From: no-reply=huonvalley.tas.gov.au@mailgun.huonvalley.tas.gov.au on behalf of

"Huon Valley Council" <no-reply@huonvalley.tas.gov.au> **Sent:**Tue, 22 Mar 2022 17:25:46 +1100

To: hvc@huonvalley.tas.gov.au;amelia@hannafords.com.au

Subject: Planning Representation - Amelia Hannaford and Jamie Smith - {Application

No:7}

Your representation has been submitted.

Please note: This representation may be subject to the provisions of the Right to Information Act 2009 which may result in its disclosure to a third party.

I/We (name)

Amelia Hannaford and Jamie Smith

Are you lodging as a Individual, Company or Organisation

Individual/s

Of Address

2 Primrose Place

Address Line 2

2 Primrose Place

Town or Suburb

Sandy Bay

Postcode

7005

Email

amelia@hannafords.com.au

Phone Number

0407656293

References

Draft Huon Valley Local Provisions Schedule. PID 5857214

Comments

Please find attached a submission relating to the Draft Huon Valley Local Provisions Schedule

File

- ECOtas GracesRoad Appendix-NVA.pdf
- ECOtas GracesRoad Appendix-BVD.pdf
- ECOtas GracesRoad Appendix-PMST.pdf
- ECOtas GracesRoad Report compressed.pdf
- mpdf.pdf

Document Set ID: 1947158 Version: 1, Version Date: 23/03/2022

- <u>List-Map-Sparkling-Wine.pdf</u><u>HVC-LPS-Submission.pdf</u>

Submit Application

• Yes Submit

Document Set ID: 1947158 Version: 1, Version Date: 23/03/2022

2 Primrose Place Sandy Bay TAS 7005 amelia@hannafords.com.au 0407 656 293

18th March 2022

The General Manager Huon Valley Council Huonville

Dear Sir

Re Draft Huon Valley Local Provisions Schedule. PID 5857214 Cygnet Coast Road, Cradoc

We the undersigned, Amelia Hannaford and Jamie Smith are the owners of the block of land identified above.

We would like to submit a representation in regard to the both the proposed re-zoning of our land from Rural Resource to Landscape Conversation and to the Priority Veg Report that supports the Natural Assets Overlay.

Currently the land is zoned Rural Resource. To its North, East, South boundaries all the other blocks are zoned either Rural Resource or Significant Agriculture with the subdivision in front of us to the West being zoned Environmental Living.

In the proposed plan, all the North, East and Southern properties remain Rural or Significant Agriculture and we, along with the Porta Drive subdivision are re-zoned Landscape Conservation.

We bought the property in 2019 delighted by its scenic amenity but also as it is neighbouring a significant local winery, 'Sailor Seeks Horse" with a long-term intention to develop a small portion on the Eastern end of the block as a winery in keeping with our Rural Resource zoning and as per the Listmap identification of areas of the block as being of the highest suitability for Sparkling Wine Grape growing, like their block.

As part of the process towards submitting a planning application and mindful of the Biodiversity Overlay which identified Eucalyptus Amygdalina on Sandstone Substrate as the threatened species, we commissioned a Natural Values Assessment from the well-regarded Mark Wapstra at Ecotas which is attached to the email. This identified this species and where it is growing as well as assessing all the land's natural values.

A map provided by Ecotas identifies the areas of the Amygdalina on the land.

The new Priority Veg report for this property makes no mention of the Amygdalina and only of the Leptosperum Scoparium and further advises of two threatened species habitats that have not previously been identified in the current Biodiversity Overlay nor are they identified in the Natural Values Assessment.

We are quite confused about this completely different Biodiversity/Natural Assets/Priority Veg overlay which doesn't seem to make a lot of sense to us and we are seeking further clarification from HVC in regards to this assessment and whether it is final.

Further to this, we are seeking clarification in the regards to the proposed re-zoning given that we specifically purchased the land because it was Rural Resource and not Environmental Living.

We are seeking confirmation and reassurance that some agricultural development and building of a single residence will still be permissible as a discretionary use with the Landscape Conservation zoning and if yes how will this interact with the new Natural Values Assessment. And if no, is there any means of appealing this decision should it proceed.

We thank you for reading our submission.

Yours faithfully

Amelia Hannaford Jamie Smith

Environmental Consulting Options Tasmania

NATURAL VALUES ASSESSMENT OF GRACES ROAD (CYGNET COAST ROAD) (PID 5857214; C.T. 209116/1; LPI JZD25), CRADOC, TASMANIA



Environmental Consulting Options Tasmania (ECO*tas*) for Amelia Hannaford & Jamie Smith

12 June 2021

Mark Wapstra

28 Suncrest Avenue Lenah Valley, TAS 7008 ABN 83 464 107 291

email: mark@ecotas.com.au web: www.ecotas.com.au

phone: (03) 6<mark>2</mark> 283 220

mobile: 04<mark>07</mark> 008 685

CITATION

This report can be cited as:

ECOtas (2021). Natural Values Assessment of Graces Road (Cygnet Coast Road) (PID 5857214; C.T. 209116/1; LPI JZD25), Cradoc, Tasmania. Report by Environmental Consulting Options Tasmania (ECOtas) for Amelia Hannaford & Jamie Smith, 12 June 2021.

AUTHORSHIP

Field assessment: Mark Wapstra Report production: Mark Wapstra

Habitat and vegetation mapping: Mark Wapstra

Base data for mapping: LISTmap

Digital and aerial photography: Mark Wapstra, GoogleEarth, LISTmap

ACKNOWLEDGEMENTS

Amelia Hannaford & Jamie Smith provided background information on the historical and proposed land use within the subject title.

COVER ILLUSTRATION

View of existing well-formed access through regrowth-structured forest.

Please note: the blank pages in this document are deliberate to facilitate double-sided printing.

ECOtoc	providing	ontions in	environmental	conculting
ECULAS	. Di Oviullia	ODLIONS III	environneniai	CONSULTIN

CONTENTS

SUM	1MARY	1
PUR	POSE, SCOPE, LIMITATIONS AND QUALIFICATIONS OF THE SURVEY	5
	Purpose	5
	Scope	5
	Limitations	5
	Qualifications	6
	Permit	6
STU	DY AREA	6
	Overview	6
LANI	D USE PROPOSAL	24
MET	HODS	24
	Nomenclature	24
	Preliminary investigation	24
	Field assessment	25
	Vegetation classification	25
	Threatened (and priority) flora	25
	Threatened fauna	25
	Weed and hygiene issues	25
FIND	DINGS	26
	Vegetation types	26
	Comments on TASVEG mapping	26
	Vegetation types recorded as part of the present study	26
	Conservation significance of identified vegetation types	27
	Plant species	30
	General information	30
	Threatened flora species recorded from the study area	30
	Threatened flora species potentially present (database analysis)	30
	Fauna species	30
	Threatened fauna species recorded from the study area	30
	Threatened fauna species potentially present (database analysis)	34
	Other ecological values	34
	Weed species	34
	Rootrot pathogen, <i>Phytophthora cinnamomi</i>	35
	Myrtle wilt	35

Myrtle rust	35
Chytrid fungus and other freshwater pathogens	35
Additional "Matters of National Environmental Significance" – Threatened Ecological Communities	36
DISCUSSION	36
Summary of key findings	36
Legislative and policy implications	37
Recommendations	52
REFERENCES	53
APPENDIX A. Vegetation community structure and composition	55
APPENDIX B. Vascular plant species recorded from study area	57
APPENDIX C. Analysis of database records of threatened flora	59
APPENDIX D. Analysis of database records of threatened fauna	61
APPENDIX E. DPIPWE's Natural Values Atlas report for the study area	65
APPENDIX F. Forest Practices Authority's Biodiversity Values Atlas report for the study area	65
APPENDIX G. CofA's <i>Protected Matters</i> report for the study area	65
ATTACHMENT	65

SUMMARY

General

Amelia Hannaford & Jamie Smith (owners) engaged Environmental Consulting Options Tasmania (ECOtas) to undertake a natural values assessment of Graces Road (Cygnet Coast Road) (PID 5857214; C.T. 209116/1; LPI JZD25), Cradoc, Tasmania, primarily to ensure that the requirements of the identified ecological values are appropriately considered during any further project planning under local, State and Commonwealth government approval protocols.

Site assessment

A natural values assessment of the study area was undertaken by Mark Wapstra (ECOtas) on 9 Jun. 2021.

Summary of key findings

Threatened flora

• No plant species listed as threatened on the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBCA) and/or the Tasmanian *Threatened Species Protection Act 1995* (TSPA) were detected, or are known from database information, from the study area.

Threatened fauna

- No fauna species listed as threatened on the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBCA) and/or the Tasmanian *Threatened Species Protection Act 1995* (TSPA) were detected, or are known from database information, from the study area.
- The study area supports potential habitat (to varying degrees) of several species, as follows:
 - Tasmanian devil (Sarcophilus harrisii);
 - spotted-tailed quoll (*Dasyurus maculatus* subsp. *maculatus*);
 - eastern quoll (Dasyurus viverrinus);
 - eastern barred bandicoot (Perameles gunnii subsp. gunnii);
 - masked owl (Tyto novaehollandiae); and
 - grey goshawk (Accipiter novaehollandiae).

Vegetation types

- The study area supports the following TASVEG mapping units:
 - Eucalyptus obliqua dry forest (TASVEG code: DOB);
 - Eucalyptus amygdalina forest and woodland in sandstone (TASVEG code: DAS); and
 - regenerating cleared land (TASVEG code: FRG).

• DOB is not listed as threatened on Schedule 3A of the Tasmanian Nature Conservation Act 2002 and does not equate to a threatened ecological community under the Commonwealth Environment Protection and Biodiversity Conservation Act 1999. DAS is listed as threatened on Schedule 3A of the Tasmanian Nature Conservation Act 2002 but does not equate to a threatened ecological community under the Commonwealth Environment Protection and Biodiversity Conservation Act 1999.

Weeds

No plant species classified as declared weeds within the meaning of the Tasmanian Weed
Management Act 1999, or considered as environmental weeds (author opinion), were
detected from the study area.

Plant disease

- No evidence of Phytophthora cinnamomi (PC, rootrot) was recorded within the study area.
- No evidence of myrtle wilt was recorded from within the study area.
- No evidence of myrtle rust was recorded from within the study area.

Animal disease (chytrid)

• The study area supports limited habitats conducive to frog chytrid disease.

Recommendations

The recommendations provided below are a summary of those provided in relation to each of the ecological features described in the main report. The main text of the report provides the relevant context for the recommendations.

Vegetation types

Exclusion of development, except for routine property maintenance activities (e.g. boundary fence construction and maintenance, maintenance of existing tracks, fuel reduction burning), from the area mapped as *Eucalyptus amygdalina* forest and woodland on sandstone (TASVEG code: DAS) should be avoided. Activities within the area mapped as *Eucalyptus obliqua* dry forest (TASVEG code: DOB) and regenerating cleared land (TASVEG code: FRG) is not likely to require special management, although the retention of hollow-bearing trees, where safe and practical to do so, is suggested.

Threatened flora

None identified - no special management required.

Threatened fauna

Apart from recommendation to minimise impact to threatened native vegetation and some habitat elements within non-threatened vegetation (within the intent of the zone provisions and findings regarding natural values), specific management in relation to threatened fauna is not recommended.

Weed and disease management

A stand-alone weed management plan is not indicated. Owner-occupation is considered the most effective future and longer-term means of achieving weed management (i.e. vigilance and control as needed).

Legislative and policy implications

There are no formal requirements for a permit under Section 51 of the Tasmanian *Threatened Species Protection Act 1995* (TSPA).

A formal referral to the Commonwealth Department of Agriculture, Water and the Environment under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBCA) is not considered required.

Development (depending on its specific design) is likely to require a planning permit pursuant to the provisions of the *Huon Valley Interim Planning Scheme 2015*. A review of the provisions of the Biodiversity Code indicates likely compliance with P1 of E10.7.1 without the need for specific planning permit conditions but this will need to be reviewed on presentation of a formal planning application. Note also that this will need to be reviewed once the *Statewide Planning Scheme* and Local Provisions Schedule comes into effect.

It is also recommended to seek formal advice from officers of Huon Valley Council and/or the Forest Practices Authority in relation to the interaction/interpretation of the planning scheme with the Forest Practices Act 1985 and associated Forest Practices Regulations 2017.

ECOtasproviding options in environmental consulting	ECOtas	providina	options	in	environmental	consultin
---	--------	-----------	---------	----	---------------	-----------

PURPOSE, SCOPE, LIMITATIONS AND QUALIFICATIONS OF THE SURVEY

Purpose

Amelia Hannaford & Jamie Smith (owners) engaged Environmental Consulting Options Tasmania (ECOtas) to undertake a natural values assessment of Graces Road (Cygnet Coast Road) (PID 5857214; C.T. 209116/1; LPI JZD25), Cradoc, Tasmania, primarily to ensure that the requirements of the identified ecological values are appropriately considered during any further project planning under local, State and Commonwealth government approval protocols.

Scope

This report relates to:

- flora and fauna species of conservation significance, including a discussion of listed threatened species (under the Tasmanian *Threatened Species Protection Act 1995* and/or the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*) potentially present, and other species of conservation significance/interest;
- vegetation types (forest and non-forest, native and exotic) present, including a discussion
 of the distribution, condition, extent, composition and conservation significance of each
 community;
- plant and animal disease management issues;
- weed management issues; and
- a discussion of some of the policy and legislative implications of the identified ecological values.

This report follows the government-produced *Guidelines for Natural Values Surveys – Terrestrial Development Proposals* (DPIPWE 2015) in anticipation that the report (or extracts of it) may be required as part of various approval processes.

The report format should also be applicable to other assessment protocols as required by the Commonwealth Department of Agriculture, Water and the Environment (for any referral/approval that may be required under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*), which is unlikely to be required in this case.

More specifically, this assessment and report have been prepared to address specific provisions of the *Huon Interim Planning Scheme 2015*, with particular reference to the natural values/biodiversity provisions of the Biodiversity Code.

Limitations

The ecological assessment was undertaken on 9 Jun 2020. Many plant species have ephemeral or seasonal growth or flowering habits, or patchy distributions (at varying scales), and it is possible that some species were not recorded for this reason. However, every effort was made to sample the range of habitats present in the survey area to maximise the opportunity of recording most species present (particularly those of conservation significance). Late spring and into summer is usually regarded as the most suitable period to undertake most botanical assessments. While some species have more restricted flowering periods, a discussion of the potential for the site to support

these is presented. In this case, I believe that the survey was appropriately timed to detect the species with a highest priority for conservation management in this part of the State.

The survey was also limited to vascular species: species of mosses, lichens and liverworts were not recorded. However, a consideration is made of threatened species (vascular and non-vascular) likely to be present (based on habitat information and database records) and reasons presented for their apparent absence.

Surveys for threatened fauna were largely limited to an examination of "potential habitat" (i.e. comparison of on-site habitat features to habitat descriptions for threatened fauna), and detection of tracks, scats and other signs.

Qualifications

Except where otherwise stated, the opinions and interpretations of legislation and policy expressed in this report are made by the author and do not necessarily reflect those of the relevant agency. The client should confirm management prescriptions with the relevant agency before acting on the content of this report. This report and associated documents do not constitute legal advice.

Permit

Any plant material was collected under DPIPWE permit TFL 20167 (in the name of Mark Wapstra). Relevant data will be entered into DPIPWE's *Natural Values Atlas* database by the author. Some plant material may be lodged at the Tasmanian Herbarium by the author.

No vertebrate or invertebrate material was collected.

STUDY AREA

Overview

The study area (Figures 1-3) comprises the private title of an un-numbered lot accessed from Graces Road (shown on LISTmap as being a title on Cygnet Coast Road), Cradoc, Tasmania (Figures 1-3), with the following cadastral details:

• PID 5857214; C.T. 209116/1; LPI JZD25 (299,418.406 m² or ca. 29.94 ha).

Land tenure and other categorisations relevant to natural values management of the study area are as follows:

- Huon Valley municipality, with the subject title zoned as Rural Resource pursuant to the Huon Valley Interim Planning Scheme 2015 (Figure 4);
- Huon Valley municipality, with the subject title wholly subject to the Biodiversity Protection Area overlay under the immediately preceding version of the overlay maps linked to the Huon Valley Interim Planning Scheme 2015 (Figure 5) and the overlay under the recently developed overlay maps through LISTmap for AM-HUO-PSA-4-2019 (Figure 6); part of the title is also subject to the Waterway and Coastal Protection Areas overlay (Figures 5 & 6);
- Southern Ranges bioregion, according to the IBRA 7 bioregions used by most government agencies); and
- NRM South Natural Resource Management (NRM) region.

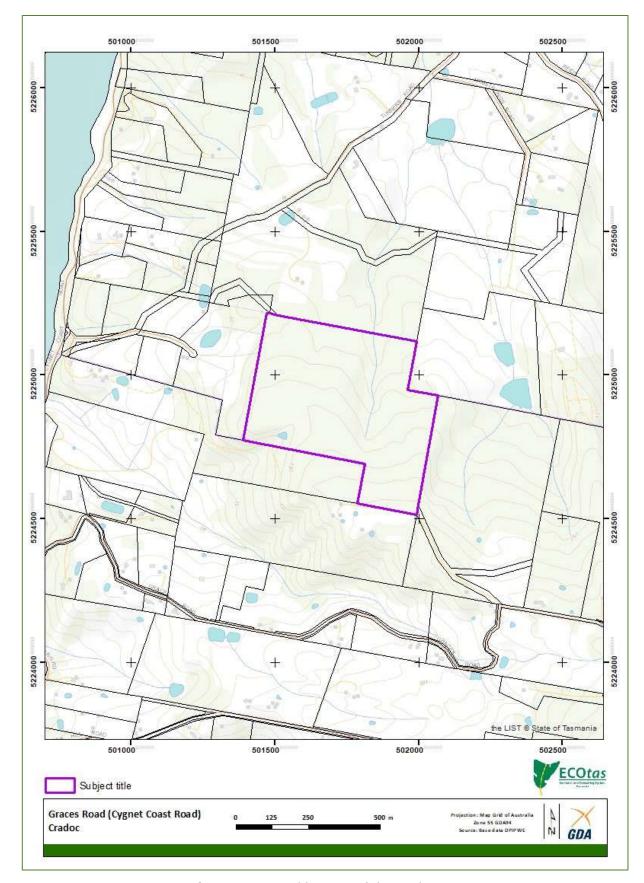


Figure 1. General location of the study area

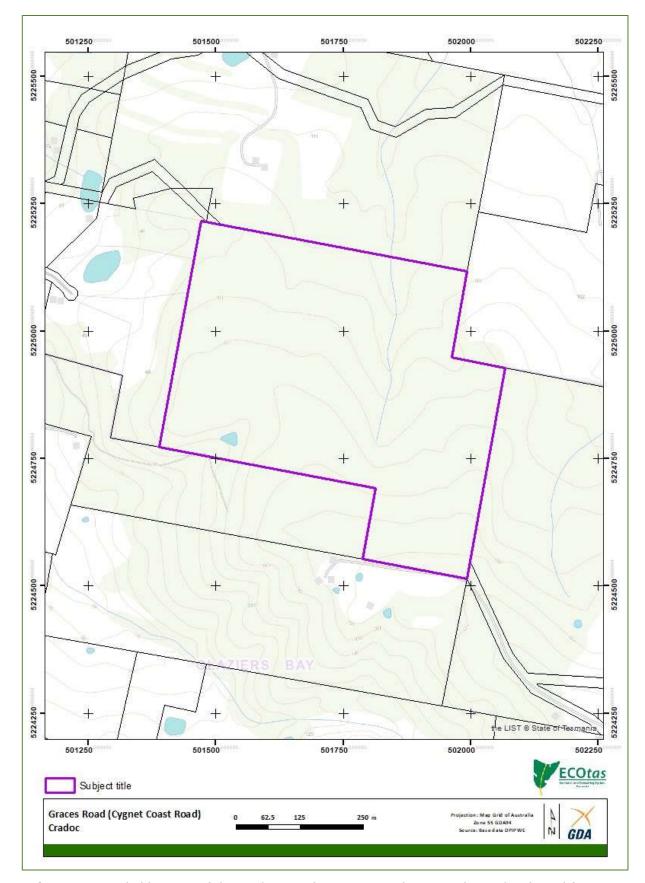


Figure 2. Detailed location of the study area showing general topographic and cadastral features

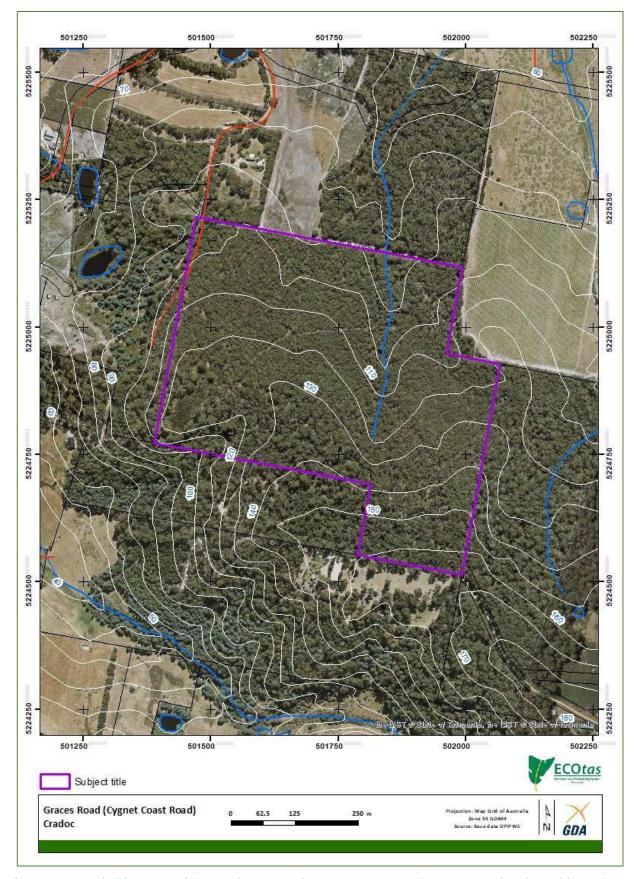


Figure 3. Detailed location of the study area – showing recent aerial imagery and cadastral boundaries

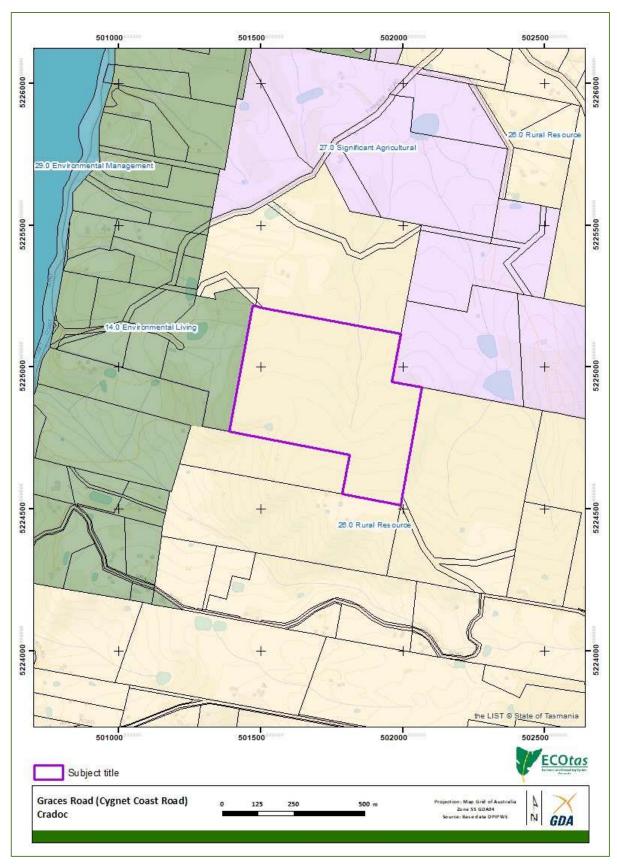


Figure 4. Zoning of subject title and surrounds pursuant to the *Huon Valley Interim Planning Scheme 2015* [source: LISTmap]

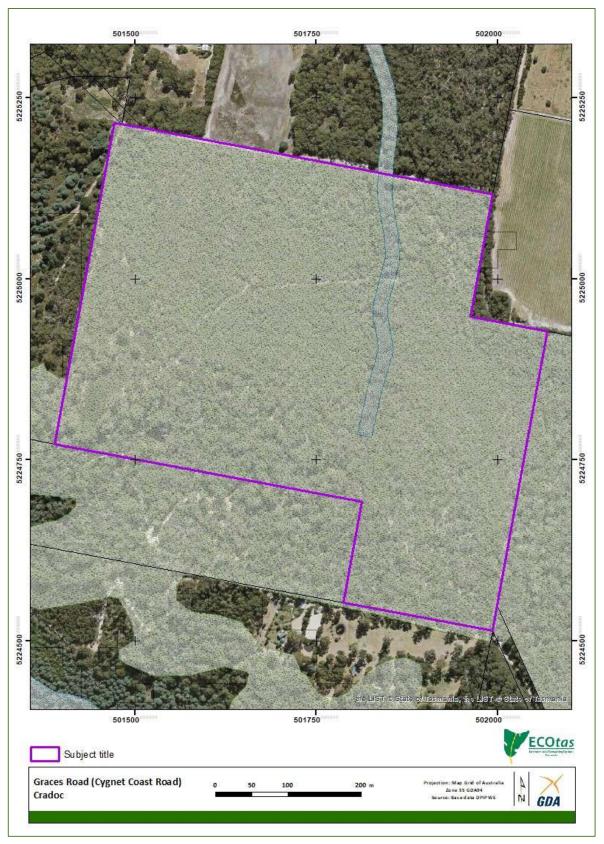


Figure 5. Extent of Biodiversity Protection Area and Waterway and Coastal Protection Areas overlays (immediately preceding version) near subject title surrounds pursuant to the *Huon Valley Interim Planning Scheme 2015* [source: LISTmap]

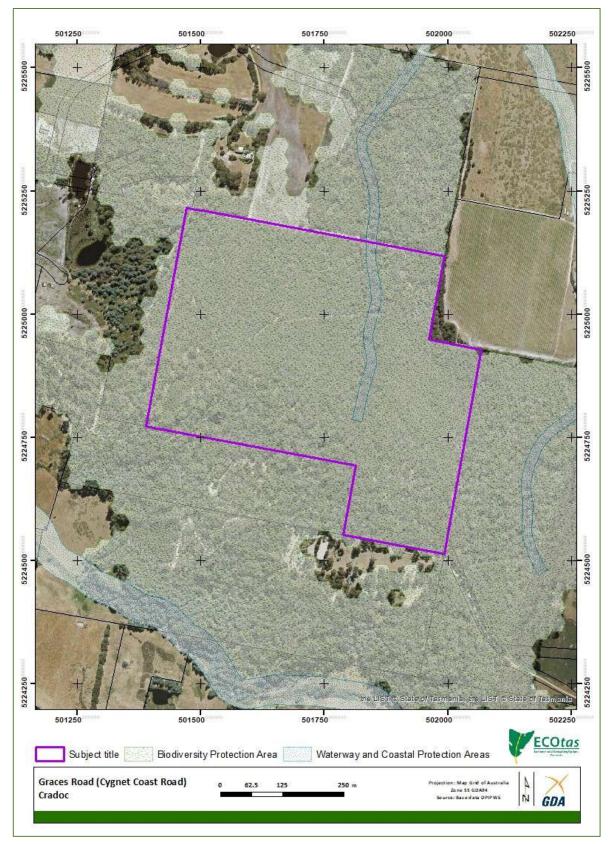


Figure 6. Extent of Biodiversity Protection Area overlay (AM-HUO-PSA-4-2019) and Waterway and Coastal Protection Areas overlay within the subject title and surrounds pursuant to the *Huon Valley Interim Planning Scheme 2015* [source: LISTmap]

The title is accessed off Graces Road by a well-formed access track (gravelled with "blue metal") with a gated entrance (Plates 1-4). Future property management will probably require routine maintenance of this track including works on table drains and the pavement, as well as possible removal of overhanging branches and dangerous trees (several dead trees along verge of track). If a residence is constructed at the end of the track, it is assumed that some works will be required including minor pavement widening in some sections as well as installation of some passing bays every ca. 200 m. This means 2-3 passing bays will probably be required – site assessment included walking and driving the road in two directions and it is clear that there are ample opportunities to install such bays without needing to remove trees or manifestly impact on native vegetation (see Plates 1-4).



Plates 1-4. Existing access route including entrance gate, well-formed pavement, existing clear table drains and various opportunities for passing bays lacking native vegetation per se

The title is not fully fenced, with a length of post-and-wire fence along the eastern boundary only and a section of new fence along part of the northern boundary (that boundary is otherwise well-defined by clearing on the title to the north). Part of the western boundary is now defined by the recent Porta Drive subdivision, although only some of the formal fencing directly follows the title boundary.

The title supports uniformly regrowth native forest (Plates 1-9) with a distinctive age structure that implies a major disturbance event ca. 50 years ago. However, LISTmap's Fire History layer does not show any recorded fire events. Site assessment indicated a sparse over-topping canopy of more mature trees with small and large basal fire scars, presumably "fire-survivors" (of different

original ages at the time of the fire) from the Feb. 1967 bushfire event (Plates 5-8). More recent scorch marks on some regrowth trunks indicates a more recent less intensive fire event (Plate 9).



Plates 5-8. More mature trees and stumps showing evidence of impact from a major fire event, presumed to be the Feb. 1967 bushfire



Plate 9. Example of scorching on larger tree, indicative of a less intensive and more recent fire event

The title is on a broad "ridge" with variable aspects. Elevation varies from ca. 85 m a.s.l. (northern boundary) to ca. 165 m a.s.l. (southeastern corner). An un-named headwater of a north-trending drainage line crosses much of the title, crossing on to adjacent titles and terminating in a large farm dam with no outfall to the sea indicated. This feature shows no evidence of flow, not much more than a gentle dip in the topography with only marginal change to the "riparian" vegetation (Plate 10). Another minor un-marked drainage feature trends southwest in the southwest corner of the tile – this includes an existing small dam (Plate 11).



Plate 10. (LHS) Minor drainage depression along northern boundary with sedgy understorey indicating poor drainage but with no direct evidecne of flow

Plate 11. (RHS) Existing small dam on the drainage feature in the southwest of the title

The regrowth-structure forest north of the access track is somewhat difficult to explain only based on fire history. Several older cut stumps (e.g. Plate 12) imply a logging history also, which is also supported by some older tracks (see Plate 15). It is possible that following the 1967 wildfire event, the resulting burnt forest was largely pushed and then allowed to regenerate, creating the evenaged regrowth. There is also evidence of more recent cutting (e.g. Plates 13 & 14), indicative of firewood collecting in the 1980s through to 2000s.



Plate 12. Older cut stump indicating an attempt at clearing, perhaps in the late 1960s or into the 1970s





Plates 13 & 14. More recent stumps, perhaps suggestive of low intensity fiorewood gathering in the 1980s through to the 2000s

The geology of the title is wholly mapped (Figure 7) as Permian-age "upper glaciomarine sequences of pebbly mudstone, pebbly sandstone and limestone" (geocode: Pu). The geology is mentioned because it can have a strong influence on the classification of vegetation and the potential occurrence of threatened flora (and to a lesser extent, threatened fauna). In this case, the interpretation of the geology has direct relevance to the parts of the title dominated by Eucalyptus amyqdalina (black peppermint) because determination that the site is predominantly sandstonebased means classification as Eucalyptus amygdalina forest and woodland on sandstone (TASVEG code: DAS), a vegetation classified as threatened under Schedule 3A of the Tasmanian Nature Conservation Act 2002, but determination that the site is predominantly mudstone-based means classification as Eucalyptus amygdalina forest on mudstone (TASVEG code: DAM), a non-listed vegetation type. While geology is not my primary area of expertise, I am comfortable assessing the substrate and its relationship to vegetation types. In this case, while much of the title has no to limited rock outcrops and/or regolith, the soils are generally sandy (although with a high clay content) and imply a primarily sandstone-based underlying geology (see Plates 15-18). The northeast corner has some outcropping rocks and these are highly variable but meet the intent of "pebbly sandstone" (Plate 19). Overall, I believe the underlying substrate is closer to a "pebbly sandstone" rather than a mudstone (I saw no evidence of limestone), although this Permian sequence is variable with interbedded layers of different grain sizes, meaning part of the site may be better classed as mudstone. More detailed soil tests and geological mapping would be needed to determine this.



Plate 15. (LHS) Old track through forest showing sandy substrate

Plate 16. (RHS) Close-up of dug soil on northern slopes showing mixed sand-clay loam structure



Plates 17 & 18. Further examples of consolidated clay-rich pebbly-quartzite soils



Plate 19. Example of different rock types from a small area (ca. 2 m radius) in the northeast corner of the title, showing pebble-rich sandstone, a finer-grained mudstone, lump of puree quartzite and highly weathered sandstone that crumbles to coarse sand

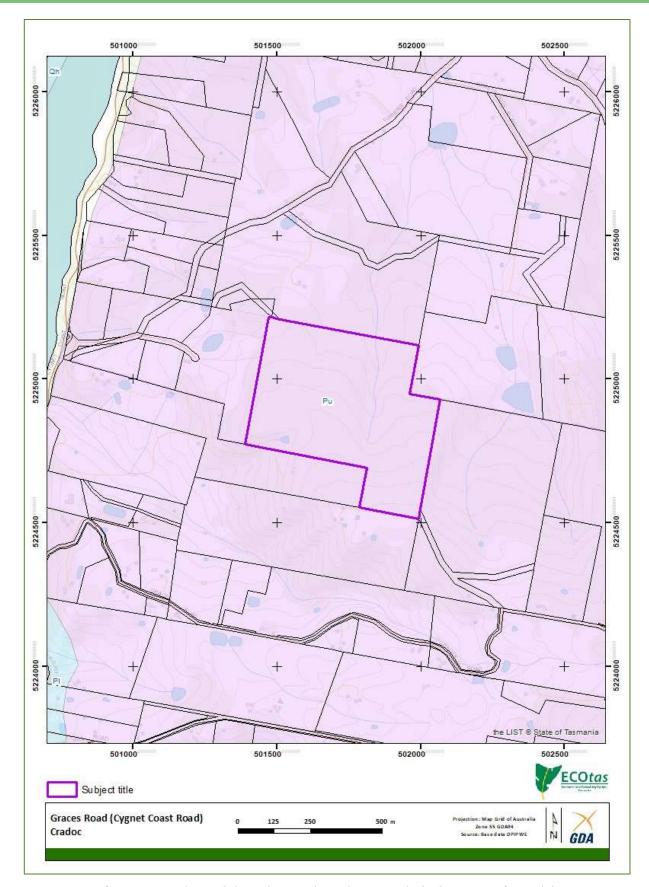


Figure 7. Geology of the subject title and surrounds (refer to text for code)

The southwest corner of the title has been historically-managed, presumably some attempt at localised primary production (this may also explain the small dam). Examination of GoogleEarth's historical aerial imagery, combined with LISTmap's orthoimagery (and the ESRI orthoimage) provides a useful indicator of the history of vegetation management in this section of the title (see series of Figures 8-15). This site has remained managed in some manner since at least before May 2009, with periods between then and the present where it shows as being dominated by grass (presumably sown pasture grass).

At present, this managed part of the title is relatively recently slashed with the scattered overtopping and fringing trees still present (Plates 20 & 21), with the existing well-formed track accessing this clearing (Plate 22) and it being the location of informal structures designed for day use (Plate 23).





Plates 20 & 21. Examples of the managed part of the title showing that this has now been a bracken-dominated understorey beneath no canopy (or only a sparse canopy)





Plate 22. (LHS) Existing access where it reaches the previously-cleared area **Plate 23.** (RHS) Existing informal structure on the edge of the previously-cleared area

Examination of the imagery, combined with site assessment, indicates that this area qualifies, in my opinion, as "previously cleared and converted land means land" within the intent of the *Forest Practices Regulations 2017*, which is defined as "land (a) whose owner can demonstrate a history of agricultural or other non-forest land use over a consecutive period of at least 5 years, since 1985, during which the land did not contain trees or threatened native vegetation communities; or (b) that has been cleared and converted in the immediately preceding 5-year period in accordance with a certified forest practices plan" (clause (a) applies). Whether this has the same intent and meaning as E10.4.1(n) of the *Huon Valley Interim Planning Scheme 2015* may require further advice: that clause exempts certain developments from the Biodiversity Code including "clearance

and conversion or disturbance of previously cleared agricultural land" where "agricultural land" is defined as "all land that is in agricultural use, or has the potential for agricultural use, that has not been zoned or developed for another use or would not be unduly restricted for agricultural use by its size, shape and proximity to adjoining non-agricultural uses".



Figure 8. GoogleEarth historical imagery: May 2009



Figure 9. GoogleEarth historical imagery: Feb. 2011



Figure 10. GoogleEarth historical imagery: Sep. 2013



Figure 11. GoogleEarth historical imagery: Dec. 2015



Figure 12. GoogleEarth historical imagery: Jul. 2016



Figure 13. GoogleEarth historical imagery: Feb. 2017



Figure 14. GoogleEarth historical imagery: Nov. 2017



Figure 15. GoogleEarth historical imagery: Sep. 2018

LAND USE PROPOSAL

At this stage of natural values assessment, no specific land use proposal has bene presented. Some options include a residential dwelling located in the previously-managed part of the title at the end of the existing access, possibility of a shed for rural resource closer to the southeast corner of the title (where there is the option of economical power connection) and eventually some form of primary production activity. Until a specific land use proposal is developed, however, it is difficult to advise on the specific application of different legislative and policy instruments so the following report is intended to be general in nature. An addendum can be produced using this baseline report, which can address the specific provisions of the then applicable planning scheme This is mentioned because at present, development and works would be subject to the provisions of the *Huon Valley Interim Planning Scheme 2015* but this is predicted to be replaced by the incoming *Statewide Planning Scheme* and associated Local Provisions Schedule in coming months. Depending on the proposed land use, there may be approvals required (e.g. a Forest Practices Plan) other than a planning permit – refer to **DISCUSSION** *Legislative and policy implications* for more details.

METHODS

Nomenclature

All grid references in this report are in GDA94, except where otherwise stated.

Vascular species nomenclature follows de Salas & Baker (2021) for scientific names and Wapstra et al. (2005+) for common names. Fauna species scientific and common names follow the listings in the cited *Natural Values Atlas* report (DPIPWE 2021).

Vegetation classification follows TASVEG 4.0, as described in *From Forest to Fjaeldmark:* Descriptions of Tasmania's Vegetation (Kitchener & Harris 2013+).

Preliminary investigation

Available sources of previous reports, threatened flora records, vegetation mapping and other potential environmental values were interrogated. These sources include:

- Tasmanian Department of Primary Industries, Parks, Water & Environment's Natural Values
 Atlas records for threatened flora and fauna (GIS coverage maintained by the author
 current as at date of report);
- Tasmanian Department of Primary Industries, Parks, Water & Environment's Natural Values
 Atlas report ECOtas_GracesRoad for a polygon defining the title area (centred on
 501743mE 5224896mN), buffered by 5 km, dated 7 Jun. 2021 (DPIPWE 2021) Appendix
 E;
- Forest Practices Authority's *Biodiversity Values Database* report, specifically the species' information for grid reference centroid 501743mE 5224896mN (i.e. a point defining the approximate centre of the assessment area), buffered by 5 km and 2 km for threatened fauna and flora records, respectively, hyperlinked species' profiles and predicted range boundary maps, dated 7 Jun. 2021 (FPA 2021) Appendix F;
- Commonwealth Department of Agriculture, Water and the Environment's Protected Matters Report for a polygon defining the title area, buffered by 5 km, dated 7 Jun. 2021 (CofA 2021) – Appendix G;

- the TASVEG 4.0 vegetation coverage (as available through GIS coverage and via LISTmap);
- GoogleEarth and LISTmap aerial orthoimagery; and
- other sources listed in tables and text as indicated.

Field assessment

The assessment was undertaken by Mark Wapstra (ECOtas) on 9 Jun. 2021. Cadastral data uploaded to the iGIS application guided the in-field assessment as some of the boundaries are not formally defined by fences or the like. Meandering transects were used to capture the greater range of aspects, slopes and site conditions.

Vegetation classification

Vegetation was classified by waypointing vegetation transitions for later comparison to aerial imagery. The structure and composition of the vegetation types was described using nominal 30 m radius plots at a representative site within the vegetation types, and compiling "running" species lists between plots and vegetation types. Hand-held GPS (Garmin Oregon 600) was used to waypoint the transition between vegetation types.

Threatened (and priority) flora

With reference to the threatened flora, the survey included consideration of the most likely habitats for such species. Further details are not provided because no such species were detected. Further details are not provided because no such species were detected.

Threatened fauna

Surveys for threatened fauna were largely limited to an examination of "potential habitat" (i.e. comparison of on-site habitat features to habitat descriptions for threatened fauna), and detection of tracks, scats and other signs.

Weed and hygiene issues

The subject title was also assessed with respect to plant species classified as declared weeds under the Tasmanian *Weed Management Act 1999*, Weeds of National Significance (WoNS) or "environmental weeds" (author opinion and as included in *A Guide to Environmental and Agricultural Weeds of Southern Tasmania*, NRM South 2017). Further details are not provided because no such species were detected.

The site was also assessed with respect to potential impacts of plant and animal pathogens, by reference to habitat types and field symptoms.

FINDINGS

Vegetation types

Comments on TASVEG mapping

This section, which comments on the existing TASVEG 4.0 mapping for the study area, is included to highlight the differences between existing mapping and the more recent mapping from the present study to ensure that any parties assessing land use proposals (via this report) do not rely on existing mapping. Note that TASVEG mapping, which was mainly a desktop mapping exercise based on aerial photography, is often substantially different to ground-truthed vegetation mapping, especially at a local scale. An examination of existing vegetation mapping is usually a useful preassessment exercise to gain an understanding of the range of habitat types likely to be present and the level of previous botanical surveys.

TASVEG 4.0 maps the whole of the subject title and much of the surrounds as (Figure 16) *Eucalyptus obliqua* dry forest (TASVEG code: DOB).

Vegetation types recorded as part of the present study

Vegetation types have been classified according to TASVEG 4.0, as described in *From Forest to Fjaeldmark: Descriptions of Tasmania's Vegetation* (Kitchener & Harris 2013+). Table 1 provides information on the vegetation type identified from the study area. Refer to Figure 17 that provides a map of the revised vegetation types recorded from the study area. Refer to Appendix A for a more detailed description of the native vegetation mapping units identified from the study area.

Table 1. Vegetation mapping units present in the subject title

[conservation status: NCA – as per Schedule 3A of the Tasmanian Nature Conservation Act 2002, using units described by Kitchener & Harris (2013+), relating to TASVEG mapping units (DPIPWE 2021); EPBCA – as per the listing of ecological communities on the Commonwealth Environment Protection and Biodiversity Conservation Act 1999, relating to communities as described under that Act, but with equivalencies to TASVEG units]

TASVEG equivalent (Kitchener & Harris 2013+)	Conservation priority TASVEG EPBCA	Comments
	Dry (eucalypt forest and woodland
Eucalyptus obliqua dry forest (DOB)	not threatened not threatened	DOB occurs across the southern third of the title, generally associated with the more sheltered aspects. DOB has a predominantly regrowth structure and a now shrubby understorey reflecting a long period without disturbance. The understorey has characteristic of both wet sclerophyll forest (e.g. species such as <i>Acacia leprosa</i> , <i>A. riceana</i> , <i>Monotoca glauca</i> , <i>Zieria arborescens</i> and <i>Dianella tasmanica</i>) and dry sclerophyll forest (e.g. species such as <i>Pultenaea juniperina</i> , <i>P. daphnoides</i> , <i>Oxylobium ellipticum</i> , <i>Acacia terminalis</i> , <i>Aotus ericoides</i> , <i>Leucopogon ericoides</i> , <i>Banksia marginata</i> , <i>Epacris impressa</i> and locally dense <i>Pteridium esculentum</i>). Around the small dam, DOB grades into <i>Eucalyptus obliqua</i> forest with broad-leaf shrubs (TASVEG code: WOB) but still retained sufficient dry sclerophyll features (and is too small an area) to be mapped as part of the DOB polygon.

TASVEG equivalent (Kitchener & Harris 2013+)	Conservation priority TASVEG <i>EPBCA</i>	Comments	
		DOB also occurs in the two northeast corners of the title. DOB grades with DAS, generally defined by a marginally taller and denser upper canopy, which is shown on aerial imagery to some extent, although the transitional zone between DOB and DAS is sometimes quite broad. DOB is in good condition with no weeds or symptoms of disease noted. It	
		has a regrowth structure from past fires and possibly some level of clearing/firewood collection.	
Eucalyptus amygdalina forest and woodland on sandstone (DAS)	threatened not threatened	DAS occurs across the northern and central portions of the title, generally with a northerly aspect on gentle to moderate slopes. Structurally, DAS is very simple with an even-aged canopy dominated by <i>Eucalyptus amygdalina</i> over a tall and usually dense shrubby understorey, allowed to develop due to lack of fire, in turn over a usually depauperate ground layer. This example of DAS is floristically less diverse than most examples, which generally occur on Triassic sandstone rather than this form of Permian mixed sediments (refer to section on geology that describes the substrate in detail). DAS grades with DOB with a variably wide transition zone. Aerial imagery is a useful guide to the DAS-DOB distinction, except in the far northeast where DAS has a similar signature to DOB and extends into the gullies, environments usually expected to support DOB. DAS is in good condition with no weeds or symptoms of disease noted. It has a regrowth structure from past fires and possibly some level of clearing/firewood collection.	
Modified land			
regenerating cleared land (FRG)	not threatened not threatened	FRG is used to map the area of historical clearing and management in the southwest of the subject title. It is characterised by the lack of canopy trees over a mosaic of bare ground, <i>Pteridium esculentum</i> (bracken fern) and various grasses, sedges and herbs. Technically, this may be better mapped as <i>Pteridium esculentum</i> fernland (TASVEG code: FPF) but whether the site is mapped as FPF or FRG is of no particular consequence from a conservation management perspective.	

Conservation significance of identified vegetation types

DOB is a widespread and well-reserved vegetation type, not listed as threatened on Schedule 3A of the Tasmanian *Nature Conservation Act 2002*. DAS, however, is listed as threatened on Schedule 3A of the Tasmanian *Nature Conservation Act 2002*.

The vegetation communities recorded from the subject title do not equate to threatened ecological communities under the Commonwealth *Environment Protection and Biodiversity Conservation Act* 1999 (EPBCA).

As a threatened vegetation community, DAS qualifies as a moderate priority biodiversity value under Table E10.1 of the Biodiversity Code of the *Huon Valley Interim Planning Scheme 2015*. As a non-threatened vegetation community, DOB does not qualify as a moderate priority biodiversity value but it is noted that this table does not include high or low priority biodiversity values. As a vegetation type, DOB does not qualify under items (a) "any threatened native vegetation community" (not threatened), (c) "all remnant vegetation" (in no way is this site "remnant") or (e) "native vegetation where there is less than 30% native vegetation in the surrounding one kilometre" (the site is part of an extensive swathe of native forest). However, it may qualify under items (b) "known or potential habitat for any threatened species" and (d) "all native vegetation within of adjacent to a watercourse or wetland" (for riparian areas).

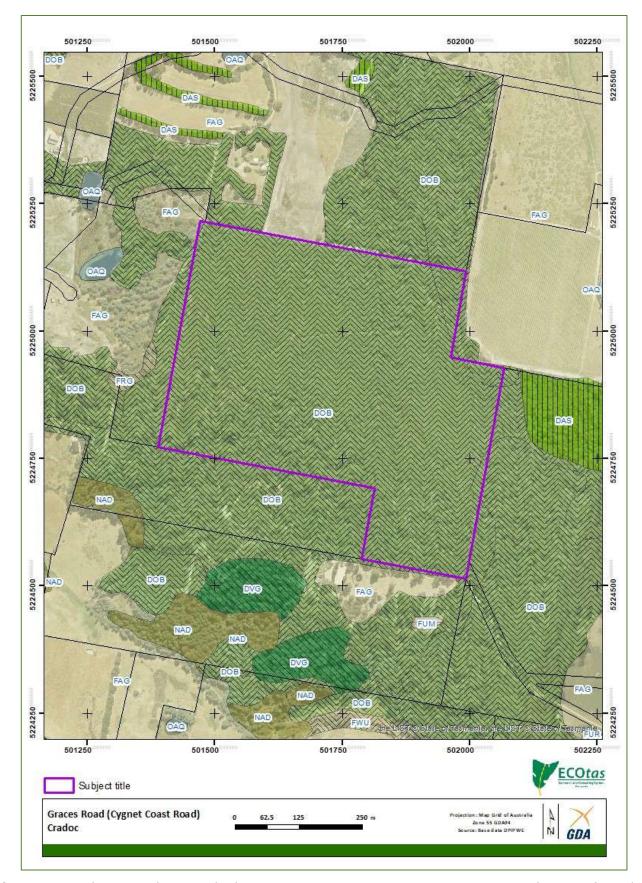


Figure 16. Study area and surrounds showing existing TASVEG 4.0 vegetation mapping (see text for codes)



Figure 17. Revised vegetation mapping for subject title (refer to text for codes)

Plant species

General information

A total of 48 vascular plant species were recorded from the study area (Appendix B), comprising 37 dicotyledons (including 3 endemic and 1 naturalised/exotic species), 10 monocotyledons (all native) and 1 pteridophyte (native). This species diversity (i.e. low) is highly typical of long un burnt regrowth-structured dry (transitioning into wet) sclerophyll forest in this part of the State, especially on infertile substrates. The lack of naturalised species is notable, with ubiquitous herbs restricted to scattered plants on the "blue metal" access only (of no management consequence).

Additional surveys at different times of the year may detect additional short-lived herbs and grasses but a follow-up survey is not considered warranted because of the very low likelihood of species with a high priority for conservation management being present.

Threatened flora species recorded from the study area

No flora species listed as threatened on the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBCA) and/or the Tasmanian *Threatened Species Protection Act 1995* (TSPA) are known from database information (Figure 18), or were detected as a consequence of the field survey, from the study area.

The habitat type present (i.e. regrowth-structured wet sclerophyll forest) in this part of the State is not strongly associated with threatened flora (refer section below and Table C1).

Threatened flora species potentially present (database analysis)

Figure 18 indicates threatened flora species near to the study area and Table C1 (Appendix C) provides a listing of threatened flora from within 5,000 m of the study area (nominal buffer width usually used to discuss the potential of a particular study area to support various species listed in databases), with comments on whether potential habitat is present for the species, and possible reasons why a species was not recorded.

Fauna species

Threatened fauna species recorded from the study area

No fauna species listed as threatened on the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBCA) and/or the Tasmanian *Threatened Species Protection Act 1995* (TSPA) are known from database information (Figure 19), or were detected as a consequence of the field survey, from the study area.

The vegetation types present have some association with threatened fauna (refer section below and Table D1).

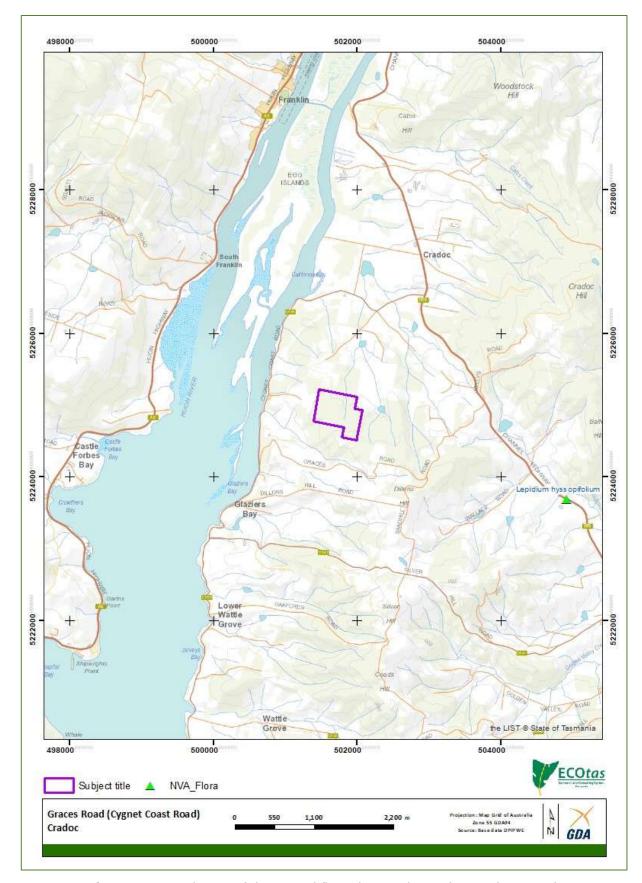


Figure 18. Distribution of threatened flora close to the study area (overview)

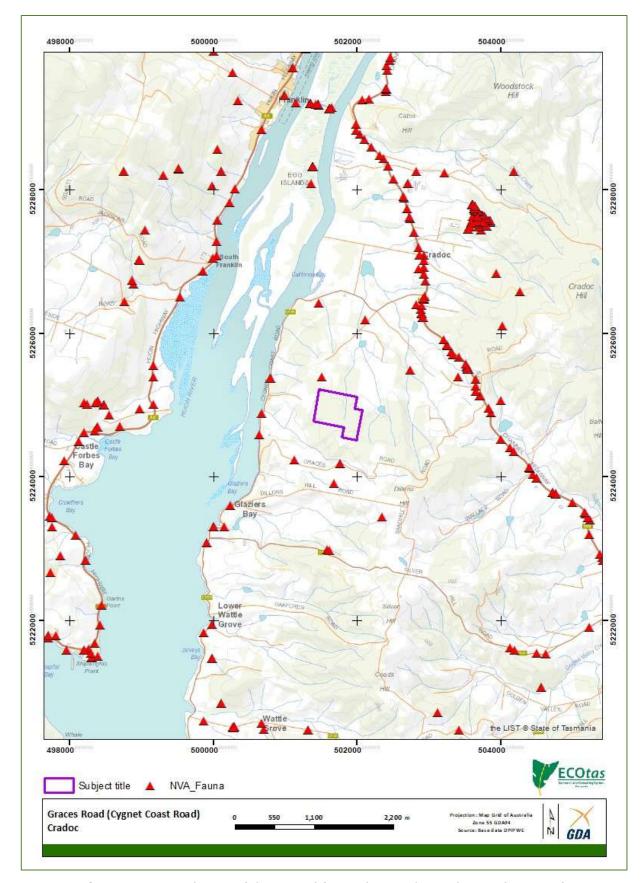


Figure 19a. Distribution of threatened fauna close to the study area (overview)

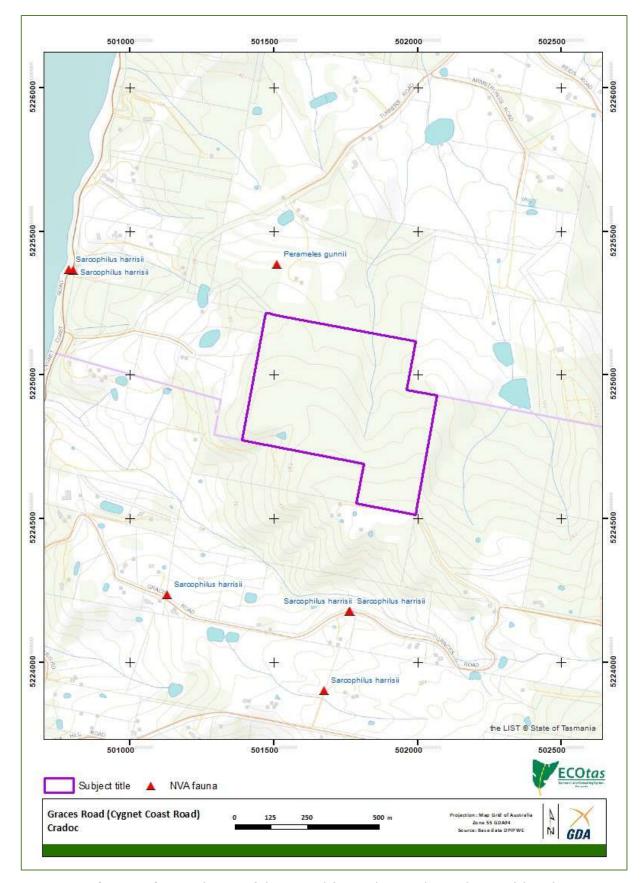


Figure 19b. Distribution of threatened fauna close to the study area (closer)

Threatened fauna species potentially present (database analysis)

Figure 19 indicates threatened fauna species near to the study area and Table D1 (Appendix D) provides a listing of threatened fauna from within 5,000 m of the study area (nominal buffer width usually used to discuss the potential of a particular study area to support various species listed in databases), with comments on whether potential habitat is present for the species, and possible reasons why a species was not recorded.

Site assessment indicated that the subject title supports ubiquitous potential habitat for a suite of threatened fauna species. This includes potential habitat of species such as *Sarcophilus harrisii* (Tasmanian devil), *Dasyurus maculatus* subsp. *maculatus* (spotted-tailed quoll), *Dasyurus viverrinus* (eastern quoll), *Perameles gunnii* subsp. *gunnii* (eastern barred bandicoot), *Tyto novaehollandiae* (masked owl), *Accipiter novaehollandiae* (grey goshawk) and *Aquila audax* (wedge-tailed eagle). Small-scale development is not anticipated to have a significant deleterious impact on these species, particularly as no specific habitat features were observed. In fact, no evidence of the marsupial carnivores (in the form of scats) was observed on the main access route (slow-walked) and any of the minor tracks or property boundaries.

In summary, the title provides potential habitat for a suite of threatened fauna species, although small-scale works are not anticipated to have a significant deleterious impact at any reasonable scale. Within the accepted range of these species, minor disturbance would be regarded as minor.

Other ecological values

Weed species

No plant species classified as declared weeds within the meaning of the Tasmanian *Weed Management Act 1999*, or regarded as environmental weds (author opinion), were detected from the study area. In fact, the site is notable for being virtually weed-free, with only scattered ubiquitous herbs scattered on the main access (of no management consequence).

Given that any access to the title will be from Graces Road and then the fully-formed internal access, the risk of construction machinery and vehicles introducing weeds to the relevant part of the subject title is considered negligible. In the case of titles with limited weeds present, owner-occupation is considered the most appropriate long-term management option, where vigilance and immediate control are practical.

Several planning manuals provide guidance on appropriate management actions, which can be referred to develop site-specific prescriptions for any proposed works in the study area. These manuals include:

- Allan, K. & Gartenstein, S. (2010). *Keeping It Clean: A Tasmanian Field Hygiene Manual to Prevent the Spread of Freshwater Pests and Pathogens*. NRM South, Hobart;
- Rudman T. (2005). *Interim* Phytophthora cinnamomi *Management Guidelines*. Nature Conservation Report 05/7, Biodiversity Conservation Branch, Department of Primary Industries, Water & Environment, Hobart;
- Rudman, T., Tucker, D. & French, D. (2004). Washdown Procedures for Weed and Disease Control. Edition 1. Department of Primary Industries, Water & Environment, Hobart; and
- DPIPWE (2015). Weed and Disease Planning and Hygiene Guidelines Preventing the Spread of Weeds and Diseases in Tasmania. Department of Primary Industries, Parks, Water & Environment, Hobart.

Rootrot pathogen, Phytophthora cinnamomi

Phytophthora cinnamomi (PC) is widespread in lowland areas of Tasmania, across all land tenures. However, disease will not develop when soils are too cold or too dry. For these reasons, PC is not a threat to susceptible plant species that grow at altitudes higher than about 700 metres or where annual rainfall is less than about 600 mm (e.g. Midlands and Derwent Valley). Furthermore, disease is unlikely to develop beneath a dense canopy of vegetation because shading cools the soils to below the optimum temperature for the pathogen. A continuous canopy of vegetation taller than about 2 metres is sufficient to suppress disease. Hence PC is not considered a threat to susceptible plant species growing in wet sclerophyll forests, rainforests (except disturbed rainforests on infertile soils) and scrub e.g. teatree scrub (Rudman 2005; FPA 2009).

The vegetation types identified from the study area are recognised as possibly susceptible to PC in some circumstances (particularly DAS). Site assessment did not record any field symptoms (dead and/or dying susceptible plant species, with several possible indicator species present). No special management should be required in relation to PC.

Myrtle wilt

Myrtle wilt, caused by a wind-borne fungus (*Chalara australis*), occurs naturally in rainforest where myrtle beech (*Nothofagus cunninghamii*) is present. The fungus enters wounds in the tree, usually caused by damage from wood-boring insects, wind damage and forest clearing. The incidence of myrtle wilt often increases forest clearing events such as windthrow and wildfire.

The subject title does not support *Nothofagus cunninghamii*. No special management is required.

Myrtle rust

Myrtle rust is a disease limited to plants in the Myrtaceae family. This plant disease is a member of the guava rust complex caused by *Austropuccinia psidii*, a known significant pathogen of Myrtaceae plants outside Australia. Infestations are currently limited to NSW, Victoria, Queensland and Tasmania (DPIPWE 2015).

No evidence of myrtle rust was noted (several possible indicator species present). The longer-term management issue for the site is to ensure that any ornamental plantings source plants from a reputable nursery free from the pathogen (such businesses are already subject to strict biosecurity conditions).

Chytrid fungus and other freshwater pathogens

Native freshwater species and habitat are under threat from freshwater pests and pathogens including *Batrachochytrium dendrobatidis* (chytrid frog disease), *Mucor amphibiorum* (platypus mucor disease) and the freshwater algal pest *Didymosphenia geminata* (didymo) (Allan & Gartenstein 2010). Freshwater pests and pathogens are spread to new areas when contaminated water, mud, gravel, soil and plant material or infected animals are moved between sites. Contaminated materials and animals are commonly transported on boots, equipment, vehicles tyres and during road construction and maintenance activities. Once a pest pathogen is present in a water system it is usually impossible to eradicate. The manual *Keeping it Clean - A Tasmanian Field Hygiene Manual to Prevent the Spread of Freshwater Pests and Pathogens* (Allan & Gartenstein

2010) provides information on how to prevent the spread of freshwater pests and pathogens in Tasmanian waterways wetlands, swamps and boggy areas.

The subject title is generally well-drained and generally unsuitable for amphibians (except in a highly opportunistic sense and associated with the small dam), such that special management should not be warranted.

Additional "Matters of National Environmental Significance" - Threatened Ecological Communities

CofA (2021) indicates that the following threatened ecological communities listed on the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBCA) are likely to occur within the area:

- Subtropical and Temperate Coastal Saltmarsh [Vulnerable]
- Tasmanian Forests and Woodlands dominated by Black Gum or Brookers Gum (Eucalyptus ovata / E. brookeriana) [Critically Endangered]

Existing vegetation mapping (Figure 16) and revised vegetation mapping (Figure 17) indicates that neither of these communities is present within or adjacent to the subject title. There are no implications under the Commonwealth *Environment Protection and Biodiversity Conservation Act* 1999.

DISCUSSION

Summary of key findings

Threatened flora

• No plant species listed as threatened on the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBCA) and/or the Tasmanian *Threatened Species Protection Act 1995* (TSPA) were detected, or are known from database information, from the study area.

Threatened fauna

- No fauna species listed as threatened on the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBCA) and/or the Tasmanian *Threatened Species Protection Act 1995* (TSPA) were detected, or are known from database information, from the study area.
- The study area supports potential habitat (to varying degrees) of several species, as follows:
 - Tasmanian devil (Sarcophilus harrisii);
 - spotted-tailed quoll (Dasyurus maculatus subsp. maculatus);
 - eastern quoll (Dasyurus viverrinus);
 - eastern barred bandicoot (Perameles gunnii subsp. gunnii);
 - masked owl (Tyto novaehollandiae); and
 - grey goshawk (Accipiter novaehollandiae).

Vegetation types

- The study area supports the following TASVEG mapping units:
 - Eucalyptus obliqua dry forest (TASVEG code: DOB);
 - Eucalyptus amygdalina forest and woodland in sandstone (TASVEG code: DAS); and
 - regenerating cleared land (TASVEG code: FRG).
- DOB is not listed as threatened on Schedule 3A of the Tasmanian Nature Conservation Act 2002 and does not equate to a threatened ecological community under the Commonwealth Environment Protection and Biodiversity Conservation Act 1999. DAS is listed as threatened on Schedule 3A of the Tasmanian Nature Conservation Act 2002 but does not equate to a threatened ecological community under the Commonwealth Environment Protection and Biodiversity Conservation Act 1999.

Weeds

No plant species classified as declared weeds within the meaning of the Tasmanian Weed
Management Act 1999, or considered as environmental weeds (author opinion), were
detected from the study area.

Plant disease

- No evidence of Phytophthora cinnamomi (PC, rootrot) was recorded within the study area.
- No evidence of myrtle wilt was recorded from within the study area.
- No evidence of myrtle rust was recorded from within the study area.

Animal disease (chytrid)

• The study area supports limited habitats conducive to frog chytrid disease.

Legislative and policy implications

Some commentary is provided below with respect to the key threatened species, vegetation management and other relevant legislation. Note that there may be other relevant policy instruments in addition to those discussed. The following information does not constitute legal advice and it is recommended that independent advice is sought from the relevant agency/authority.

Tasmanian Threatened Species Protection Act 1995

Threatened flora and fauna on this Act are managed under Section 51, as follows:

- 51. Offences relating to listed taxa
- (1) Subject to subsections (2) and (3), a person must not knowingly, without a permit -
 - (a) take, keep, trade in or process any specimen of a listed taxon of flora or fauna; or
 - (b) disturb any specimen of a listed taxon of flora or fauna found on land subject to an interim protection order; or
 - (c) disturb any specimen of a listed taxon of flora or fauna contrary to a land management agreement; or

- (d) disturb any specimen of a listed taxon of flora or fauna that is subject to a conservation covenant entered into under Part 5 of the *Nature Conservation Act* 2002; or
- (e) abandon or release any specimen of a listed taxon of flora or fauna into the wild.
- (2) A person may take, keep or process, without a permit, a specimen of a listed taxon of flora in a domestic garden.
- (3) A person acting in accordance with a certified forest practices plan or a public authority management agreement may take, without a permit, a specimen of a listed taxon of flora or fauna, unless the Secretary, by notice in writing, requires the person to obtain a permit.
- (4) A person undertaking dam works in accordance with a Division 3 permit issued under the Water Management Act 1999 may take, without a permit, a specimen of a listed taxon of flora or fauna.

The simplest interpretation of this is that any activity that results in a specimen (i.e. individual) of listed flora or fauna being "knowingly taken" would require a permit to be issued through the Policy & Conservation Advice Branch (PCAB, DPIPWE) through a formal application process. Note that the Act does not make reference to "potential habitat" such that activities that result in loss of/disturbance to potential habitat (but not known sites) – which mainly refers to threatened fauna – would not require a permit. The subject title does not support any known locations of threatened flora or fauna such that the Act does not have application.

Commonwealth Environment Protection and Biodiversity Conservation Act 1999

Under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* an action will require approval from the minister if the action has, will have, or is likely to have, a significant impact on a matter of national environmental significance.

Matters of national environmental significance considered under the EPBCA include:

- listed threatened species and communities
- listed migratory species;
- Ramsar wetlands of international importance;
- Commonwealth marine environment;
- world heritage properties;
- national heritage places;
- the Great Barrier Reef Marine Park;
- · nuclear actions; and
- a water resource, in relation to coal seam gas development and large coal mining development.

The Commonwealth Department of Agriculture, Water and the Environment provides a policy statement titled *Matters of National Environmental Significance: Significant Impact Guidelines 1.1* (CofA 2013, herein the *Guidelines*), which provides overarching guidance on determining whether an action is likely to have a significant impact on a matter protected under the EPBCA.

The Guidelines define a significant impact as:

"...an impact which is important, notable, or of consequence, having regard to its context or intensity. Whether or not an action is likely to have a significant impact depends upon the sensitivity, value, and quality of the environment which is impacted, and upon the intensity, duration, magnitude and geographic extent of the impacts"

and note that:

"...all of these factors [need to be considered] when determining whether an action is likely to have a significant impact on matters of national environmental significance".

The Guidelines provide advice on when a significant impact may be likely:

"To be 'likely', it is not necessary for a significant impact to have a greater than 50% chance of happening; it is sufficient if a significant impact on the environment is a real or not remote chance or possibility.

If there is scientific uncertainty about the impacts of your action and potential impacts are serious or irreversible, the precautionary principle is applicable. Accordingly, a lack of scientific certainty about the potential impacts of an action will not itself justify a decision that the action is not likely to have a significant impact on the environment".

The *Guidelines* provide a set of Significant Impact Criteria (CofA 2013), which are "intended to assist...in determining whether the impacts of [the] proposed action on any matter of national environmental significance are likely to be significant impacts". It is noted that the criteria are "intended to provide general guidance on the types of actions that will require approval and the types of actions that will not require approval...[and]...not intended to be exhaustive or definitive".

Listed ecological communities

The subject title does not support any such communities.

Threatened flora

The subject title does not support populations of EPBCA-listed flora, nor significant potential habitat of such species.

Threatened fauna

The subject title may support populations of threatened fauna listed on the Act, most notably the Tasmanian devil, spotted-tailed quoll, eastern quoll and eastern barred bandicoot. Note that the study area is within the range of several other species listed on the Act but it is unlikely that any proposal will result in a significant impact on these species (this includes wide-ranging species such as the wedge-tailed eagle, swift parrot and masked owl).

The *Guidelines* consider a "significant impact" to comprise loss that is likely to lead to a long-term decrease in the size of an important population of a species; reduce the area of occupancy of an important population; fragment an existing important population into two or more populations (unlikely); adversely affect habitat critical to the survival of a species; disrupt the breeding cycle of an important population; modify, destroy, remove or isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline; result in invasive species that are harmful to a threatened species becoming established in the threatened species' habitat; introduce disease that may cause the species to decline; or interfere substantially with the recovery of the species.

With respect to the aforementioned species, it is difficult to anticipate a scenario in which a referral to the Commonwealth Department of Agriculture, Water and the Environment would be become necessary at the scale of the proposed activities.

Tasmanian Forest Practices Act 1985 and associated Forest Practices Regulations 2017

The *Regulations* provide the following relevant circumstances in which a Forest Practices Plan is not required.

4. Circumstances in which forest practices plan, &c., not required

For the purpose of section 17(6) of the Act, the following circumstances are prescribed:

- (a) the harvesting of timber or the clearing of trees, with the consent of the owner of the land, if the land is not vulnerable land and
 - (i) the volume of timber harvested or trees cleared is less than 100 tonnes for each area of applicable land per year; or
 - (ii) the total area of land on which the harvesting or clearing occurs is less than one hectare for each area of applicable land per year –

whichever is the lesser:

- (j) the harvesting of timber or the clearing of trees on any land, or the clearance and conversion of a threatened native vegetation community on any land, for the purpose of enabling –
 - (i) the construction of a building within the meaning of the *Land Use Planning and Approvals Act 1993* or of a group of such buildings; or
 - (ii) the carrying out of any associated development -

if the construction of the buildings or carrying out of the associated development is authorised by a permit issued under that Act.

In theory, therefore, any clearing that is for a "building" and "associated development" subject to a planning permit issued pursuant to the relevant planning scheme will not require a Forest Practices Plan. 4(j)(i) refers to a "building within the meaning of the *Land Use Planning and Approvals Act 1993* or of a group of such building", which is defined in that Act as:

building includes -

- (a) a structure and part of a building or structure; and
- (b) fences, walls, out-buildings, service installations and other appurtenances of a building;and
- (c) a boat or a pontoon which is permanently moored or fixed to land;

And under the *Regulations*

associated development means development that is related to the construction or use of a building, or to the construction or use of a group of buildings, and includes the development of –

- (a) water, sewerage, gas, electrical, telecommunications and other services to be provided to the building or group of buildings; and
- (b) roads, footpaths and cycle paths; and
- (c) firebreaks; and
- (d) recreational facilities, including but not limited to parks and sportsgrounds; and
- (e) facilities to enable the commercial use of the building or group of buildings;

Under the Act:

clearing of trees means the removal of trees by -

- (a) clearing, cutting, pushing or otherwise removing; or
- (b) destroying the trees in any way;

forest means an area containing trees;

trees means -

- (a) any woody plants with a height or potential height of 5 metres or more, whether or not living, dead, standing or fallen, that are
 - (i) native to Tasmania; or
 - (ii) introduced into Tasmania and used for the processing or harvesting of timber; and
- (b) tree ferns;

3A. Meaning of "clearance and conversion"

(1) In this Act -

clearance and conversion, of a threatened native vegetation community, means the deliberate process of removing all or most of the threatened native vegetation community from an area of land and –

- (a) leaving the area of land, on a permanent or extended basis, in an unvegetated state; or
- (b) replacing the threatened native vegetation so removed, on a permanent or extended basis, with any, or any combination of, the following:
 - (i) another community of native vegetation;
 - (ii) non-native vegetation;
 - (iii) agricultural works;
 - (iv) residential, commercial or other non-agricultural development; or
- (c) doing a combination of any of the things referred to in paragraphs (a) and (b).
- (2) To avoid doubt, a management practice does not constitute the clearance and conversion of a threatened native vegetation community from any land unless the management practice is carried out to deliberately remove, or carried out as part of a process to deliberately remove, all or most of the threatened native vegetation community from the land on a permanent or extended basis.

The precise link between some of the definitions in the various acts and regulations is open to some interpretation. I strongly recommend independent advice be sought for any works that may require a Forest Practices Plan. While any clearing below the thresholds (1 ha or 100 tonnes per property per year) would not usually require a Forest Practices Plan, the thresholds are not relevant to "vulnerable land", which the Regulations define as:

vulnerable land means land that -

- (a) is within a streamside reserve or a machinery exclusion zone within the meaning of the *Forest Practices Code*; or
- (b) has a slope of more than the landslide threshold slope angles within the meaning of the *Forest Practices Code*; or
- (c) is within the High or Very High Soil Erodibility Class within the meaning of the *Forest Practices Code*; or
- (d) consists of, or contains, a threatened native vegetation community; or
- (e) is inhabited by a threatened species within the meaning of the *Threatened Species Protection Act 1995*; or
- (f) contains vulnerable karst soil within the meaning of the Forest Practices Code; or
- (g) contains an area of trees reserved from the harvesting of timber or the clearing of trees under a forest practices plan where the period specified in the plan has expired.

The above has direct relevance to any riparian areas and any areas mapped as *Eucalyptus amygdalina* forest and woodland on sandstone, listed as threatened under Schedule 3A of the Tasmanian *Nature Conservation Act 2002*.

Again, the interaction between planning scheme provisions (which may or may not allow for clearing of forest, threatened or otherwise, for primary production purposes on Rural Resource zoned land) and the provisions of the *Forest Practices Act 1985* and associated *Forest Practices Regulations 2017* is not clearcut. It is recommended that formal advice be sought from both officers of Huon Valley Council and the Forest Practices Authority for any land use practices where the legislation is not certain.

Tasmanian Nature Conservation Act 2002

Schedule 3A of the Act lists vegetation types classified as threatened within Tasmania. The subject title supports *Eucalyptus amygdalina* forest and woodland on sandstone, which is so listed. While the Tasmanian Department of Primary Industries, Parks, Water & Environment (DPIPWE) have administrative responsibility for the Act, actual regulation of impacts on threatened vegetation types is through either the Tasmanian *Forest Practices Regulations 2017* or the Tasmanian *Land Use Planning and Approvals Act 1993* (in this case, the *Huon Valley Interim Planning Scheme 2015*).

Tasmanian Weed Management Act 1999

No plant species classified as declared weed within the meaning of the Tasmanian *Weed Management Act 1999* were detected from the study area. As such, this Act has limited direct application.

Tasmanian Wildlife (General) Regulations 2010

While the assessment of the study area indicated the presence of species listed on schedules of the *Regulations* (i.e. "specially protected wildlife", "protected wildlife", "partly protected wildlife"), no individuals, or products (e.g. nests, dens, etc.), of these species, are likely to be directly physically affected by the works.

Tasmanian Land Use Planning and Approvals Act 1993

Note that the following is my interpretation of the provisions of the *Huon Valley Interim Planning Scheme 2015* and does not represent the views of Huon Valley Council. The following does not constitute legal advice. It is recommended that formal advice be sought from the relevant agency prior to acting on any aspect of this statement.

It is also noted that the *Statewide Planning Scheme* (SPS) s imminent. It is assumed that the title's current Rural resource zoning will be transferred to the SPS as the Rural zone. It is also assumed that the Biodiversity Protection Area overlay will be transferred as the Priority Vegetation Overlay. I am not certain as to the content of the Local Provisions Schedule and how this overlay will interact with the zone provisions.

General zone provisions

The subject title is zoned Rural Resource.

Below I address some specific clauses of the Rural Resource zone to provide guidance on the likely impact of a future development proposal on "natural values" referred to in these clauses.

There appear to be two uses that need consideration. The first is "Rural Development", which appears to be a "No Permit Required" use (26.2). I will assume that this is applicable to all activities reasonably considered to comprise some form of agricultural activity. Note that this does not necessarily mean that any "clearing" will not require a Forest Practices Plan.

The second is "Residential", which is a "Discretionary" use with the qualification "Only if single dwelling". My interpretation of this statement is that the zone provisions accept a single residential dwelling on land so zoned but that there is some discretion applied, presumably principally in relation to the primary purpose statements of the zone that relate mainly to rural resource uses.

Based on my experience with residential development in this zone, I believe that the principal clause requiring consideration in relation to natural values 26.4. Development Standards for Buildings and Works, in particular 26.4.3 Design, which is stated as follows:

26.4.3 Design

Objective: To ensure that the location and appearance of buildings and works minimises adverse impact on the rural landscape.

The basic objective of 26.4.3 should be relatively easily met with a single residential dwelling with a standard bushfire hazard management plan. It is noted that the primary objective of 26.4.3 relates to "rural landscape" and not "natural values".

The Acceptable Solution is as follows:

Acceptable Solutions

Α1

The location of buildings and works must comply with any of the following:

- (a) be located within a building area, if provided on the title;
- (b) be an addition or alteration to an existing building;
- (c) be located on a site that does not require the clearing of native vegetation and is not on a skyline or ridgeline.

It will not be possible to meet the Acceptable Solutions of A1 because the title does not (to my knowledge) include a "building area" shown on title, it would be a new residence, and the development may require some clearing of native vegetation. While the residence would be proposed for within the existing cleared area and utilise an existing access, hazard management may need extend to the adjacent regrowth-structured forest.

Based on the above, the Performance Criteria would need to be addressed, as follows:

Performance Criteria

Ρ1

The location of buildings and works must satisfy all of the following:

- (a) be located on a skyline or ridgeline only if:
 - (i) there are no sites clear of native vegetation and clear of other significant site constraints such as access difficulties or excessive slope, or the location is necessary for the functional requirements of infrastructure;
 - (ii) significant impacts on the rural landscape are minimised through the height of the structure, landscaping and use of colours with a light reflectance value not greater than 40 percent for all exterior building surfaces;
- (b) be consistent with any Desired Future Character Statements provided for the area;
- (c) be located in an area requiring the clearing of native vegetation only if:
 - (i) there are no sites clear of native vegetation and clear of other significant site constraints such as access difficulties or excessive slope, or the location is necessary for the functional requirements of infrastructure;
 - (ii) the extent of clearing is the minimum necessary to provide for buildings, associated works and associated bushfire protection measures.

I do not believe that P1(a) has application. While I am not a qualified person with respect to visual analysis, examination of topographic maps combined with on-ground assessments indicates that the most likely house site would be unseen from available vantage points. This would need to be confirmed.

P1(b) does not have application as 26.1.3 Desired Future Character Statements states "there are no desired future character statements for this zone".

Technically, P1(c) should be satisfied by placement of the dwelling in the existing cleared area.

In relation to P1(c)(ii), I would usually accept a bushfire hazard management plan from an accredited person as meeting the intent and specifics of the condition. In this case, I would accept a lower BAL rating (e.g. BAL-19 or even lower) rather than BAL-29 (sometimes perceived as having less of an impact on natural values) because of the nature of the vegetation type and adjoining steeper slopes i.e. I accept that substantial clearing of a non-threatened vegetation type may need to be undertaken to satisfy contemporary bushfire hazard management requirements.

On the basis of the above analysis, in my opinion a proposed residential dwelling couls meet the intent and specifics of the provisions of the Rural Resource zone in relation to "natural values" (I have not addressed any other values).

Biodiversity Code

The subject title is wholly subject to the Biodiversity Protection Area overlay under the immediately preceding version of the overlay maps linked to the *Huon Valley Interim Planning Scheme 2015* (Figure 5) and also under the recently developed overlay maps provided through LISTmap for AM-HUO-PSA-4-2019 (Figure 6), noting that this took effect on 10 Jul. 2020 (email from TPC, 21 May 2020). I have previously requested a Priority Vegetation Report from officers of Huon Valley Council for titles with similar overlays to explain the rationale for the revised overlay. I have not requested such a report at this stage, and as such, I will review the overlay with respect to the current values identified in Table E10.1 of the Biodiversity Code.

The purpose of the Biodiversity Code is stated below:

E10.1 Purpose

E10.1.1

The purpose of this provision is to:

- (a) minimise loss of identified threatened native vegetation communities and threatened flora species;
- (b) conserve identified threatened fauna species by minimising clearance of important habitat and managing environmental impact; and
- (c) minimise loss of other biodiversity values that are recognised as locally significant by the Planning Authority;

where not otherwise regulated by the State or Commonwealth.

The subject title does support a threatened vegetation community, such that clause E10.1.1(a) will direct application in relation to this value, at least for the area now allocated to *Eucalyptus amygdalina* forest and woodland on sandstone.

The subject title does not support threatened flora, such that clause E10.1.1(a) should not have direct application in relation to this value.

It can be argued that the subject title supports potential habitat of threatened fauna (e.g. Tasmanian devil, spotted-tailed quoll, eastern quoll, eastern barred bandicoot, masked owl, grey goshawk), but the degree to which this represents "important habitat" is less easy to interpret because the *Scheme* (or Code) does not define the term. In my professional opinion, in this case it is reasonable to indicate that the more heavily forested areas may meet the intent of "important habitat", such that E10.1.1(b) may have direct application to such areas, but the application to existing cleared/managed areas (i.e. the area now mapped as regenerating cleared land) is less clear.

I am not aware of any particular biodiversity values within the title recognised as locally significant, such that I do not believe that clause E10.1.1(c) has direct application. However, I analyse the biodiversity values identified in Table E10.1 in some detail.

The application of the Biodiversity Code is stated below:

E10.2 Application

This code applies to development involving the clearance and conversion or disturbance of native vegetation within a Biodiversity Protection Area.

"Clearance and conversion" is defined under the Code as:

"the process of removing native vegetation from an area of land and: (a) leaving the area of land, on a permanent or extended basis, in a state predominantly unvegetated with native vegetation; or (b) replacing the native vegetation so removed, on a permanent or extended basis, with residential, commercial, mining agriculture or other non-agricultural development".

"Disturbance" is defined under the Code as:

"the alteration of the structure and species composition of a vegetation community through actions including cutting down, felling, thinning, logging, removing or destroying of a native vegetation community".

"Native vegetation" is defined in the Scheme as:

"plants that are indigenous to Tasmania including trees, shrubs, herbs and grasses that have not been planted for domestic or commercial purposes".

It is reasonable to consider the clearing for some form of resource development and for buildings and associated infrastructure elements such as access driveways and water tanks, sheds and the like as "clearance and conversion".

In my opinion, partial structural modification (e.g. some canopy removal, slashing of understorey) for the purposes of maintaining a low-risk fire management zone should not be considered to comprise "clearance and conversion" but may fall within the intent of the definition of "disturbance". I note that the definition of "disturbance" requires the alteration of the structure <u>and</u> composition of a vegetation community. DOB as a vegetation type is extremely resilient and robust to most forms of disturbance.

Section E10.5 indicates the application requirements for developments with the Biodiversity Protection Overlay area, as follows:

E10.5 Application Requirements

E10.5.1

In addition to any other application requirements, the planning authority may require the applicant to provide a natural values determination if considered necessary to determine compliance with acceptable solutions.

E10.5.1

In addition to any other application requirements, the planning authority may require the applicant to provide any of the following information, if considered necessary to determine compliance with performance criteria:

- (a) a natural values determination;
- (b) a natural values assessment;
- (c) a report detailing how impacts on priority biodiversity values will be avoided, minimised, and/or mitigated;
- (d) a special circumstances justification report;
- (e) a biodiversity offsets plan.

A "natural values assessment" (a higher level of assessment than a "natural values determination") is defined as:

An ecological assessment, generally consistent with the *Guidelines for Natural Values Assessment* (DPIPWE July 2009), by a suitably qualified person (biodiversity) to identify and convey:

- (a) the location of priority biodiversity values affecting the site;
- (b) the significance of these priority biodiversity values, with particular reference to Table E10.1;
- (c) any likely impact on these priority biodiversity values including existing activities on the site, nearby land uses, weeds, pests, pathogens and the degree of connectivity with other land with natural values;
- (d) the likely impact of the proposed development or use on these priority biodiversity values;
- (e) recommendations for the design and siting of the proposed development or use to avoid or minimise the identified impacts; and
- (g) recommendations for the mitigation or management of any residual impacts.

The preceding report on the natural values and this review of the provisions of the Biodiversity Code should meet the intent and specifics of a "natural values assessment".

At this juncture, it is worth exploring some exemptions provided in the Biodiversity Code that may apply to a development and/or routine property maintenance. Note tat these are the current exemptions under the interim scheme and I do not know if these will be applicable through the incoming *Statewide Planning Scheme* and Local Provisions Schedule.

E10.4 Development Exempt from this Code

E10.4.1

The following development is exempt from this code:

(a) clearance and conversion or disturbance associated with a Level 2 Activity under the Environmental Management and Pollution Control Act 1994;

[Unlikely to be applicable].

(b) forest operations, including clearing for agriculture, in accordance with a certified Forest Practices Plan;

[See previous discussion on this matter. My understanding of this provision in some planning scheme is that it is included not to provide an "out" from the planning scheme but to refer to matters routinely administered through the Forest Practices Authority i.e. commercial forestry activities and some forms of clearing/management of forest for primary production. In this case, based on my experience, it is doubtful if the Forest Practices Authority would allow a Forest Practices Plan to be certified to include clearance and conversion of a threatened vegetation community, unless such an activity met the test of "exceptional circumstances" (which is unlikely). In my opinion, development of a Forest Practices Plan for anything other than formal native forest silviculture and/or clearance and conversion is not the most suitable administrative option in this case].

(c) fire hazard management works in accordance with a bushfire hazard management plan endorsed by the Tasmanian Fire Service, Forestry Tasmanian or the Parks and Wildlife Service on land owned or administered by the Crown or Council;

[This issue is outside my area of expertise but may relate to matters such as routine fire hazard management not included as part of a formal hazard management area associated with a residential dwelling. Further advice from a suitably qualified person should be sought on this matter].

(d) fire hazard management works in accordance with the *Fire Services Act 1979* or an abatement notice issued under the *Local Government Act 1993*;

[See above].

(e) fire hazard management works for an existing dwelling in accordance with a bushfire hazard management plan endorsed by an accredited person as defined under the Bushfire Prone Areas Code, wherein the extent of clearance and conversion and disturbance is the minimum necessary for adequate protection from bushfire;

[This does not come into effect unless there is an existing dwelling].

(f) the removal or destruction of declared weeds or local environmental weeds;

[Not applicable to the subject title and no such plant species are present].

(g) works considered necessary by an agency or council to remedy an unacceptable risk to public or private safety or to mitigate or prevent environmental harm;

[Unlikely to be applicable].

(h) works considered necessary by an agency or council for the protection of a water supply, watercourse, lake, wetland or tidal waters or coastal values as part of a management plan;

[Unlikely to be applicable].

 coastal protection works considered necessary by an agency or council that have been designed by a suitably qualified person;

[Not applicable].

(j) works within 2 m of existing infrastructure including roads, tracks, footpaths, cycle paths, drains, sewers, pipelines and telecommunications facilities for the maintenance, repair, upgrading or replacement of such infrastructure;

[This would clearly have application in relation to the existing well-formed access but potentially also to the more minor but still navigable tracks].

(k) works necessary to make safe power lines or for the maintenance, repair, upgrading or replacement of such infrastructure;

[Unlikely to be applicable, at least at present].

- (I) works for the purpose or erecting or maintaining a boundary fence:
 - (i) within 4 m of a boundary line if within the Rural Resource or Significant Agricultural Zones; or
 - (ii) within 2 m of a boundary line if in other zones;

[This will have direct application to boundary fences, noting the zoning as Rural Resource allows for a 4 m clearing width to be created and maintained].

(m) clearance and conversion or disturbance of an area no more than 750 m²;

[I have sought advice from various parties on how this clause can be reasonably interpreted as the threshold is not linked to a time period (e.g. financial or calendar year) or person (e.g. per person or per listed owner) or event (e.g. one-off event or several events separated in time and/or space, and it is suggested this exemption be exercised with all due caution].

(n) clearance and conversion or disturbance of previously cleared agricultural land;

[See previous discussion on this matter in the introductory material. Whether the area now allocated to FRG (i.e. the previously cleared and converted and managed for many years) comprises "previously cleared agricultural land" may require formal advice from the planning authority].

(o) clearance and conversion or disturbance requiring assessment under the *Environment Protection and Biodiversity Conservation Act 1999*;

[See under section on Commonwealth *Environment Protection and Biodiversity Conservation Act* 1999 – not regarded as applicable].

(p) clearance and conversion or disturbance requiring assessment under the Forest Practices Act 1985, the Threatened Species Protection Act 1995 and/or the Nature Conservation Act 2002.

[See under these Acts – only the Forest Practices Act 1985 may have some application].

On the basis of the above review of the exemptions, it appears some activities (e.g. fenceline construction and maintenance, maintenance of existing tracks) may be exempt but that all other substantial works involving native vegetation may require consideration under the Biodiversity Code.

Section E10.7.1 provides the development standards for buildings and works, as follows:

10.7.1 Buildings and Works

Objective

To ensure that development for buildings and works that involves clearance and conversion or disturbance within a Biodiversity Protection Area does not result in unnecessary or unacceptable loss of priority biodiversity values.

Unfortunately, the Scheme does not define terms such as "unnecessary or unacceptable loss of priority biodiversity values". Most of the interim schemes included low, moderate and high priority biodiversity values, where it was possible to logically interpret terms such as "unnecessary" or "unacceptable". For example, where a development could be restricted to the part of the title supporting low priority biodiversity values and avoid any areas with moderate or high priority biodiversity values, this can be reasonably interpreted as minimises "loss of priority biodiversity values". As this scheme only includes moderate priority biodiversity values (an almost nonsensical scenario in real world terms), interpreting the objective statement is genuinely challenging in most circumstances. In this case, however, the area allocated to the DAS vegetation type is reasonably interpreted as having the highest priority for conservation management and I believe if a development and works are restricted to DOB and avoid the DAS, it is reasonable to indicate that "loss of priority biodiversity values" will be minimised. In the case of the regrowth-structured DOB vegetation type (a widespread and well-reserved vegetation type), which does not support threatened flora and essentially only ubiquitous potential habitat for landscape-scale distributed threatened fauna, development and works hardly "trigger" the need for referring to an "unnecessary or unacceptable loss of priority biodiversity values". Until a specific development proposal is presented, it is difficult to know whether it will be "acceptable" (or may remain open to interpretation) but in the context of the zone's purpose (rural resource development), I find it difficult to justify why a proposal for some management (including clearing) of non-threatened vegetation would not be acceptable.

The Acceptable Solution (A1) is as follows, with author comments below each criterion:

Α1

Clearance and conversion or disturbance must comply with one of the following:

- (a) be within a Building Area on a plan of subdivision approved under this planning scheme;
- Not applicable to the best of my knowledge for the subject title.
 - (b) the development is for a single dwelling on an existing lot within the Low Density Residential Zone, Rural Living Zone or Environmental Living Zone and
 - (i) the area of clearance and conversion is no more than 3,000 m²;
 - (ii) the area of disturbance is no more than 6,000 m²;

Not applicable as the zoning is Rural Resource.

- (c) the development is other than for a single dwelling on an existing lot within the Low Density Residential Zone, Rural Living Zone or Environmental Living Zone and
 - (i) the area of clearance and conversion is no more than 1,500 m²;
 - (ii) the area of disturbance is no more than 3,000 m²;

Not applicable as the zoning is Rural Resource.

The Performance Criteria (P1) will need to be met (if exemptions are not applicable).

These criteria require an analysis of whether the development proposal will include clearance and conversion and/or disturbance of "priority biodiversity values". This *Scheme* only includes "moderate priority biodiversity values" (Table E10.1), with the entries in Table E10.1 for "high" and "low priority diversity values" being listed as "nil".

The Biodiversity Code defines "moderate biodiversity values" as (Table E10.1), with author comments below each criterion:

On land within the Biodiversity Protection Area includes:

(a) any threatened native vegetation community;

This is applicable to the part of the title mapped as *Eucalyptus amygdalina* forest and woodland on sandstone (DAS) but not to the non-threatened vegetation (DOB).

(b) known or potential habitat for any threatened species;

Threatened flora

No threatened flora species have been identified from the subject title. The vegetation types present are not generally strongly associated with such species, and any species potentially present are detectable at virtually any time of the year, such that (b) has no application in relation to threatened flora.

Threatened fauna

The intent of the term "potential habitat" is unclear in this *Scheme* (although it is defined in other interim schemes) but is presumed to refer to sites that can be more strongly linked to a particular species (e.g. blue gum-dominated forests for swift parrots).

In this case, there is ubiquitous potential habitat for species such as the Tasmanian devil, spotted-tailed quoll, eastern quoll, eastern barred bandicoot, masked owl and grey goshawk, but this clause has tenuous application because these species also utilise a wide range of non-native habitats such as pasture. That said, the subject title is within the range of these species but no evidence of the species (e.g. scats, dens, nests, etc.) was detected and the habitat is considered to be quite marginal in its own right (except as part of a wider home range/territory) because of the relatively simple structure and composition of the vegetation lacking understorey complexity.

(c) all remnant vegetation;

Remnant vegetation is not present because the vegetation is contiguous with similar vegetation on adjacent titles and extensive within the title itself.

(d) all native vegetation within or adjacent to a watercourse or wetland;

This would apply to any vegetation along the defined watercourses.

(e) native vegetation where there is less than 30% native vegetation in the surrounding one kilometre:

An examination of recent aerial imagery (LISTmap) and TASVEG vegetation mapping clearly demonstrates that there is far greater than 30% native vegetation within 1 km of the subject title.

(f) habitat for hollow dwelling species;

See response under clause (b) but note that the whole title supports regrowth-structured (post-1967 bushfire events) forest with highly scattered hollow-bearing trees only.

(g) threatened species;

See response under clause (b).

(h) the following species;

This list appears to be a suite of non-threatened vascular plant species that are presumed to be "uncommon" in the region, although the selection of this seemingly very select list is not understood.

- (i) Caladenia mentiens
- (ii) Carex fascicularis
- (iii) Centrolepis aristata
- (iv) Daviesai [sic Daviesia] sejugata
- (v) Eucalyptus cordata
- (vi) Gahnia rodwayi
- (vii) Heterozostera tasmanica
- (viii) Hypoxis glabella var. glabella
- (ix) Juncus holoschoenus
- (x) Lemma disperma
- (xi) Lepidosperma globosum
- (xii) Lepidosperma [sic Leptospermum] laevigatum
- (xiii) Lythrum hyssopifolia
- (xiv) Muehlenbeckia gunnii
- (xv) Notodanthonia semiannularis [sic Rytidosperma semiannulare]
- (xvi) Olearia floribunda
- (xvii) Pelargonium inodorum
- (xviii) Phragmites australis
- (xix) Senecio glomeratus
- (xx) Spyridium obovatum
- (xxi) Suaeda australis
- (xxii) Thelionema umbellatum
- (xxiii) Thelymitra arenaria
- (xxiv) Todea barbara

None of these species are present within the subject title.

Since the conclusion is that almost any part of the title may meet the broad intent of all or part of sub-clauses (a), (b), (d), (f) & (g), the Performance Criteria related to the development standards for Buildings and Works (clause 10.7.1) are considered below (noting that only the section for "moderate biodiversity values" are copied because Table E10.1 does not indicate any "high" or "low" values). Author comments are provided below each clause.

Ρ1

Clearance and conversion or disturbance must satisfy the following:

- (b) if moderate priority biodiversity values:
 - (i) development is designed and located to minimise impacts, having regard to constraints such as topography or land hazard and the particular requirements of the development;

In my opinion, clearance and conversion, whether for a residential dwelling and associated hazard management and/or for further limited agricultural development, should be acceptable under the zone provisions. Whether such a proposal meets the intent of "to minimise impacts" is open to interpretation but to constrain such development based on the identified natural values within this zoning does not appear logical except for the areas identified as DAS and associated with waterways.

(ii) impacts resulting from bushfire hazard management measures are minimised as far as reasonably practicable through siting and fire-resistant design of habitable buildings;

In relation to P1(b)(ii), I would usually accept a bushfire hazard management plan from an accredited person as meeting the intent and specifics of the condition. In this case, I would accept a lower BAL rating (e.g. BAL-19 or even lower) rather than BAL-29 (sometimes perceived as having less of an impact on natural values) because of the nature of the vegetation type and adjoining steeper slopes.

(iii) remaining moderate priority biodiversity values on the site are retained and improved through implementation of current best practice mitigation strategies and ongoing management measures designed to protect the integrity of these values;

It is my understanding that the balance of the subject title would be retained as undisturbed native vegetation. Due to the zoning and overlays, I do not believe it is warranted to place a conservation covenant or a Part V Agreement that nominally "protects" the balance of the native vegetation, especially in the context of the zoning.

(iv) residual adverse impacts on moderate priority biodiversity values not able to be avoided or satisfactorily mitigated are offset in accordance with the *Guidelines for the Use of Biodiversity Offsets in the Local Planning Approval Process*, Southern Tasmanian Councils Authority 2013 and any relevant Council policy.

This clause can be difficult to interpret but it is assumed it is attempting to refer to the area of "moderate priority biodiversity values" that will not be included in the balance of native vegetation retained outside the development zone. Clause P1(b)(iv) notes that any such offsets, should they be warranted, should be in accordance with the *Guidelines for the Use of Biodiversity Offsets in the Local Planning Approval Process*. These guidelines provide general principles only on the hierarchical approach to developing offsets (i.e. concepts such as "avoid, mitigate, offset" and "like for like") and these principles can be addressed for any development proposal through the retention of the balance of the native vegetation within the subject title. I do not believe that Huon Valley Council has "any relevant Council policy" in relation to biodiversity offsets. On the basis of the above discussion, I do not believe that there will be a significant "residual adverse impact on moderate priority biodiversity values" that will require a formal offset (but this would need to be re-=examined on presentation of a formal planning application).

Recommendations

The recommendations provided below are a summary of those provided in relation to each of the ecological features described in the main report. The main text of the report provides the relevant context for the recommendations.

Vegetation types

Exclusion of development, except for routine property maintenance activities (e.g. boundary fence construction and maintenance, maintenance of existing tracks, fuel reduction burning), from the area mapped as *Eucalyptus amygdalina* forest and woodland on sandstone (TASVEG code: DAS) should be avoided. Activities within the area mapped as *Eucalyptus obliqua* dry forest (TASVEG code: DOB) and regenerating cleared land (TASVEG code: FRG) is not likely to require special management, although the retention of hollow-bearing trees, where safe and practical to do so, is suggested.

Threatened flora

None identified – no special management required.

Threatened fauna

Apart from recommendation to minimise impact to threatened native vegetation and some habitat elements within non-threatened vegetation (within the intent of the zone provisions and findings regarding natural values), specific management in relation to threatened fauna is not recommended.

Weed and disease management

A stand-alone weed management plan is not indicated. Owner-occupation is considered the most effective future and longer-term means of achieving weed management (i.e. vigilance and control as needed).

Legislative and policy implications

There are no formal requirements for a permit under Section 51 of the Tasmanian *Threatened Species Protection Act 1995* (TSPA).

A formal referral to the Commonwealth Department of Agriculture, Water and the Environment under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBCA) is not considered required.

Development (depending on its specific design) is likely to require a planning permit pursuant to the provisions of the *Huon Valley Interim Planning Scheme 2015*. A review of the provisions of the Biodiversity Code indicates likely compliance with P1 of E10.7.1 without the need for specific planning permit conditions but this will need to be reviewed on presentation of a formal planning application. Note also that this will need to be reviewed once the *Statewide Planning Scheme* and Local Provisions Schedule comes into effect.

It is also recommended to seek formal advice from officers of Huon Valley Council and/or the Forest Practices Authority in relation to the interaction/interpretation of the planning scheme with the Forest Practices Act 1985 and associated Forest Practices Regulations 2017.

REFERENCES

- Allan, K. & Gartenstein, S. (2010). Keeping It Clean: A Tasmanian Field Hygiene Manual to Prevent the Spread of Freshwater Pests and Pathogens. NRM South, Hobart.
- APG (Angiosperm Phylogeny Group) (2016). An update of the Angiosperm Phylogeny Group classification for the orders and families of flowering plants: APG IV. *Botanical Journal of the Linnean Society* 181(1): 1–20.
- Bryant, S.L. & Jackson, J. (1999). *Tasmania's Threatened Fauna Handbook: What, Where and How to Protect Tasmania's Threatened Animals*. Threatened Species Unit, Parks & Wildlife Service, Hobart.
- CofA (Commonwealth of Australia) (2013). EPBC Act Policy Statement 1.1: Significant Impact Guidelines Matters of National Environmental Significance. Commonwealth of Australia, Canberra.
- CofA (Commonwealth of Australia) (2021). Department of Agriculture, Water and the Environment's *Protected Matters Report* for a polygon defining the title area, buffered by 5 km, dated 7 Jun. 2021 Appendix G.
- de Salas, M.F. (Ed.) (2021+) Flora of Tasmania Online. Tasmanian Herbarium, Hobart.
- de Salas, M.F. & Baker, M.L. (2021). *A Census of the Vascular Plants of Tasmania, including Macquarie Island*. Tasmanian Herbarium, Hobart.
- DPIPWE (Department of Primary Industries, Parks, Water & Environment) (2015). Weed and Disease Planning and Hygiene Guidelines Preventing the Spread of Weeds and Diseases in Tasmania. Department of Primary Industries, Parks, Water & Environment, Hobart.
- DPIPWE (Department of Primary Industries, Parks, Water & Environment) (2015). *Guidelines for Natural Values Surveys Terrestrial Development Proposals*. Department of Primary Industries, Parks, Water & Environment, Hobart.
- DPIPWE (Department of Primary Industries, Parks, Water & Environment) (2015). *Biosecurity Factsheet: Myrtle Rust*. Department of Primary Industries, Parks, Water & Environment, Hobart.
- DPIPWE (Department of Primary Industries, Parks, Water & Environment) (2021). *Natural Values Atlas* report ECOtas_GracesRoad for a polygon defining the title area (centred on 501743mE 5224896mN), buffered by 5 km, dated 7 Jun. 2021 Appendix E.
- DPIPWE (Department of Primary Industries, Parks, Water & Environment) (2021) Threatened Native Vegetation Communities List, as per Schedule 3A of the Tasmanian Nature Conservation Act 2002. http://dpipwe.tas.gov.au/conservation/flora-of-tasmania/monitoring-and-mapping-tasmanias-vegetation-(tasveg)/tasveg-the-digital-vegetation-map-of-tasmania/threatened-native-vegetation-communities.
- FPA (Forest Practices Authority) (2009). *Management of Phytophthora cinnamomi in Production Forests. Flora Technical Note No. 8.* Forest Practices Authority, Hobart.
- FPA (Forest Practices Authority) (2016). *Habitat Descriptions of Threatened Flora in Tasmania*. Forest Practices Authority, Hobart.
- FPA (Forest Practices Authority) (2017). *Threatened Flora Species Survey Notes*. Forest Practices Authority, Hobart.
- FPA (Forest Practices Authority) (2021). *Biodiversity Values Database* report, specifically the species' information for grid reference centroid 501743mE 5224896mN (i.e. a point defining the approximate centre of the assessment area), buffered by 5 km and 2 km for threatened fauna and flora records, respectively, hyperlinked species' profiles and predicted range boundary maps, dated 7 Jun. 2021 Appendix F.
- Kitchener, A. & Harris, S. (2013+). From Forest to Fjaeldmark: Descriptions of Tasmania's Vegetation. Edition 2 (online edition). Department of Primary Industries, Parks, Water & Environment, Hobart.

- NRM South (2017). A Guide to Environmental and Agricultural Weeds of Southern Tasmania. NRM South, Hobart.
- Rudman T. (2005). *Interim* Phytophthora cinnamomi *Management Guidelines*. Nature Conservation Report 05/7, Biodiversity Conservation Branch, Department of Primary Industries, Water & Environment, Hobart.
- Rudman, T., Tucker, D. & French, D. (2004). Washdown Procedures for Weed and Disease Control. Edition 1. Department of Primary Industries, Water & Environment, Hobart.
- TSS (Threatened Species Section) (2003+). *Notesheets* and *Listing Statements for* various threatened species. Department of Primary Industries, Parks, Water & Environment, Hobart.
- TSSC (Threatened Species Scientific Committee) (2011). *Commonwealth Conservation Advice on* Botaurus poiciloptilus (*Australasian Bittern*). Department of Sustainability, Environment, Water, Population & Communities. Canberra.
- Wapstra, M. (2018). Flowering Times of Tasmanian Orchids: A Practical Guide for Field Botanists. Self-published by the author (Fourth Edition, July 2018 version).
- Wapstra, H., Wapstra, A., Wapstra, M. & Gilfedder, L. (2005+, updated online at www.dpipwe.tas.gov.au). *The Little Book of Common Names for Tasmanian Plants*. Department Primary Industries, Parks, Water & Environment, Hobart.

APPENDIX A. Vegetation community structure and composition

The tables below provide basic information on the structure and composition of the vegetation mapping units identified from the study area.

Eucalyptus obliqua dry forest (TASVEG code: DOB)

DOB occurs across the southern third of the title, generally associated with the more sheltered aspects. DOB has a predominantly regrowth structure and a now shrubby understorey reflecting a long period without disturbance. The understorey has characteristic of both wet sclerophyll forest (e.g. species such as *Acacia leprosa*, *A. riceana*, *Monotoca glauca*, *Zieria arborescens* and *Dianella tasmanica*) and dry sclerophyll forest (e.g. species such as *Pultenaea juniperina*, *P. daphnoides*, *Oxylobium ellipticum*, *Acacia terminalis*, *Aotus ericoides*, *Leucopogon ericoides*, *Banksia marginata*, *Epacris impressa* and locally dense *Pteridium esculentum*). Around the small dam, DOB grades into *Eucalyptus obliqua* forest with broad-leaf shrubs (TASVEG code: WOB) but still retained sufficient dry sclerophyll features (and is too small an area) to be mapped as part of the DOB polygon.



Typical structure of DOB

Stratum	Height (m) Cover (%)	Species (underline = dominant, parentheses = sparse; + = present)	
Trees	15-22 m 40%	Eucalyptus obliqua, (Eucalyptus amygdalina) [ca. 25 m on southwest-facing slopes near dam and includes scattered Eucalyptus viminalis and Acacia dealbata]	
Tall shrubs	4-9 m 5%	Exocarpos cupressiformis, Banksia marginata, Acacia riceana, Acacia Ieprosa	
Medium shrubs	1-4 m 60%	Philotheca virgata, Banksia marginata, Pultenaea juniperina, Pultenaea daphnoides, Oxylobium ellipticum, Leucopogon ericoides, Epacris impressa, Aotus ericoides, Acacia terminalis, Monotoca glauca	
Low shrubs	< 0.5 m +	Styphelia humifusa	
Graminoids	5%	Gahnia grandis, (Dianella tasmanica)	
Ground ferns	variable	Pteridium esculentum	
Herbs	+	Hydrocotyle hirta, Chiloglottis reflexa, Gonocarpus spp., Stylidium graminifolium, Pterostylis pedunculata, Euchiton japonicus	
Climbers	1-2%	Cassytha pubescens	

Eucalyptus amygdalina forest and woodland on sandstone (TASVEG code: DAS)

DAS occurs across the northern and central portions of the title, generally with a northerly aspect on gentle to moderate slopes. Structurally, DAS is very simple with an even-aged canopy dominated by *Eucalyptus amygdalina* over a tall and usually dense shrubby understorey, allowed to develop due to lack of fire, in turn over a usually depauperate ground layer. This example of DAS is floristically less diverse than most examples, which generally occur on Triassic sandstone rather than this form of Permian mixed sediments (refer to section on geology that describes the substrate in detail).

DAS grades with DOB with a variably wide transition zone. Aerial imagery is a useful guide to the DAS-DOB distinction, except in the far northeast where DAS has a similar signature to DOB and extends into the gullies, environments usually expected to support DOB.

DAS is in good condition with no weeds or symptoms of disease noted. It has a regrowth structure from past fires and possibly some level of clearing/firewood collection.



Typical structure of DAS

Stratum	Height (m) Cover (%)	Species (underline = dominant, parentheses = sparse; + = present)	
Trees	10-15 m 40%	Eucalyptus amygdalina, (Eucalyptus obliqua) [attains 20-25 m along some drainage features and sheltered slopes]	
Tall shrubs	4-9 m 5%	Exocarpos cupressiformis, Banksia marginata	
Medium shrubs	1-4 m 60%	<u>Leptospermum glaucescens</u> , Philotheca virgata, Banksia marginata, Pultenaea juniperina, Leucopogon ericoides, Epacris impressa, Melaleuca squarrosa, (Monotoca glauca)	
Low shrubs	< 0.5 m +	Hibbertia procumbens	
Graminoids	5%	Gahnia grandis, (Dianella tasmanica)	
Ground ferns	variable	Pteridium esculentum	
Herbs	+	Hydrocotyle hirta, Chiloglottis reflexa, Gonocarpus spp., Stylidium graminifolium	
Climbers	1-2%	Cassytha pubescens	

APPENDIX B. Vascular plant species recorded from study area

Botanical nomenclature follows *A Census of the Vascular Plants of Tasmania* (de Salas & Baker 2021), with family placement updated to reflect the nomenclatural changes recognised in the *Flora of Tasmania Online* (de Salas 2021+) and APG (2016); common nomenclature follows *The Little Book of Common Names of Tasmanian Plants* (Wapstra et al. 2005+, updated online at www.dpipwe.tas.gov.au).

e = endemic to Tasmania; i = naturalised/exotic (i.e. not native to Tasmania)

Table B1. Summary of vascular species recorded from the study area

	ORDER			
STATUS	DICOTYLEDONAE	MONOCOTYLEDONAE	GYMNOSPERMAE	PTERIDOPHYTA
	32	10	-	1
е	3	-	-	-
i	1	-	-	-
Sum	37	10	0	1
TOTAL	48			

DICOTYLEDONAE

APIACEAE

Hydrocotyle hirta

ASTERACEAE

Euchiton japonicus Lagenophora stipitata Senecio minimus

DILLENIACEAE

Hibbertia procumbens

DROSERACEAE

Drosera auriculata

ERICACEAE

Epacris impressa Monotoca glauca Styphelia humifusa

FABACEAE

Acacia dealbata subsp. dealbata Acacia leprosa var. graveolens

Acacia melanoxylon Acacia riceana

e Acacia riceana Acacia terminalis

> Acacia verticillata subsp. verticillata Aotus ericoides

Daviesia ulicifolia subsp. ulicifolia Pultenaea daphnoides

Pultenaea daphnoides Pultenaea juniperina

GENTIANACEAE

Centaurium erythraea

GOODENIACEAE

Goodenia ovata **HALORAGACEAE**

Gonocarpus tetragynus Gonocarpus teucrioides

LAURACEAE

Cassytha pubescens

MYRTACEAE

e Eucalyptus amygdalina Eucalyptus obliqua Eucalyptus viminalis subsp. viminalis

Leptospermum glaucescens Leptospermum scoparium hairy pennywort

common cottonleaf blue bottledaisy shrubby fireweed

spreading guineaflower

tall sundew

common heath goldey wood native cranberry

silver wattle varnish wattle blackwood arching wattle sunshine wattle prickly moses golden pea

yellow spiky bitterpea heartleaf bushpea prickly beauty

common centaury

hop native-primrose

common raspwort forest raspwort

downy dodderlaurel

black peppermint stringybark white gum smoky teatree common teatree Melaleuca squarrosa scented paperbark

PROTEACEAE

Banksia marginata silver banksia

ROSACEAE

Acaena novae-zelandiae common buzzy

RUTACEAE

Philotheca virgata twiggy waxflower

Zieria arborescens subsp. arborescens stinkwood

SANTALACEAE

Exocarpos cupressiformis common native-cherry

STYLIDIACEAE

Stylidium graminifolium narrowleaf triggerplant

VIOLACEAE

Viola hederacea subsp. hederacea ivyleaf violet

MONOCOTYLEDONAE

AMARYLLIDACEAE

Dianella tasmanica forest flaxlily

ASPARAGACEAE

Lomandra longifolia sagg

CYPERACEAE

Gahnia grandis cutting grass
Lepidosperma elatius tall swordsedge

JUNCACEAE

Juncus paucifloruslooseflower rushJuncus procerustall rushJuncus sarophorusbroom rush

ORCHIDACEAE

Chiloglottis reflexa autumn bird-orchid

Pterostylis pedunculata maroonhood

POACEAE

Microlaena stipoides var. stipoides weeping grass

PTERIDOPHYTA

DENNSTAEDTIACEAE

Pteridium esculentum subsp. esculentum bracken

APPENDIX C. Analysis of database records of threatened flora

Table C1 provides a listing of threatened flora from within 5,000 m of the study area (nominal buffer width usually used to discuss the potential of a particular study area to support various species listed in databases), with comments on whether potential habitat is present for the species, and possible reasons why a species was not recorded.

Table C1. Threatened flora records from within 5,000 m of boundary of the study area

Species listed below are listed as rare (r), vulnerable (v), endangered (e), or extinct (x) on the Tasmanian *Threatened Species Protection Act 1995* (TSPA); vulnerable (VU), endangered (EN), critically endangered (CR) or extinct (EX) on the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBCA). Information below is sourced from DPIPWE's *Natural Values Atlas* (DPIPWE 2021) and other sources where indicated. Habitat descriptions are taken from FPA (2016), FPA (2017) and TSS (2003+), except where otherwise indicated. Species marked with # are listed in CofA (2021).

Scientific name Common name	Status TSPA EPBCA	Tasmanian habitat description (and distribution)	Comments on study area and database records
<i>Caladenia caudata</i> tailed spider-orchid	v VU # only	Caladenia caudata has highly variable habitat, which includes the central north: Eucalyptus obliqua heathy forest on low undulating hills; the northeast: E. globulus grassy/heathy coastal forest, E. amygdalina heathy woodland and forest, Allocasuarina woodland; and the southeast: E. amygdalina forest and woodland on sandstone, coastal E. viminalis forest on deep sands. Substrates vary from dolerite to sandstone to granite, with soils ranging from deep windblown sands, sands derived from sandstone and well-developed clay loams developed from dolerite.	Potential habitat absent.
<i>Epacris exserta</i> south esk heath	e EN # only	Epacris exserta occurs along the lower reaches of the South Esk, North Esk and Supply rivers. It is a strictly riparian species that grows in areas subject to periodic inundation, mainly on alluvium amongst dolerite boulders within dense riparian scrub, and occasionally in open rocky sites. It has been recorded from 10-310 m a.s.l.	Potential habitat absent. The listing in CofA (2021) is clearly erroneous.
Epacris virgata Kettering pretty heath	V - #	Epacris virgata (Kettering) occurs among foothills in southeastern Tasmania in dry sclerophyll forest on hilly terrain at elevations of 10-300 m a.s.l., mainly on dolerite, though sometimes close to the geological boundary of dolerite and Permian mudstone. It is generally associated with grassy/heathy Eucalyptus ovata woodland/forest, but is also occasionally found in grassy/heathy E. pulchella woodland/forest.	Potential habitat absent.
Lepidium hyssopifolium soft peppercress	e EN #	The native habitat of <i>Lepidium</i> hyssopifolium is the growth suppression zone beneath large trees in grassy woodlands and grasslands	Potential habitat absent.

Scientific name Common name	Status TSPA EPBCA	Tasmanian habitat description (and distribution)	Comments on study area and database records
		(e.g. over-mature black wattles and isolated eucalypts in rough pasture). Lepidium hyssopifolium is now found primarily under large exotic trees on roadsides and home yards on farms. It occurs in the eastern part of Tasmania between sea-level to 500 m a.s.l. in dry, warm and fertile areas on flat ground on weakly acid to alkaline soils derived from a range of rock types.	
Prasophyllum apoxychilum tapered leek-orchid	v EN # only	Prasophyllum apoxychilum is restricted to eastern and northeastern Tasmania where it occurs in coastal heathland or grassy and scrubby open eucalypt forest on sandy and clay loams, often among rocks. It occurs at a range of elevations and seems to be strongly associated with dolerite in the east and southeast of its range.	Potential habitat absent.
Xerochrysum palustre swamp everlasting	v VU # only	Xerochrysum palustre has a scattered distribution with populations in the northeast, east coast, Central Highlands and Midlands, all below about 700 m elevation. It occurs in wetlands, grassy to sedgy wet heathlands and extends to associated heathy Eucalyptus ovata woodlands. Sites are usually inundated for part of the year.	Potential habitat absent.

APPENDIX D. Analysis of database records of threatened fauna

Table D1 provides a listing of threatened fauna from within 5,000 m of the study area (nominal buffer width usually used to discuss the potential of a particular study area to support various species listed in databases), with comments on whether potential habitat is present for the species, and possible reasons why a species was not recorded.

Table D1. Threatened fauna records from 5,000 m of boundary of the study area

Species listed below are listed as rare (r), vulnerable (v), endangered (e), or extinct (x) on the Tasmanian *Threatened Species Protection Act 1995* (TSPA); vulnerable (VU), endangered (EN), critically endangered (CR) or extinct (EX) on the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBCA). Information below is sourced from the DPIPWE's *Natural Values Atlas* (DPIPWE 2021), Bryant & Jackson (1999) and FPA (2021); marine, wholly pelagic and littoral species such as marine mammals, fish and offshore seabirds are excluded. Species marked with # are listed in CofA (2021).

Scientific name Common name	Status TSPA EPBCA	Tasmanian habitat description (and distribution)	Comments on study area and database records
<i>Accipiter novaehollandiae</i> grey goshawk	e -	Potential habitat is native forest with mature elements below 600 m altitude, particularly along watercourses. Significant habitat may be summarised as areas of wet forest, rainforest and damp forest patches in dry forest, with a relatively closed mature canopy, low stem density, and open understorey in close proximity to foraging habitat and a freshwater body (i.e. stream, river, lake, swamp, etc.).	Potential habitat present. The species may occasionally utilise the greater study area as part of a home range and for foraging but small-scale development should not have a significant impact on this aspect of the life history of the species.
Antipodia chaostola tax. leucophaea chaostola skipper	e EN #	Potential habitat is dry forest and woodland supporting Gahnia radula (usually on sandstone and other sedimentary rock types) or Gahnia microstachya (usually on granitebased substrates).	Potential habitat absent (both <i>Gahnia</i> species not present).
Apus pacificus fork-tailed swift	- - # only	Occasional non-breeding migrant to Tasmania only.	Potential habitat present. However, as this species rarely lands or roosts (and does not breed) on the Australian migration, any proposal should not have a deleterious impact on the species. Further consideration of this species should not be required.
Aquila audax subsp. fleayi tasmanian wedge-tailed eagle	e EN #	Potential habitat comprises potential nesting habitat and potential foraging habitat. Potential foraging habitat is a wide variety of forest (including areas subject to native forest silviculture) and non-forest habitats. Potential nesting habitat is tall eucalypt trees in large tracts (usually more than 10 ha) of eucalypt or mixed forest. Nest trees are usually amongst the largest in a locality. They are generally in sheltered positions on leeward slopes, between the lower and mid sections of a slope and with the top of the tree usually lower than the ground level of the top of the ridge, although in some parts of the State topographic shelter is not always a significant factor	Potential nesting habitat absent (generally even-aged regrowth-structured forest). There are no known nests within 1 km of the subject title. The species may occasionally utilise the greater study area as part of a home range and for foraging but small-scale development should not have a significant impact on this aspect of the life history of the species.

Scientific name Common name	Status TSPA EPBCA	Tasmanian habitat description (and distribution)	Comments on study area and database records
		(e.g. parts of the northwest and Central Highlands). Nests are usually not constructed close to sources of disturbance and nests close to disturbance are less productive. More than one nest may occur within a territory but only one is used for breeding in any one year. Breeding failure often promotes a change of nest in the next year.	
Botaurus poiciloptilus australasian bittern	- EN # only	Potential habitat is comprised of wetlands with tall dense vegetation, where it forages in still, shallow water up to 0.3 m deep, often at the edges of pools or waterways, or from platforms or mats of vegetation over deep water. It favours permanent and seasonal freshwater habitats, particularly those dominated by sedges, rushes and reeds (e.g. <i>Phragmites, Cyperus, Eleocharis, Juncus, Typha, Baumea, Bolboschoenus</i>) or cutting grass (Gahnia) growing over a muddy or peaty substrate (TSSC 2011).	Potential habitat absent.
<i>Ceyx azureus</i> subsp. <i>diemenensis</i> Tasmanian azure kingfisher	V EN #	Potential habitat comprises potential foraging habitat and potential breeding habitat. Potential foraging habitat is primarily freshwater (occasionally estuarine) waterbodies such as large rivers and streams with well-developed overhanging vegetation suitable for perching and water deep enough for dive-feeding. Potential breeding habitat is usually steep banks of large rivers (a breeding site is a hole (burrow) drilled in the bank).	Potential habitat absent.
Dasyurus maculatus subsp. maculatus spotted-tailed quoll	r VU #	Potential habitat is coastal scrub, riparian areas, rainforest, wet forest, damp forest, dry forest and blackwood swamp forest (mature and regrowth), particularly where structurally complex and steep rocky areas are present, and includes remnant patches in cleared agricultural land.	Potential habitat widespread. No evidence (e.g. scats, dens) of the species was observed. The species may occasionally utilise the greater study area as part of a home range and for foraging but small-scale development should not have a significant impact on this aspect of the life history of the species.
<i>Dasyurus viverrinus</i> eastern quoll	- EN #	Potential habitat is a variety of habitats including rainforest, heathland, alpine areas and scrub. However, it seems to prefer dry forest and native grassland mosaics which are bounded by agricultural land.	Refer to comments under spotted-tailed quoll.
<i>Haliaeetus leucogaster</i> white-bellied sea-eagle	V -	Potential habitat comprises potential nesting habitat and potential foraging habitat. Potential foraging habitat is any large waterbody (including sea coasts, estuaries, wide rivers, lakes, impoundments and even large farm dams) supporting prey items (fish). Potential nesting habitat is tall eucalypt trees in large tracts (usually more than 10 ha) of eucalypt or mixed forest within 5 km of the coast (nearest coast including shores, bays, inlets and	Refer to comments under wedge-tailed eagle.

Scientific name Common name	Status TSPA EPBCA	Tasmanian habitat description (and distribution)	Comments on study area and database records
		peninsulas), large rivers (class 1), lakes or complexes of large farm dams. Scattered trees along river banks or pasture land may also be used.	
Hirundapus caudacutus white-throated needletail	- VU #	This species is mostly aerial, from heights of less than 1 m up to more than 1,000 m above the ground. Although they occur over most types of habitat, they are recorded most often above wooded areas, including open forest and rainforest.	Potential habitat present. However, as this species rarely lands or roosts (and does not breed) on the Australian migration, any proposal should not have a deleterious impact on the species. Further consideration of this species should not be required.
<i>Lathamus discolor</i> swift parrot	e CR #	Potential habitat comprises potential foraging habitat and potential nesting habitat. Potential foraging habitat comprises <i>Eucalyptus globulus</i> (blue gum) or <i>Eucalyptus ovata</i> (black gum) trees that are old enough to flower. For management purposes, potential nesting habitat is considered to comprise eucalypt forests that contain hollow-bearing trees.	Eucalyptus ovata is not present so this component of potential foraging habitat is absent. Eucalyptus globulus is not present so this component of potential foraging habitat is absent. Hollow-bearing trees are present but the site is highly atypical of known breeding sites.
<i>Lissotes menalcas</i> Mt Mangana stag beetle	V -	Potential habitat is any eucalypt forest that contains rotting logs (often numerous, and usually greater than about 40 cm diameter at mid-log length) below about 650 m a.s.l. (generally moist habitats that have not been subject to high intensity or frequent fires in about the last 20 years). The species has a patchy distribution within areas of potential habitat.	Potential habitat absent (dry forest only lacking large coarse woody debris).
<i>Litoria raniformis</i> green and golden frog	v VU	Potential habitat is permanent and temporary waterbodies, usually with vegetation in or around them. Potential habitat includes features such as natural lagoons, permanently or seasonally inundated swamps and wetlands, farm dams, irrigation channels, artificial water-holding sites such as old quarries, slow-flowing stretches of streams and rivers.	Potential habitat absent (small dam embedded in the heavily forested setting is unsuitable).
<i>Myiagra cyanoleuca</i> satin flycatcher	- - # only	Potential habitat is variable but mainly eucalypt-dominated forests, with a stronger association with wetter forest gullies.	Potential habitat present. This is a spring-summer migrant that may occasionally utilise the greater study area for foraging. No sightings were made on the single day of assessment in June, which was outside the species' resident period in Tasmania. Small-scale development should not have a significant impact on this species.
Pardalotus quadragintus forty-spotted pardalote	e E	Potential habitat s any forest and woodland supporting Eucalyptus viminalis (white gum) where the canopy cover of E. viminalis is greater than or equal to 10% or where E. viminalis occurs as a localised canopy dominant or codominant in patches exceeding 0.25 ha.	Potential habitat absent (<i>Eucalyptus viminalis</i> is restricted to scattered trees only near the small dam).

Scientific name Common name	Status TSPA EPBCA	Tasmanian habitat description (and distribution)	Comments on study area and database records
Perameles gunnii subsp. gunnii eastern barred bandicoot	- VU #	Potential habitat is open vegetation types including woodlands and open forests with a grassy understorey, native and exotic grasslands, particularly in landscapes with a mosaic of agricultural land and remnant bushland.	Potential habitat present (albeit highly atypical, except for the managed area). The species may occasionally utilise the greater study area as part of a home range and for foraging but small-scale development should not have a significant impact on this aspect of the life history of the species.
Prototroctes maraena Australian grayling	v VU #	Potential habitat is all streams and rivers in their lower to middle reaches. Areas above permanent barriers (e.g. Prosser River dam, weirs) that prevent fish migration, are not potential habitat.	Potential habitat absent (any waterways are highly ephemeral only and not connected to the sea).
Pseudemoia pagenstecheri tussock skink	V -	Potential habitat is grassland and grassy woodland (including rough pasture with paddock trees), generally with a greater than 20% cover of native grass species, especially where medium to tall tussocks are present.	Potential habitat absent. There are no areas with greater than 20% cover of tussock-forming grass species present.
Sarcophilus harrisii tasmanian devil	e EN #	Potential habitat is all terrestrial native habitats, forestry plantations and pasture. Devils require shelter (e.g. dense vegetation, hollow logs, burrows or caves) and hunting habitat (open understorey mixed with patches of dense vegetation) within their home range (427 km²). Significant habitat is a patch of potential denning habitat where three or more entrances (large enough for a devil to pass through) may be found within 100 m of one another, and where no other potential denning habitat with three or more entrances may be found within a 1 km radius, being the approximate area of the smallest recorded devil home range. Potential denning habitat is areas of burrowable, well-drained soil, log piles or sheltered overhangs such as cliffs, rocky outcrops, knolls, caves and earth banks, free from risk of inundation and with at least one entrance through which a devil could pass.	Refer to comments under spotted-tailed quoll.
<i>Tyto novaehollandiae</i> subsp. <i>castanops</i> masked owl	e VU #	Potential habitat is all areas with trees with large hollows (≥15 cm entrance diameter). Remnants and paddock trees (in any dry or wet forest type) in agricultural areas may constitute potential habitat. Significant habitat is any areas within the core range of native dry forest with trees over 100 cm dbh with large hollows (≥15 cm entrance diameter).	Potential nesting habitat marginally present (large trees with large hollows are scattered the study area). The species may occasionally utilise the greater study area as part of a home range and for foraging but small-scale development should not have a significant impact on this aspect of the life history of the species.

APPENDIX E.	DPIPWE's Na	itural Values A	Atlas report for	the study area
-------------	-------------	-----------------	------------------	----------------

Appended as pdf file.

APPENDIX F. Forest Practices Authority's *Biodiversity Values Atlas* report for the study area

Appended as pdf file.

APPENDIX G. CofA's Protected Matters report for the study area

Appended as pdf file.

ATTACHMENT

• .shp file of revised vegetation mapping

Natural Values Atlas Report

Authoritative, comprehensive information on Tasmania's natural values.

Reference: ECOtas GracesRoad

Requested For: MWapstra

Report Type: Summary Report

Timestamp: 09:52:21 AM Monday 07 June 2021

Threatened Flora: buffers Min: 500m Max: 5000m Threatened Fauna: buffers Min: 500m Max: 5000m

Raptors: buffers Min: 500m Max: 5000m

Tasmanian Weed Management Act Weeds: buffers Min: 500m Max: 5000m

Priority Weeds: buffers Min: 500m Max: 5000m

Geoconservation: buffer 1000m Acid Sulfate Soils: buffer 1000m TASVEG: buffer 1000m

Threatened Communities: buffer 1000m

Fire History: buffer 1000m

Tasmanian Reserve Estate: buffer 1000m Biosecurity Risks: buffer 1000m

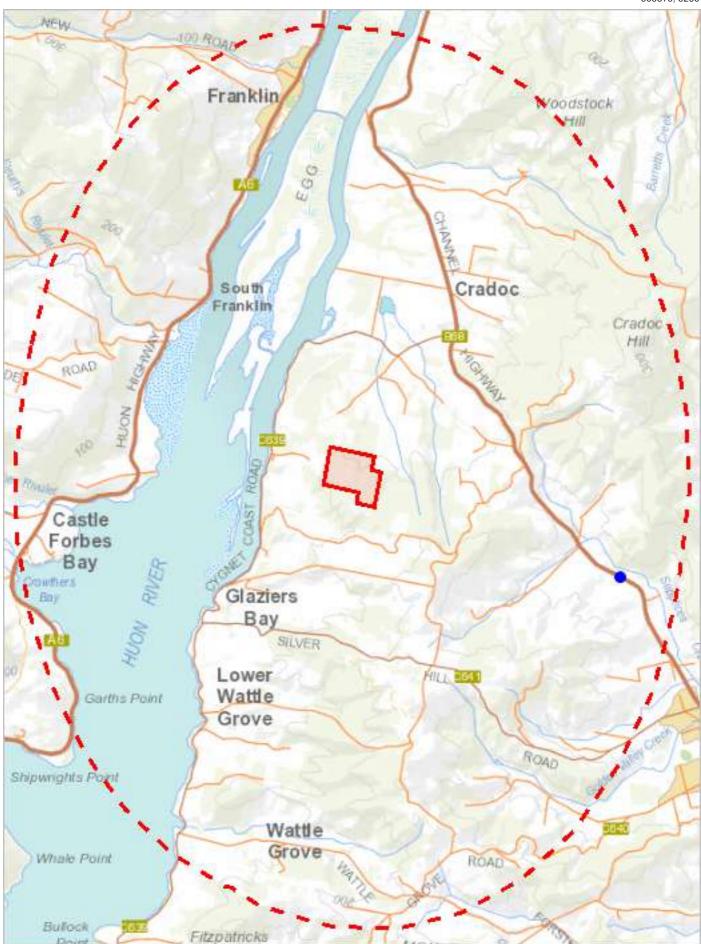


The centroid for this query GDA94: 501743.0, 5224896.0 falls within:

Property: 5857214

*** No threatened flora found within 500 metres ***





497588, 5219326



Threatened flora within 5000 metres

Legend: Verified and Unverified	d observations		
Point Verified Polygon Verified	Point UnverifiedPolygon Unverified	/ Line Verified	/ Line Unverified
Legend: Cadastral Parcels			



Threatened flora within 5000 metres

Verified Records

Species	Common Name	SS	NS	Bio	Observation Count	Last Recorded
Lepidium hyssopifolium	soft peppercress	е	EN	n	1	01-Jan-1993

Unverified Records

No unverified records were found!

For more information about threatened species, please contact Threatened Species Enquiries.

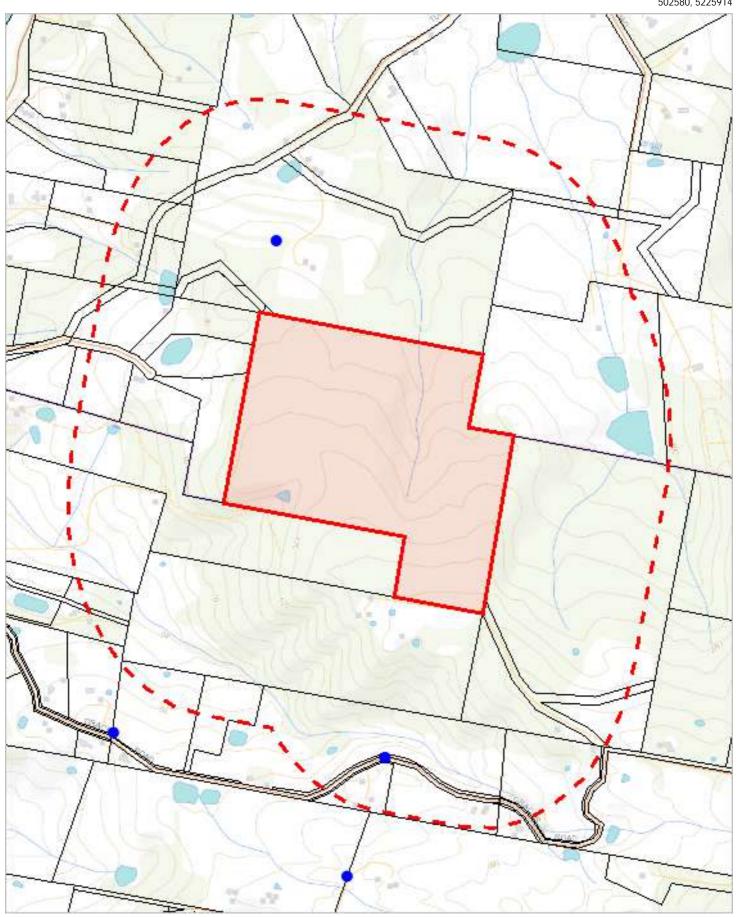
Telephone: 1300 368 550

Email: ThreatenedSpecies.Enquiries@dpipwe.tas.gov.au Address: GPO Box 44, Hobart, Tasmania, Australia, 7000



Threatened fauna within 500 metres

502580, 5225914



500878, 5223814

Please note that some layers may not display at all requested map scales



Threatened fauna within 500 metres

Legend: Verified and Unverified	d observations		
Point Verified Polygon Verified	Point UnverifiedPolygon Unverified	✓ Line Verified	/ Line Unverified
Legend: Cadastral Parcels			



Threatened fauna within 500 metres

Verified Records

Species	Common Name	SS	NS	Bio	Observation Count	Last Recorded
Perameles gunnii	eastern barred bandicoot		VU	n	1	01-Jan-1991
Sarcophilus harrisii	tasmanian devil	е	EN	е	2	15-Jun-2012

Unverified Records

No unverified records were found!

Threatened fauna within 500 metres

(based on Range Boundaries)

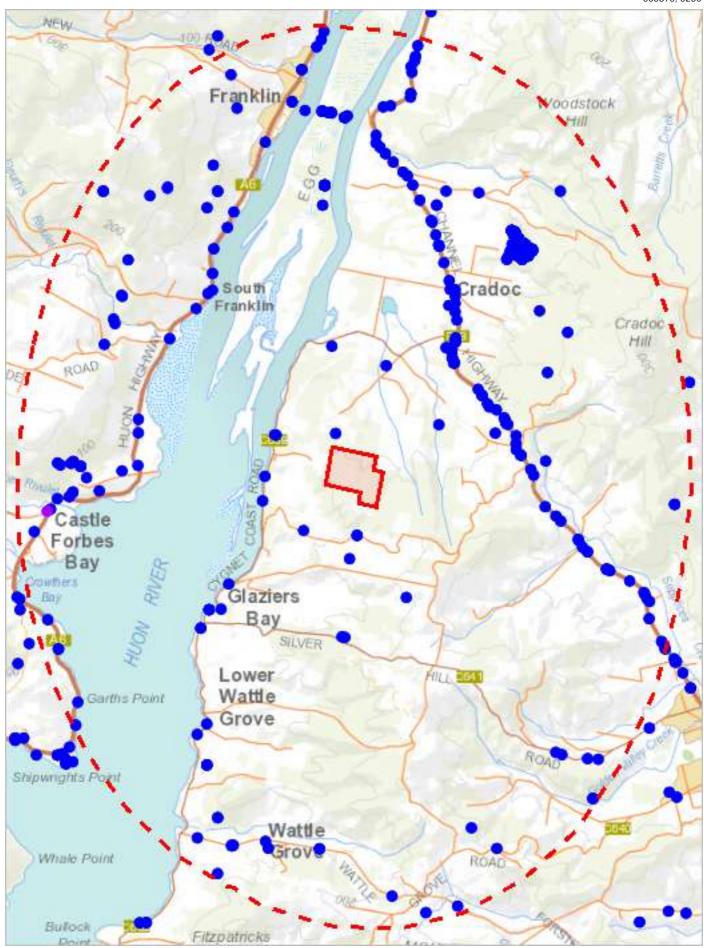
Species	Common Name	SS	NS	ВО	Potential	Known	Core
Lathamus discolor	swift parrot	е	CR	mbe	1	0	1
Dasyurus maculatus subsp. maculatus	spotted-tail quoll	r	VU	n	1	0	0
Litoria raniformis	green and gold frog	v	VU	n	1	0	0
Prototroctes maraena	australian grayling	v	VU	ae	1	0	0
Antipodia chaostola	chaostola skipper	е	EN	ae	1	0	0
Pseudemoia pagenstecheri	tussock skink	V		n	1	0	0
Tyto novaehollandiae subsp. castanops	masked owl (Tasmanian)	е	VU	е	1	0	1
Haliaeetus leucogaster	white-bellied sea-eagle	V		n	2	0	0
Accipiter novaehollandiae	grey goshawk	е		n	1	0	1
Pardalotus quadragintus	forty-spotted pardalote	е	EN	е	1	0	0
Sarcophilus harrisii	tasmanian devil	е	EN	е	1	0	0
Lissotes menalcas	mount mangana stag beetle	V		е	1	1	0
Perameles gunnii	eastern barred bandicoot		VU	n	1	0	0
Aquila audax subsp. fleayi	tasmanian wedge-tailed eagle	е	EN	е	1	0	0
Dasyurus viverrinus	eastern quoll		EN	n	0	0	1

For more information about threatened species, please contact Threatened Species Enquiries.

Telephone: 1300 368 550

Email: ThreatenedSpecies.Enquiries@dpipwe.tas.gov.au Address: GPO Box 44, Hobart, Tasmania, Australia, 7000





497588, 5219326



Threatened fauna within 5000 metres

Legend: Verified and Unverified	d observations		
Point Verified Polygon Verified	Point UnverifiedPolygon Unverified	✓ Line Verified	/ Line Unverified
Legend: Cadastral Parcels			



Threatened fauna within 5000 metres

Verified Records

Species	Common Name	SS	NS	Bio	Observation Count	Last Recorded
Accipiter novaehollandiae	grey goshawk	е		n	17	22-Mar-2021
Alcedo azurea subsp. diemenensis	azure kingfisher or azure kingfisher (tasmanian)	е	EN	е	2	01-Jan-1950
Aquila audax	wedge-tailed eagle	pe	PEN	n	1	03-Jan-2018
Dasyurus maculatus	spotted-tail quoll	r	VU	n	13	20-Mar-2020
Dasyurus viverrinus	eastern quoll		EN	n	178	04-Sep-2020
Haliaeetus leucogaster	white-bellied sea-eagle	V		n	12	15-Oct-2019
Hirundapus caudacutus	white-throated needletail		VU	n	3	15-Mar-2015
Lathamus discolor	swift parrot	е	CR	mbe	15	24-Oct-2009
Mirounga leonina	southern elephant seal	е	VU	n	1	30-Jan-2014
Perameles gunnii	eastern barred bandicoot		VU	n	71	13-Oct-2020
Sarcophilus harrisii	tasmanian devil	е	EN	е	105	22-Nov-2020
Thylacinus cynocephalus	thylacine	х	EX	ex	1	01-Jan-1961
Tyto novaehollandiae	masked owl	pe	PVU	n	4	01-Jan-1987

Unverified Records

Species	Common Name	SS	NS	Bio	Observation Count
Sarcophilus harrisii	tasmanian devil	е	EN	е	1

Threatened fauna within 5000 metres

(based on Range Boundaries)

Species	Common Name	SS	NS	ВО	Potential	Known	Core
Lathamus discolor	swift parrot	е	CR	mbe	1	0	1
Dasyurus maculatus subsp. maculatus	spotted-tail quoll	r	VU	n	1	0	0
Litoria raniformis	green and gold frog	v	VU	n	1	0	0
Prototroctes maraena	australian grayling	V	VU	ae	3	0	0
Antipodia chaostola	chaostola skipper	е	EN	ae	12	0	0
Pseudemoia pagenstecheri	tussock skink	v		n	1	0	0
Tyto novaehollandiae subsp. castanops	masked owl (Tasmanian)	е	VU	е	1	0	1
Haliaeetus leucogaster	white-bellied sea-eagle	v		n	2	0	0
Accipiter novaehollandiae	grey goshawk	е		n	1	0	1
Pardalotus quadragintus	forty-spotted pardalote	е	EN	е	1	0	0
Sarcophilus harrisii	tasmanian devil	е	EN	е	1	0	0
Lissotes menalcas	mount mangana stag beetle	V		е	1	1	0
Perameles gunnii	eastern barred bandicoot		VU	n	1	0	0
Aquila audax subsp. fleayi	tasmanian wedge-tailed eagle	е	EN	е	1	0	0
Dasyurus viverrinus	eastern quoll		EN	n	0	0	1

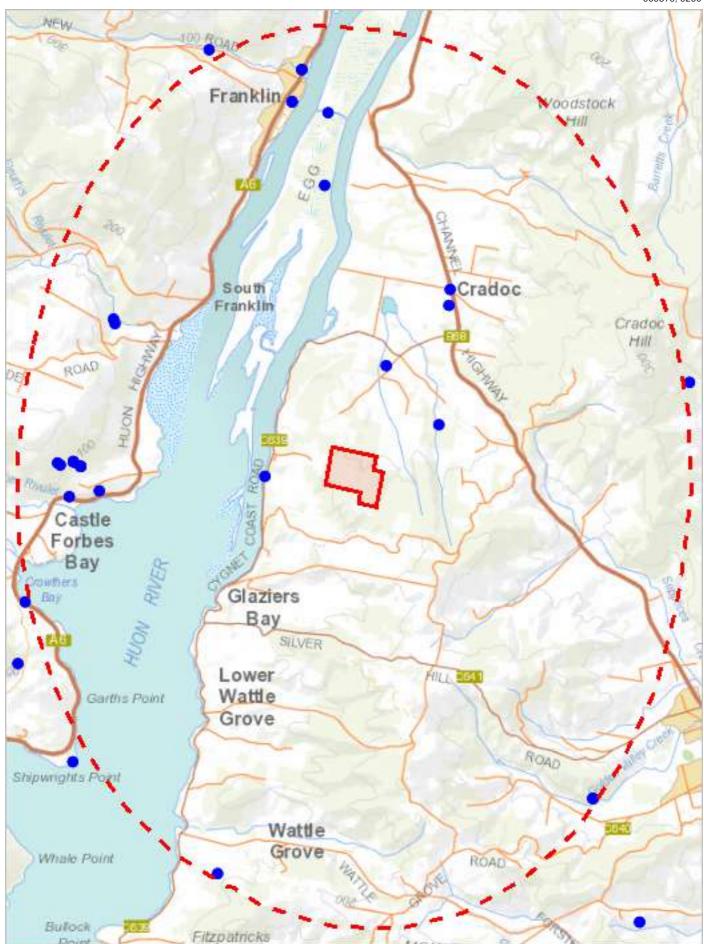
For more information about threatened species, please contact Threatened Species Enquiries.

Telephone: 1300 368 550

Email: ThreatenedSpecies.Enquiries@dpipwe.tas.gov.au Address: GPO Box 44, Hobart, Tasmania, Australia, 7000

*** No Raptor nests or sightings found within 500 metres. ***





497588, 5219326



Raptor nests and sightings within 5000 metres

Legend: Verified and Unverified	d observations		
Point Verified Polygon Verified	Point UnverifiedPolygon Unverified	/ Line Verified	/ Line Unverified
Legend: Cadastral Parcels			



Raptor nests and sightings within 5000 metres

Verified Records

Nest Id/Loca tion Foreign Id	Species	Common Name	Obs Type	Observation Count	Last Recorded
1587	Haliaeetus leucogaster	white-bellied sea-eagle	Nest	3	11-Oct-2007
2282	Haliaeetus leucogaster	white-bellied sea-eagle	Nest	1	15-Feb-2016
2715	Accipiter novaehollandiae	grey goshawk	Nest	1	01-Jan-2020
2716	Accipiter novaehollandiae	grey goshawk	Nest	1	01-Jan-2020
2794	Accipiter novaehollandiae	grey goshawk	Nest	1	30-Jun-2020
2795	Accipiter novaehollandiae	grey goshawk	Nest	1	30-Jun-2020
2796	Accipiter novaehollandiae	grey goshawk	Nest	1	30-Jun-2020
2812	Accipiter novaehollandiae	grey goshawk	Nest	1	30-Jun-2020
2813	Accipiter novaehollandiae	grey goshawk	Nest	1	30-Jun-2020
2824	Haliaeetus leucogaster	white-bellied sea-eagle	Nest	1	15-Oct-2019
835	Haliaeetus leucogaster	white-bellied sea-eagle	Nest	4	01-Jan-2007
836	Accipiter novaehollandiae	grey goshawk	Nest	1	01-Jan-1985
	Accipiter novaehollandiae	grey goshawk	Not Recorded	2	03-Dec-2016
	Accipiter novaehollandiae	grey goshawk	Sighting	7	22-Mar-2021
	Aquila audax	wedge-tailed eagle	Not Recorded	1	03-Jan-2018
	Aquila audax subsp. fleayi	tasmanian wedge-tailed eagle	Carcass	1	25-Feb-2014
	Falco peregrinus	peregrine falcon	Not Recorded	1	13-Feb-2016
	Haliaeetus leucogaster	white-bellied sea-eagle	Camera Trap	1	04-Dec-2015
	Haliaeetus leucogaster	white-bellied sea-eagle	Not Recorded	2	27-May-2016
	Tyto novaehollandiae	masked owl	Sighting	4	01-Jan-1987

Unverified Records

No unverified records were found!

Raptor nests and sightings within 5000 metres

(based on Range Boundaries)

Species	Common Name	SS	NS	Potential	Known	Core
Aquila audax subsp. fleayi	tasmanian wedge-tailed eagle	e	EN	1	0	0
Accipiter novaehollandiae	grey goshawk	е		1	0	1
Haliaeetus leucogaster	white-bellied sea-eagle	V		2	0	0

For more information about raptor nests, please contact Threatened Species Enquiries.

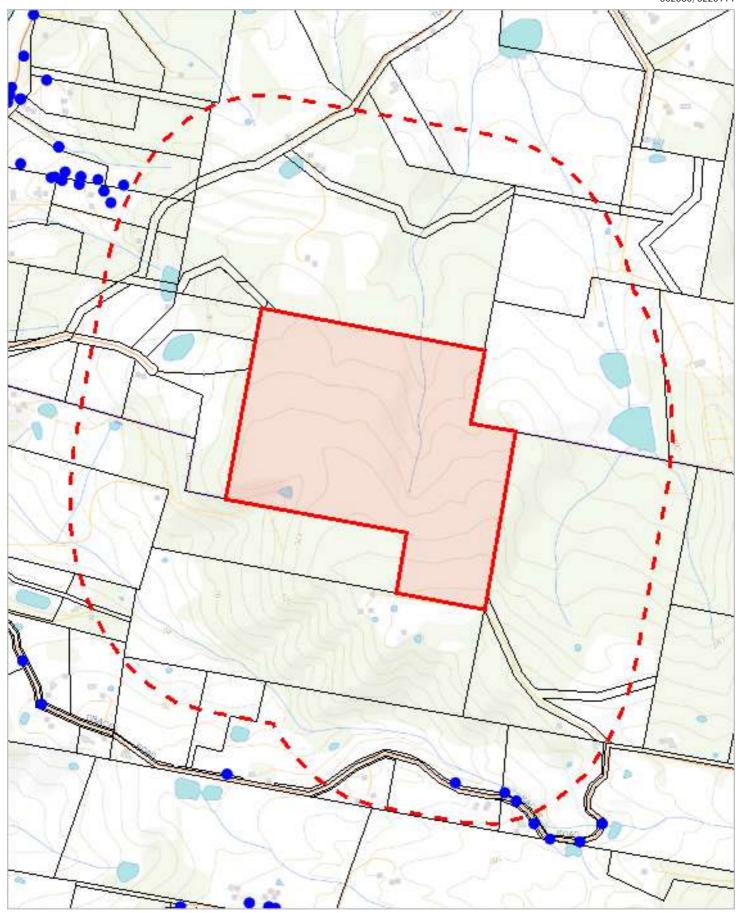
Telephone: 1300 368 550

Email: ThreatenedSpecies.Enquiries@dpipwe.tas.gov.au Address: GPO Box 44, Hobart, Tasmania, Australia, 7000



Tas Management Act Weeds within 500 m

502580, 5225914



Please note that some layers may not display at all requested map scales



500878, 5223814

Tas Management Act Weeds within 500 m

Legend: Verified and Unverified	d observations		
Point Verified Polygon Verified	Point UnverifiedPolygon Unverified	✓ Line Verified	/ Line Unverified
Legend: Cadastral Parcels			



Tas Management Act Weeds within 500 m

Verified Records

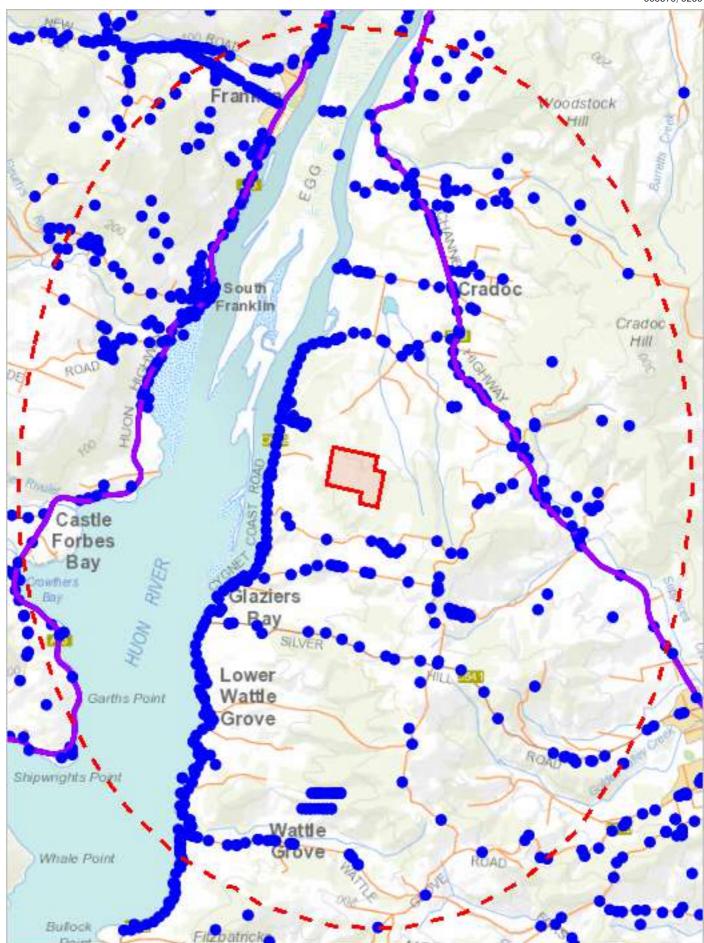
Species	Common Name	Observation Count	Last Recorded
Echium plantagineum	patersons curse	4	28-Nov-2017
Genista monspessulana	montpellier broom	1	13-Sep-2007
Rubus fruticosus	blackberry	1	13-Sep-2007
Ulex europaeus	gorse	1	13-Sep-2007

Unverified Records

For more information about introduced weed species, please visit the following URL for contact details in your area:

https://www.dpipwe.tas.gov.au/invasive-species/weeds





497588, 5219326



Tas Management Act Weeds within 5000 m

Legend: Verified and Unverified	observations		
Point Verified Polygon Verified	 Point Unverified Polygon Unverified 	/ Line Verified	/ Line Unverified
Legend: Cadastral Parcels			



Tas Management Act Weeds within 5000 m

Verified Records

Species	Common Name	Observation Count	Last Recorded
Asparagus asparagoides	bridal creeper	6	27-Sep-2016
Cenchrus macrourus	african feathergrass	6	15-Feb-2013
Chrysanthemoides monilifera subsp. monilifera	boneseed	170	24-Jan-2017
Cirsium arvense var. arvense	creeping thistle	2	25-Jan-2017
Coprosma robusta	karamu	1	22-Jan-1979
Cortaderia selloana	silver pampasgrass	1	10-Sep-2007
Cortaderia sp.	pampas grass	25	01-Nov-2019
Cytisus scoparius	english broom	29	25-Jan-2017
Echium plantagineum	patersons curse	24	23-Oct-2019
Echium vulgare	vipers bugloss	1	06-Dec-2016
Eragrostis curvula	african lovegrass	3	17-Feb-2017
Erica Iusitanica	spanish heath	79	14-Nov-2017
Foeniculum vulgare	fennel	15	13-Sep-2007
Genista monspessulana	montpellier broom	102	25-Jan-2017
Hypericum perforatum	perforated st johns-wort	27	06-Feb-2021
Hypericum perforatum subsp. veronense	perforated st johns-wort	30	25-Jan-2017
Ilex aquifolium	holly	13	06-May-2019
Leycesteria formosa	himalayan honeysuckle	4	18-Oct-2020
Marrubium vulgare	white horehound	1	16-Oct-2017
Myriophyllum aquaticum	parrotfeather	1	27-Mar-1985
Rorippa sylvestris	creeping yellowcress	11	24-Jan-2017
Rubus anglocandicans	blackberry	2	10-Jan-1999
Rubus echinatus	blackberry	1	10-Jan-2000
Rubus fruticosus	blackberry	93	22-Apr-2010
Rubus leucostachys	blackberry	4	01-Feb-2009
Salix caprea	goat willow	5	13-Sep-2007
Salix matsudana x alba	tortured willow	4	13-Sep-2007
Salix x fragilis nothovar. fragilis	crack willow	8	24-Jan-2017
Senecio jacobaea	ragwort	164	01-Nov-2019
Ulex europaeus	gorse	69	21-Nov-2018

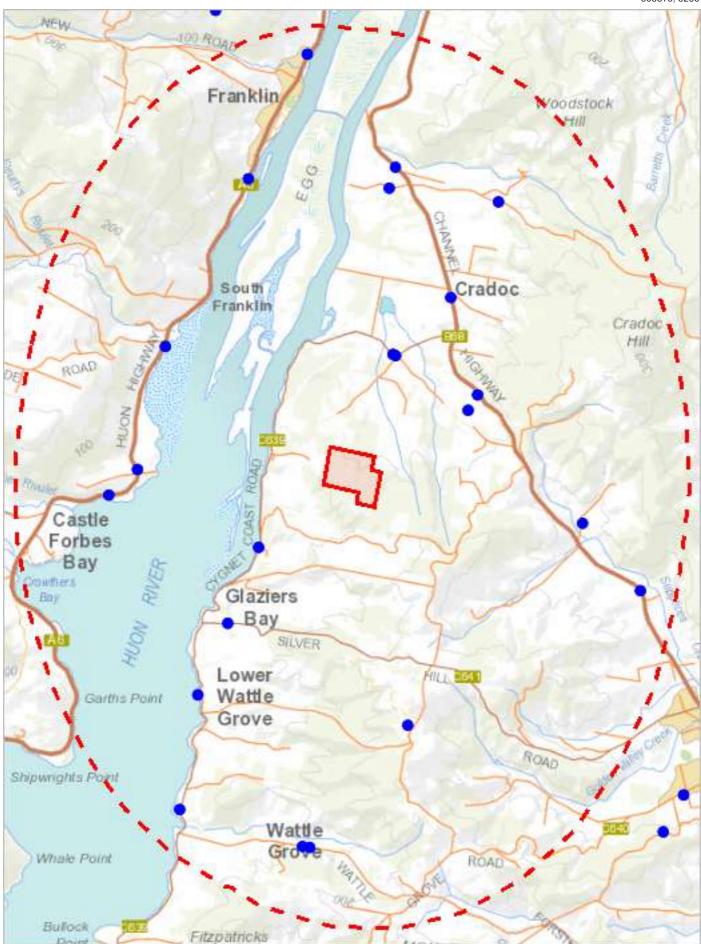
Unverified Records

For more information about introduced weed species, please visit the following URL for contact details in your area:

https://www.dpipwe.tas.gov.au/invasive-species/weeds

*** No Priority Weeds found within 500 metres ***





497588, 5219326



Priority Weeds within 5000 m

Legend: Verified and Unverified of	observations		
Point Verified Polygon Verified	Point UnverifiedPolygon Unverified	/ Line Verified	/ Line Unverified
Legend: Cadastral Parcels			



Priority Weeds within 5000 m

Verified Records

Species	Common Name	Observation Count	Last Recorded
Acacia baileyana	cootamundra wattle	6	13-Sep-2007
Pittosporum undulatum	sweet pittosporum	8	24-Jan-2017
Verbascum thapsus	great mullein	1	07-Sep-2007
Watsonia meriana var. bulbillifera	bulbil watsonia	11	13-Sep-2007

Unverified Records

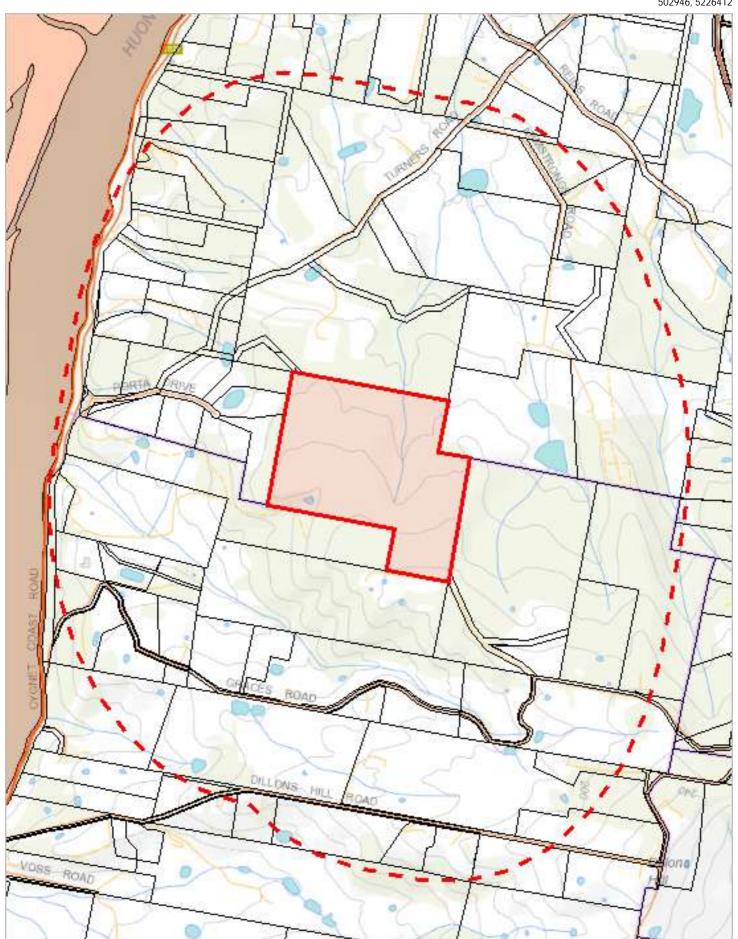
For more information about introduced weed species, please visit the following URL for contact details in your area:

https://www.dpipwe.tas.gov.au/invasive-species/weeds



Geoconservation sites within 1000 metres

502946, 5226412



500513, 5223316

Please note that some layers may not display at all requested map scales



Geoconservation sites within 1000 metres

Legend: Geoconservation (NVA)		
Legend: Cadastral Parcels		



Geoconservation sites within 1000 metres

Id	Name	Statement of Significance	Significance Level	Status
2200	Egg Islands Tidal Delta	Notable example of type.	State	Listed

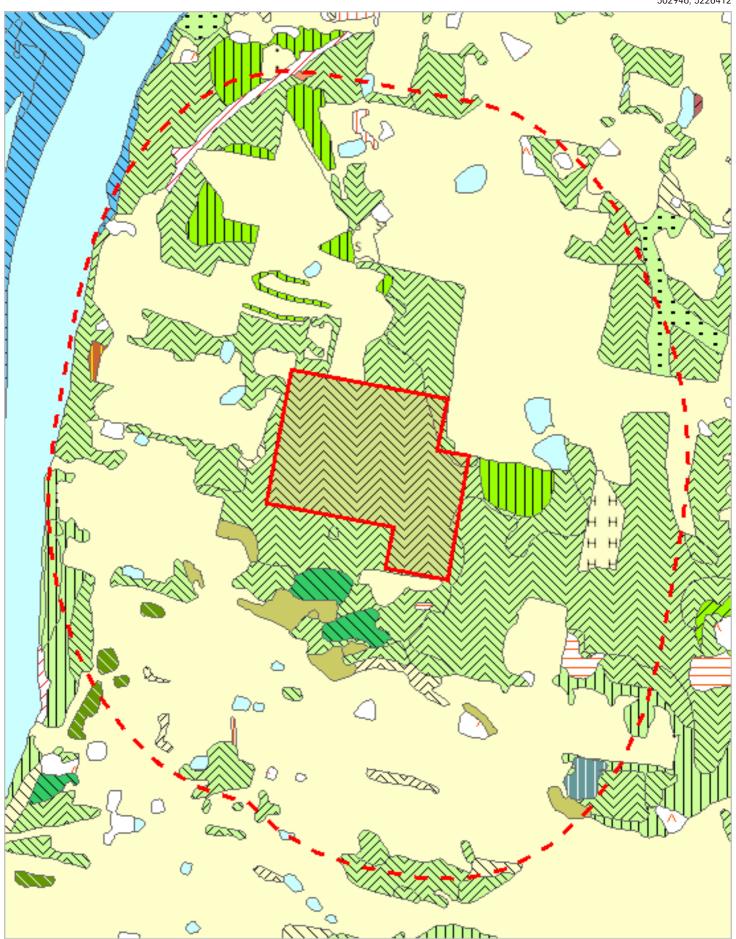
For more information about the Geoconservation Database, please visit the website: https://dpipwe.tas.gov.au/conservation/geoconservation or contact the Geoconservation Officer:

Telephone: (03) 6165 4401

Email: Geoconservation.Enquiries@dpipwe.tas.gov.au Address: GPO Box 44, Hobart, Tasmania, Australia, 7000

*** No Acid Sulfate Soils found within 1000 metres ***





500513, 5223316



Legend: TASVEG 4.0 (AAP) Alkaline pans (AHF) Freshwater aquatic herbland (AHL) Lacustrine herbland 🖊 (AHS) Saline aquatic herbland N (ARS) Saline sedgeland / rushland (ASF) Fresh water aquatic sedgeland and rushland 🚺 (ASP) Sphagnum peatland (ASS) Succulent saline herbland (AUS) Saltmarsh (undifferentiated) 🔀 (AWU) Wetland (undifferentiated) (DAC) Eucalyptus amygdalina coastal forest and woodland (DAD) Eucalyptus amygdalina forest and woodland on dolerite 🆊 (DAM) Eucalyptus amygdalina forest on mudstone (DAS) Eucalyptus amygdalina forest and woodland on sandstone 🚫 (DAZ) Eucalyptus amygdalina inland forest and woodland on Cainozoic deposits (DBA) Eucalyptus barberi forest and woodland 🔀 (DCO) Eucalyptus coccifera forest and woodland 🚺 (DCR) Eucalyptus cordata forest (DDE) Eucalyptus delegatensis dry forest and woodland (DDP) Eucalyptus dalrympleana - Eucalyptus pauciflora forest and woodland (DGL) Eucalyptus globulus dry forest and woodland (DGW) Eucalyptus gunnii woodland 🔼 (DKW) King Island Eucalypt woodland N (DMO) Eucalyptus morrisbyi forest and woodland 👿 (DMW) Midlands woodland complex [] (DNF) Eucalyptus nitida Furneaux forest (DNI) Eucalyptus nitida dry forest and woodland 🚫 (DOB) Eucalyptus obliqua dry forest 🚺 (DOV) Eucalyptus ovata forest and woodland (DOW) Eucalyptus ovata heathy woodland (DPD) Eucalyptus pauciflora forest and woodland on dolerite 🖊 (DPE) Eucalyptus perriniana forest and woodland (DPO) Eucalyptus pauciflora forest and woodland not on dolerite 🚫 (DPU) Eucalyptus pulchella forest and woodland 💌 (DRI) Eucalyptus risdonii forest and woodland (DRO) Eucalyptus rodwayi forest and woodland 🔼 (DSC) Eucalyptus amygdalina - Eucalyptus obliqua damp sclerophyll forest 📑 (DSG) Eucalyptus sieberi forest and woodland on granite 🔀 (DSO) Eucalyptus sieberi forest and woodland not on granite (DTD) Eucalyptus tenuiramis forest and woodland on dolerite (DTG) Eucalyptus tenuiramis forest and woodland on granite (DTO) Eucalyptus tenuiramis forest and woodland on sediments. (DVC) Eucalyptus viminalis - Eucalyptus globulus coastal forest and woodland (DVF) Eucalyptus viminalis Furneaux forest and woodland 🚫 (DVG) Eucalyptus viminalis grassy forest and woodland (FAC) Improved pasture with native tree canopy (FAG) Agricultural land 🖥 (FMG) Marram grassland 🏹 (FPE) Permanent easements 🖊 (FPF) Pteridium esculentum fernland 🎵 (FPH) Plantations for silviculture - hardwood 🎙 (FPS) Plantations for silviculture - softwood (FPU) Unverified plantations for silviculture 🪫 (FRG) Regenerating cleared land 🔀 (FSM) Spartina marshland 🖥 (FUM) Extra-urban miscellaneous (FUR) Urban areas



🚫 (FWU) Weed infestation

(GCL) Lowland grassland complex

- (GHC) Coastal grass and herbfield
- 💳 (GPH) Highland Poa grassland
- 🚫 (GPL) Lowland Poa labillardierei grassland
- Z (GRP) Rockplate grassland
- 🖊 (GSL) Lowland grassy sedgeland
- (GTL) Lowland Themeda triandra grassland
- (HCH) Alpine coniferous heathland
- (HCM) Cushion moorland
- (HHE) Eastern alpine heathland
- 🔼 (HHW) Western alpine heathland
- (HSE) Eastern alpine sedgeland
- (HSW) Western alpine sedgeland/herbland
- 📉 (HUE) Eastern alpine vegetation (undifferentiated)
- 🖊 (MBE) Eastern buttongrass moorland
- (MBP) Pure buttongrass moorland
- 🧮 (MBR) Sparse buttongrass moorland on slopes
- (MBS) Buttongrass moorland with emergent shrubs
- (MBU) Buttongrass moorland (undifferentiated)
- 🚫 (MBW) Western buttongrass moorland
- 🖊 (MDS) Subalpine Diplarrena latifolia rushland
- 🚫 (MGH) Highland grassy sedgeland
- (MRR) Restionaceae rushland
- (MSW) Western lowland sedgeland
- (NAD) Acacia dealbata forest
- (NAF) Acacia melanoxylon swamp forest
- (NAL) Allocasuarina littoralis forest
- 🧮 (NAR) Acacia melanoxylon forest on rises
- NAV) Allocasuarina verticillata forest
- 🔼 (NBA) Bursaria Acacia woodland
- 📉 (NBS) Banksia serrata woodland
- 🔲 (NCR) Callitris rhomboidea forest
- 🖊 (NLA) Leptospermum scoparium Acacia mucronata forest
- (NLE) Leptospermum forest
- (NLM) Leptospermum lanigerum Melaleuca squarrosa swamp forest
- (NLN) Subalpine Leptospermum nitidum woodland
- NME) Melaleuca ericifolia swamp forest
- (OAQ) Water, sea
- (ORO) Lichen lithosere
- (OSM) Sand, mud
- 🔼 (RCO) Coastal rainforest
- 💙 (RFE) Rainforest fernland
- 🔼 (RFS) Nothofagus gunnii rainforest scrub
- (RHP) Lagarostrobos franklinii rainforest and scrub
- 🖊 (RKF) Athrotaxis selaginoides Nothofagus gunnii short rainforest
- 🪫 (RKP) Athrotaxis selaginoides rainforest
- 💢 (RKS) Athrotaxis selaginoides subalpine scrub
- (RKX) Highland rainforest scrub with dead Athrotaxis selaginoides
- 🖊 (RML) Nothofagus Leptospermum short rainforest
- 📉 (RMS) Nothofagus Phyllocladus short rainforest
- 📊 (RMT) Nothofagus Atherosperma rainforest
- (RMU) Nothofagus rainforest (undifferentiated)
- (RPF) Athrotaxis cupressoides Nothofagus gunnii short rainforest
- 📊 (RPP) Athrotaxis cupressoides rainforest
- (RPW) Athrotaxis cupressoides open woodland
- 🤯 (RSH) Highland low rainforest and scrub
- (SAL) Acacia longifolia coastal scrub
- 🧮 (SBM) Banksia marginata wet scrub
- (SBR) Broad-leaf scrub
- 💌 (SCA) Coastal scrub on alkaline sands
- 🖊 (SCH) Coastal heathland
- (SCL) Heathland on calcareous substrates



(SED) Eastern scrub on dolerite (SHS) Subalpine heathland (SHW) Wet heathland 📊 (SKA) Kunzea ambigua regrowth scrub 🖊 (SLG) Leptospermum glaucescens heathland and scrub N (SLL) Leptospermum lanigerum scrub (SLS) Leptospermum scoparium heathland and scrub (SMM) Melaleuca squamea heathland 💳 (SMP) Melaleuca pustulata scrub 灰 (SMR) Melaleuca squarrosa scrub 🔼 (SRE) Eastern riparian scrub (SRF) Leptospermum with rainforest scrub 🪫 (SRH) Rookery halophytic herbland N (SSC) Coastal scrub (SSK) Scrub complex on King Island (SSW) Western subalpine scrub (SSZ) Spray zone coastal complex (SWR) Western regrowth complex (SWW) Western wet scrub (WBR) Eucalyptus brookeriana wet forest (WDA) Eucalyptus dalrympleana forest 📉 (WDB) Eucalyptus delegatensis forest with broad-leaf shrubs (WDL) Eucalyptus delegatensis forest over Leptospermum (WDR) Eucalyptus delegatensis forest over rainforest (WDU) Eucalyptus delegatensis wet forest (undifferentiated) 🚃 (WGK) Eucalyptus globulus King Island forest 🔣 (WGL) Eucalyptus globulus wet forest 🖊 (WNL) Eucalyptus nitida forest over Leptospermum (WNR) Eucalyptus nitida forest over rainforest (WNU) Eucalyptus nitida wet forest (undifferentiated) (WOB) Eucalyptus obliqua forest with broad-leaf shrubs (WOL) Eucalyptus obliqua forest over Leptospermum (WOR) Eucalyptus obliqua forest over rainforest (WOU) Eucalyptus obliqua wet forest (undifferentiated) (WRE) Eucalyptus regnans forest 🖊 (WSU) Eucalyptus subcrenulata forest and woodland N (WVI) Eucalyptus viminalis wet forest Legend: Cadastral Parcels



Code	Community	Canopy Tree	
ARS	(ARS) Saline sedgeland / rushland		
DAS	(DAS) Eucalyptus amygdalina forest and woodland on sandstone		
DGL	(DGL) Eucalyptus globulus dry forest and woodland		
DOB	(DOB) Eucalyptus obliqua dry forest		
DOV	(DOV) Eucalyptus ovata forest and woodland		
DPU	(DPU) Eucalyptus pulchella forest and woodland		
DVG	(DVG) Eucalyptus viminalis grassy forest and woodland		
FAC	(FAC) Improved pasture with native tree canopy		
FAG	(FAG) Agricultural land	EL	
FAG	(FAG) Agricultural land		
FPE	(FPE) Permanent easements		
FPH	(FPH) Plantations for silviculture - hardwood		
FPS	(FPS) Plantations for silviculture - softwood		
FPU	(FPU) Unverified plantations for silviculture		
FRG	(FRG) Regenerating cleared land		
FUM	(FUM) Extra-urban miscellaneous		
FUR	(FUR) Urban areas		
FWU	(FWU) Weed infestation		
NAD	(NAD) Acacia dealbata forest		
OAQ	(OAQ) Water, sea		
SBR	(SBR) Broad-leaf scrub		
SLS	(SLS) Leptospermum scoparium heathland and scrub		
WGL	(WGL) Eucalyptus globulus wet forest		

For more information contact: Coordinator, Tasmanian Vegetation Monitoring and Mapping Program.

Telephone: (03) 6165 4320

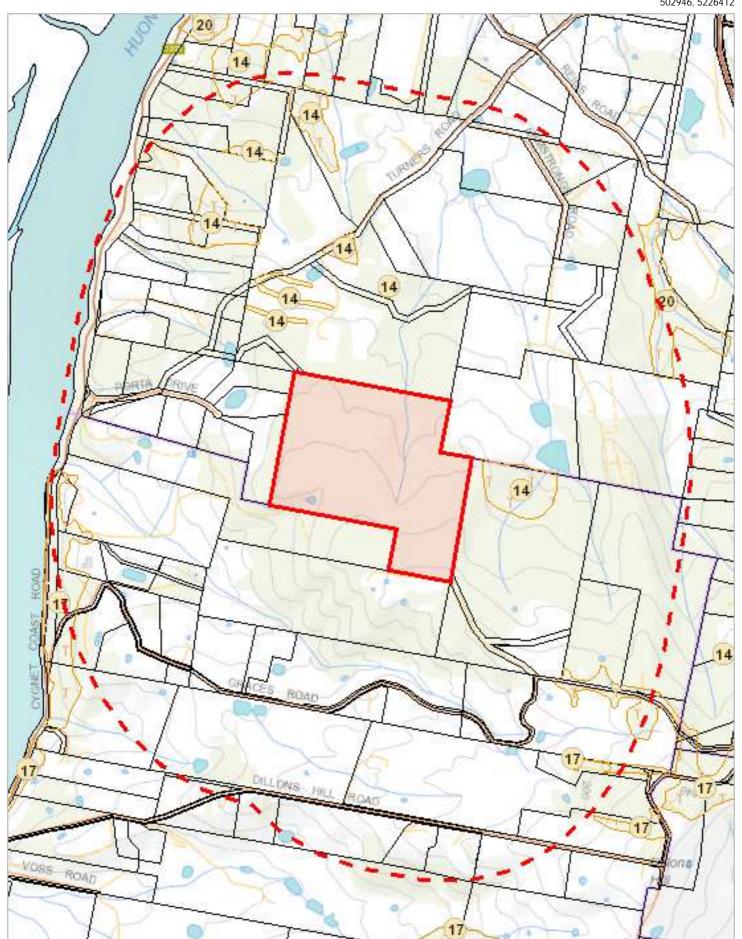
Email: TVMMPSupport@dpipwe.tas.gov.au

Address: GPO Box 44, Hobart, Tasmania, Australia, 7000



Threatened Communities (TNVC 2020) within 1000 metres

502946, 5226412



500513, 5223316



Threatened Communities (TNVC 2020) within 1000 metres

Į	egend: Inreatened Communities	
ı	1 - Alkaline pans	
i	2 - Allocasuarina littoralis forest	
i	3 - Athrotaxis cupressoides/Nothofagus gunnii short rainforest	
i	4 - Athrotaxis cupressoides open woodland	
i	5 - Athrotaxis cupressoides rainforest	
i	6 - Athrotaxis selaginoides/Nothofagus gunnii short rainforest	
i	7 - Athrotaxis selaginoides rainforest	
i	8 - Athrotaxis selaginoides subalpine scrub	
i	9 - Banksia marginata wet scrub	
i	10 - Banksia serrata woodland	
i	11 - Callitris rhomboidea forest	
i	13 - Cushion moorland	
i	14 -Eucalyptus amygdalina forest and woodland on sandstone	
i	15 - Eucalyptus amygdalina inland forest and woodland on cainozoic depos	sits
i	16 - Eucalyptus brookeriana wet forest	
i	17 - Eucalyptus globulus dry forest and woodland	
i	18 - Eucalyptus globulus King Island forest	
i	19 - Eucalyptus morrisbyi forest and woodland	
i	20 - Eucalyptus ovata forest and woodland	
i	21 - Eucalyptus risdonii forest and woodland	
i	22 - Eucalyptus tenuiramis forest and woodland on sediments	
i	23 - Eucalyptus viminalis - Eucalyptus globulus coastal forest and woodland	d
i	24 - Eucalyptus viminalis Furneaux forest and woodland	
i	25 - Eucalyptus viminalis wet forest	
i	26 - Heathland on calcareous substrates	
i	27 - Heathland scrub complex at Wingaroo	
i	28 - Highland grassy sedgeland	
i	29 - Highland Poa grassland	
i	30 - Melaleuca ericifolia swamp forest	
i	31 - Melaleuca pustulata scrub	
i	32 - Notelaea - Pomaderris - Beyeria forest	
i	33 - Rainforest fernland	
i	34 - Riparian scrub	
i	35 - Seabird rookery complex	
i	36 - Sphagnum peatland	
	36A - Spray zone coastal complex	
	37 - Subalpine Diplarrena latifolia rushland	
	38 - Subalpine Leptospermum nitidum woodland	
	39 - Wetlands	
	-	
I	egend: Cadastral Parcels	



Threatened Communities (TNVC 2020) within 1000 metres

Scheduled Community Id	Scheduled Community Name
14	Eucalyptus amygdalina forest and woodland on sandstone
17	Eucalyptus globulus dry forest and woodland
20	Eucalyptus ovata forest and woodland

For more information contact: Coordinator, Tasmanian Vegetation Monitoring and Mapping Program.

Telephone: (03) 6165 4320

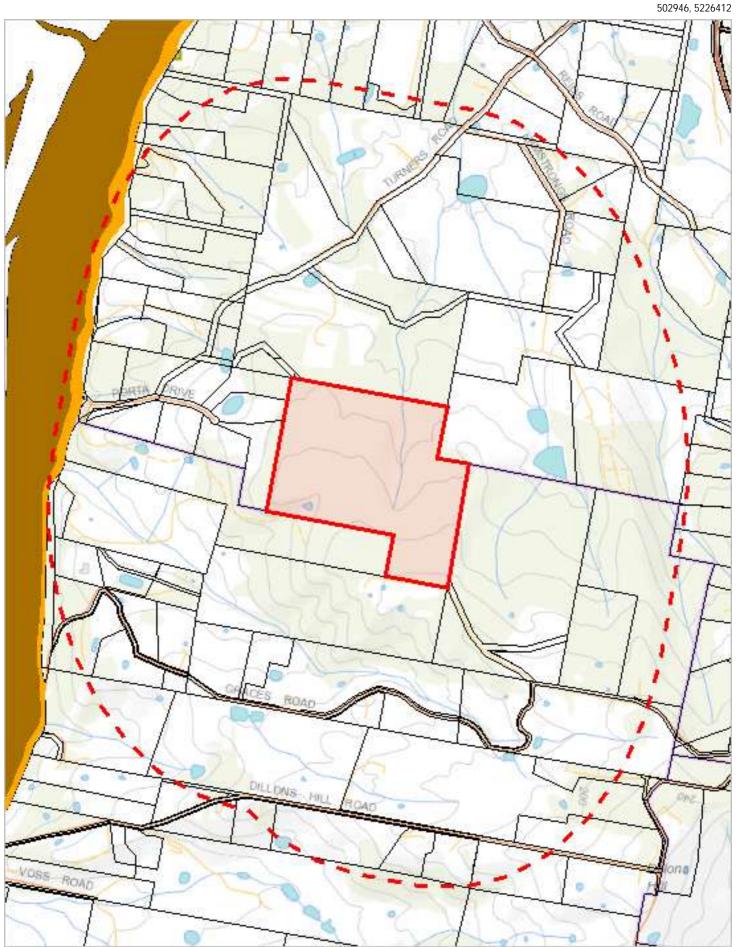
Email: TVMMPSupport@dpipwe.tas.gov.au

Address: GPO Box 44, Hobart, Tasmania, Australia, 7000

*** No Fire History (All) found within 1000 metres ***

*** No Fire History (Last Burnt) found within 1000 metres ***





500513, 5223316

Please note that some layers may not display at all requested map scales



Reserves within 1000 metres

Le	gena: Tasmanian Reserve Estate
	Conservation Area
	Conservation Area and Conservation Covenant (NCA)
	Game Reserve
	Historic Site
	Indigenous Protected Area
	National Park
	Nature Reserve
	Nature Recreation Area
	Regional Reserve
	State Reserve
	Wellington Park
	Public authority land within WHA
	Future Potential Production Forest
	Informal Reserve on Permanent Timber Production Zone Land or STT managed land
	Informal Reserve on other public land
	Conservation Covenant (NCA)
	Private Nature Reserve and Conservation Covenant (NCA)
	Private Sanctuary and Conservation Covenant (NCA)
	Private Sanctuary
	Private land within WHA
	Management Agreement
	Management Agreement and Stewardship Agreement
	Stewardship Agreement
	Part 5 Agreement (Meander Dam Offset)
	Other Private Reserve
Le	gend: Cadastral Parcels
Г	, 1
_	J



Reserves within 1000 metres

Name	Classification	Status	Area (HA)
Huon Estuary Marine Conservation Area	Conservation Area	Other Formal Reserve	693.6146114 8
	Informal Reserve on other public land	Informal Reserve	111.1370923

For more information about the Tasmanian Reserve Estate, please contact the Sustainable Land Use and Information Management Branch.

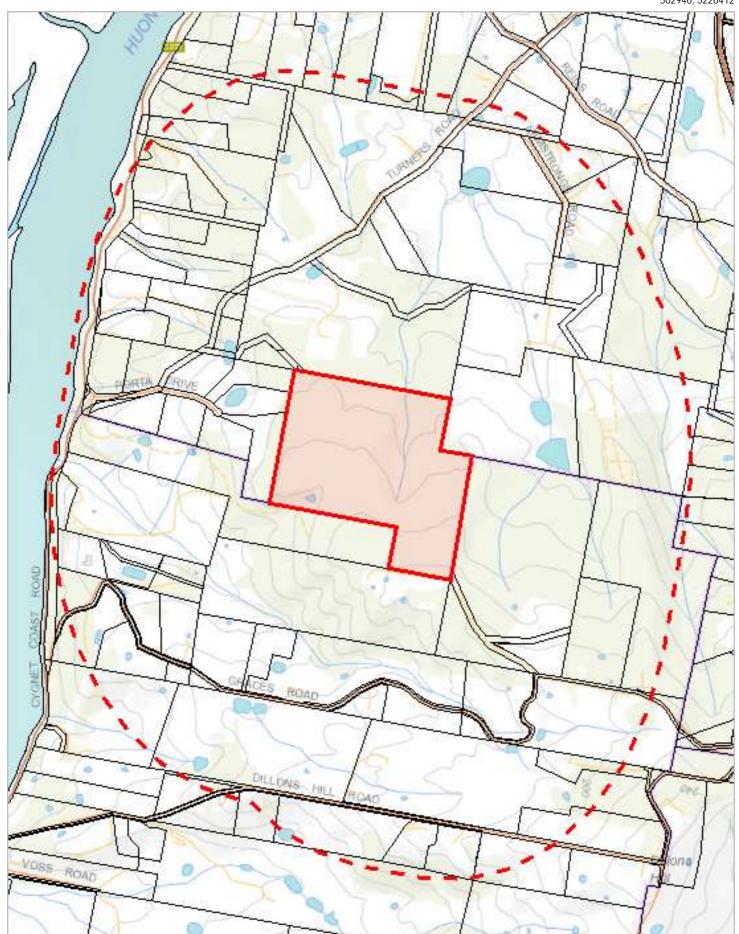
Telephone: (03) 6777 2224

Email: LandManagement.Enquiries@dpipwe.tas.gov.au Address: GPO Box 44, Hobart, Tasmania, Australia, 7000



Known biosecurity risks within 1000 meters

502946, 5226412



500513, 5223316

Please note that some layers may not display at all requested map scales



Known biosecurity risks within 1000 meters

Legend: Biosecurity Risk Species			
Point Verified Polygon Verified	 Point Unverified Polygon Unverified 	🖊 Line Verified	/ Line Unverified
Legend: Hygiene infrastructure Location Point Verified Location Line Unverified	Location PoirLocation Poly		✓ Location Line Verified ☐ Location Polygon Unverified
Legend: Cadastral Parcels			



Known biosecurity risks within 1000 meters

Verified Species of biosecurity risk

No verified species of biosecurity risk found within 1000 metres

Unverified Species of biosecurity risk

No unverified species of biosecurity risk found within 1000 metres

Generic Biosecurity Guidelines

The level and type of hygiene protocols required will vary depending on the tenure, activity and land use of the area. In all cases adhere to the land manager's biosecurity (hygiene) protocols. As a minimum always Check / Clean / Dry (Disinfect) clothing and equipment before trips and between sites within a trip as needed https://www.dpipwe.tas.gov.au/invasive-species/weeds/weed-hygiene/keeping-it-clean-a-tasmanian-field-hygiene-manual

On Reserved land, the more remote, infrequently visited and undisturbed areas require tighter biosecurity measures.

In addition, where susceptible species and communities are known to occur, tighter biosecurity measures are required.

Apply controls relevant to the area / activity:

- Don't access sites infested with pathogen or weed species unless absolutely necessary. If it is necessary to visit, adopt high level hygiene protocols.
- Consider not accessing non-infested sites containing known susceptible species / communities. If it is necessary to visit, adopt high level hygiene protocols.
- Don't undertake activities that might spread pest / pathogen / weed species such as deliberately moving soil or water between areas.
- Modify / restrict activities to reduce the chance of spreading pest / pathogen / weed species e.g. avoid periods when weeds are seeding, avoid clothing/equipment that excessively collects soil and plant material e.g. Velcro, excessive tread on boots.
- Plan routes to visit clean (uninfested) sites prior to dirty (infested) sites. Do not travel through infested areas when moving between sites.
- Minimise the movement of soil, water, plant material and hitchhiking wildlife between areas by using the Check / Clean / Dry (Disinfect when drying is not possible) procedure for all clothing, footwear, equipment, hand tools and vehicles https://www.dpipwe.tas.gov.au/invasive-species/weeds/weed-hygiene
- Neoprene and netting can take 48 hours to dry, use non-porous gear wherever possible.
- Use walking track boot wash stations where available.
- Keep a hygiene kit in the vehicle that includes a scrubbing brush, boot pick, and disinfectant https://www.dpipwe.tas.gov.au/invasive-species/weeds/weed-hygiene/keeping-it-clean-a-tasmanian-field-hygiene-manual
- Dispose of all freshwater away from natural water bodies e.g. do not empty water into streams or ponds.
- Dispose of used disinfectant ideally in town though a treatment or septic system. Always keep disinfectant well away from natural water systems.
- Securely contain any high risk pest / pathogen / weed species that must be collected and moved e.g. biological samples.

Hygiene Infrastructure

No known hygiene infrastructure found within 1000 metres



Threatened Fauna Range Boundaries Boundaries

Search Point 501743E,5224896N is within the following fauna range boundaries as at Mon Jun 07 2021 09:54:32 GMT+1000 (Australian Eastern Standard Time)

Common name	Species name	Range Class	Habitat Description
			Potential habitat for the grey goshawk is native forest with mature elements below 600 m altitude, particularly along watercourses. FPA's Fauna Technical Note 12 can be used as a guide in the identification of grey goshawk habitat.
grey goshawk	Accipiter novaehollandiae	Core Range	Significant habitat for the grey goshawk may be summarised as areas of wet forest, rainforest and damp forest patches in dry forest, with a relatively closed mature canopy, low stem density, and open understorey in close proximity to foraging habitat and a freshwater body (i.e. stream, river, lake, swamp, etc.). FPA's Fauna Technical Note 12 can be used as a guide in the identification of grey goshawk habitat.
chaostola skipper	Antipodia chaostola	Potential Range	Potential habitat for the Chaostola Skipper is dry forest and woodland supporting Gahnia radula (usually on sandstone and other sedimentary rock types) or Gahnia microstachya (usually on granite-based substrates).
wedge- tailed eagle	Aquila audax subsp. fleayi	Potential Range	Potential habitat for the wedge-tailed eagle comprises potential nesting habitat and potential foraging habitat. Potential foraging habitat is a wide variety of forest (including areas subject to native forest silviculture) and non-forest habitats. Potential nesting habitat is tall eucalypt trees in large tracts (usually more than 10 ha) of eucalypt or mixed forest. Nest trees are usually amongst the largest in a locality. They are generally in sheltered positions on leeward slopes, between the lower and mid sections of a slope and with the top of the tree usually lower than the ground level of the top of the ridge, although in some parts of the State topographic shelter is not always a significant factor (e.g. parts of the northwest and Central Highlands). Nests are usually not constructed close to sources of disturbance and nests close to disturbance are less productive. More than one nest may occur within a territory but only one is used for breeding in any one year. Breeding failure often promotes a change of nest in the next year. [see FPA's Fauna Technical Note 1 and FPA's Fauna Technical Note 6 for more information]
			Significant habitat for the wedge-tailed eagle is all native forest and native non-forest vegetation within 500 m or 1 km line-of-sight of known nest sites (where the nest tree is still present).
			Potential habitat for the spotted-tailed quoll is coastal scrub, riparian areas, rainforest, wet forest, damp forest, dry forest and blackwood swamp forest (mature and regrowth), particularly where structurally complex areas are present, and includes remnant patches in cleared agricultural land or plantation areas.
spotted- tailed	Dasyurus maculatus	Core Range	Significant habitat for the spotted-tailed quoll is all potential denning habitat within the core range of the species.
quoll			Potential denning habitat for the spotted-tailed quoll includes 1) any forest remnant (>0.5ha) in a cleared or plantation landscape that is structurally complex (high canopy, with dense understorey and ground vegetation cover), free from the risk of inundation, or 2) a rock outcrop, rock crevice, rock pile, burrow with a small entrance, hollow logs, large piles of coarse woody debris and caves. FPA's Fauna Technical Note 10 can be used as a guide in the identification of potential denning habitat.
eastern	Dasyurus	Core	Potential habitat for the Eastern quoll includes rainforest, heathland, alpine areas and scrub. However, it seems to prefer dry forest and native grassland mosaics which are bounded by agricultural land.
quoll	viverrinus	Range	Potential range for the Eastern Quoll is the whole of mainland Tasmania and Bruny Island. Core range for the Eastern Quoll is a specialist-defined area based primarily on modelling work published in Fancourt et al 2015 and additional expert advice.
white- bellied sea-eagle	Haliaeetus leucogaster	Potential Range	Potential habitat for the White-Bellied Sea-eagle species comprises potential nesting habitat and potential foraging habitat. Potential foraging habitat is any large waterbody (including sea coasts, estuaries, wide rivers, lakes, impoundments and even large farm dams) supporting prey items (fish). Potential nesting habitat is tall eucalypt trees in large tracts (usually more than 10 ha) of eucalypt or mixed forest within 5 km of the coast (nearest coast including shores, bays, inlets and peninsulas), large rivers (Class 1), lakes or complexes of large farm dams. Scattered trees along river banks or pasture land may also be used.
			Significant habitat for the white-bellied sea-eagle is all native forest and native non-forest vegetation within 500 m or 1 km line-of-sight of known nest sites (where nest tree still present).
swift parrot	Lathamus discolor	Core Breeding Range	Potential breeding habitat for the Swift Parrot comprises potential foraging habitat and potential nesting habitat, and is based on definitions of foraging and nesting trees (see Table A in swift parrot habitat assessment Technical Note). Potential foraging habitat comprises E. globulus or E. ovata trees that are old enough to flower. The occurrence of foraging-habitat can be remotely assessed, although only to a limited extent, by using mapping layers such as GlobMap (DPIPWE 2010). Due to the scale and inadequacies in current foraging-habitat mapping, potential foraging-habitat density within operational areas may need to be largely identified by ground-based surveys as per Table B in the swift parrot habitat assessment Technical Note. For management purposes potential nesting habitat is considered to comprise eucalypt forests that contain hollow-bearing trees. The FPA mature habitat availability map (see Technical Note 2) predicts the availability of hollow-bearing trees using the relevant definitions of habitat provided in Table C of the swift parrot habitat assessment Technical Note. The mature habitat availability map is designed to be used to make landscape-scale assessments and may not be reliable for stand-level assessments required during the development of a Forest Practices Plan. At the stand-level the availability and distribution of hollow-bearing trees across a coupe or operation area is best determined from a ground-based assessment (see Table C in the swift parrot habitat assessment Technical Note). Significant habitat is all potential breeding habitat within the SE potential breeding range and the NW breeding areas.

Common name	Species name	Range Class	Habitat Description
swift parrot	Lathamus discolor SPIBA	SPIBA - Channel	Potential breeding habitat for the Swift Parrot comprises potential foraging habitat and potential nesting habitat, and is based on definitions of foraging and nesting trees (see Table A in swift parrot habitat assessment Technical Note). Potential foraging habitat comprises E. globulus or E. ovata trees that are old enough to flower. The occurrence of foraging-habitat can be remotely assessed, although only to a limited extent, by using mapping layers such as GlobMap (DPIPWE 2010). Due to the scale and inadequacies in current foraging-habitat mapping, potential foraging-habitat density within operational areas may need to be largely identified by ground-based surveys as per Table B in the swift parrot habitat assessment Technical Note. For management purposes potential nesting habitat is considered to comprise eucalypt forests that contain hollow-bearing trees. The FPA mature habitat availability map (see Technical Note 2) predicts the availability of hollow-bearing trees using the relevant definitions of habitat provided in Table C of the swift parrot habitat assessment Technical Note. The mature habitat availability map is designed to be used to make landscape-scale assessments and may not be reliable for stand-level assessments required during the development of a Forest Practices Plan. At the stand-level the availability and distribution of hollow-bearing trees across a coupe or operation area is best determined from a ground-based assessment (see Table C in the swift parrot habitat assessment Technical Note).
			Significant habitat is all potential breeding habitat within the SE potential breeding range and the NW breeding areas.
mt. mangana stag beetle	Lissotes menalcas	Known Range	Potential habitat for the Mt Mangana stag beetle is any eucalypt forest that contains rotting logs (often numerous, and usually greater than about 40 cm diameter at mid-log length) below about 650 m a.s.l. (generally moist habitats that have not been subject to high intensity or frequent fires in about the last 20 years). The species has a patchy distribution within areas of potential habitat. Some rainforest will support the species, although in low densities as the species has an apparent preference for eucalypt logs. In terms of using mapping layers, potential habitat is all areas mapped as 'wet forest' under TASVEG or another forest type that is within 50 m of a freshwater source (e.g. stream or wetland) and either high, medium or low mature habitat availability OR PI-type mature crown density class 'a', 'b', 'c', 'd' and 'f'.
			Significant habitat for the Mt Mangana stag beetle is all potential habitat within the known range.
green and golden	Litoria raniformis	Potential Range	Potential habitat for the green and gold frog is permanent and temporary waterbodies, usually with vegetation in or around them. Potential habitat includes features such as natural lagoons, permanently or seasonally inundated swamps and wetlands, farm dams, irrigation channels, artificial water-holding sites such as old quarries, slow-flowing stretches of streams and rivers and drainage features.
frog		g-	Significant habitat for the green and gold frog is still or very slow flowing water bodies, with at least some vegetation, and a lack of obvious pollutants (oils, chemicals, etc). See FPA Fauna Technical Note 18 for further guidance on assessing significant habitat for the green and gold frog.
forty- spotted	Pardalotus quadragintus	Potential Range	Potential habitat for the 40-spotted pardalote is any forest and woodland supporting Eucalyptus viminalis (white gum) where the canopy cover of E. viminalis is greater than or equal to 10% or where E. viminalis occurs as a localised canopy dominant or codominant in patches exceeding 0.25 ha.
pardalote	quadragiiitus	Runge	Significant habitat for the 40-spotted Pardalote is all potential habitat associated with known colonies and such habitat within 500 m of known colonies.
australian grayling	Prototroctes maraena	Potential Range	Potential habitat for the Australian Grayling is all streams and rivers in their lower to middle reaches. Areas above permanent barriers (e.g. Prosser River dam, weirs) that prevent fish migration, are not potential habitat.
			Potential habitat for the Tasmanian devil is all terrestrial native habitats, forestry plantations and pasture. Devils require shelter (e.g. dense vegetation, hollow logs, burrows or caves) and hunting habitat (open understorey mixed with patches of dense vegetation) within their home range (4-27 km²).
tasmanian devil	Sarcophilus harrisii	Potential Range	Significant habitat for the Tasmanian devil is a patch of potential denning habitat where three or more entrances (large enough for a devil to pass through) may be found within 100 m of one another, and where no other potential denning habitat with three or more entrances may be found within a 1 km radius, being the approximate area of the smallest recorded devil home range (Pemberton 1990).
			Potential denning habitat for the Tasmanian devil is areas of burrowable, well-drained soil, log piles or sheltered overhangs such as cliffs, rocky outcrops, knolls, caves and earth banks, free from risk of inundation and with at least one entrance through which a devil could pass. FPA's Fauna Technical Note 10 can be used as a guide in the identification of potential denning habitat
			Potential habitat for the masked owl is all areas with trees with large hollows (≥15 cm entrance diameter). Remnants and paddock trees (in any dry or wet forest type) in agricultural areas may also constitute potential habitat.
masked owl	Tyto novaehollandiae	Core Range	Significant habitat for the masked owl is any area of native dry forest, within the core range, with trees with large hollows (≥15 cm entrance diameter). Remnants and paddock trees (in any dry or wet forest type) in agricultural areas may also constitute significant habitat.
			See FPA Fauna Technical Note 17 for guidance on assessing masked owl habitat using 'on-ground' and remote methods.

Threatened Fauna Records

Fauna Records within 5000m of 501743E,5224896N at Mon Jun 07 2021 09:54:32 GMT+1000 (Australian Eastern Standard Time)

Records with the project code 'rnd' and same foreign ID (nest ID) have been simplified to only show the newest observation.

Records V	Rep	Reported	e ma a	na same	e roreign	יו וי (nes	est ID) Have		Simpili	tied to only show the newest observation	on.
Species name	Common name	Position accuracy (m)	x	Υ	Distance (m)	Obs. type	Obs. date	Date accuracy	Obs. state	Project code + Foreign id	NVA id
Tyto novaehollandiae	masked owl	5000	501112	5229683	4828	Sighting	1987- 01-01	Unknown	Present	fos cra-rfa:fos:13623/1	NVA
Dasyurus viverrinus	eastern quoll	500	500712	5220483	4532	Sighting	1996- 01-01	Unknown	Present	qs-mj cra-rfa:qs-mj:12179/1	NVA
Tyto novaehollandiae	masked owl	1000	496812	5225083	4935	Sighting	1983- 06-16	Unknown	Present	tmag-fos cra-rfa:tmag-fos:13182/1	NVA
Tyto novaehollandiae	masked owl	5000	501112	5229683	4828	Sighting	1984- 06-04	Unknown	Present	tmag-fos cra-rfa:tmag-fos:13414/1	NVA
Perameles gunnii	eastern barred bandicoot	100	502103	5228690	3811	Sighting	1991- 10-28	Day	Present	rk_c1 roadkill:rk_C1:1983/1	<u>NVA</u>
Dasyurus viverrinus	eastern quoll	1570	502403	5229358	4511	Sighting	1993- 03-30	Day	Present	rk_c1 roadkill:rk_C1:1990/1	NVA
Perameles gunnii	eastern barred bandicoot	100	502419	5229652	4804	Sighting	1991- 10-28	Day	Present	rk_c1 roadkill:rk_C1:1992/1	<u>NVA</u>
Perameles gunnii	eastern barred bandicoot	409	502428	5228319	3491	Sighting	1992- 01-19	Day	Present	rk_c1 roadkill:rk_C1:1993/1	<u>NVA</u>
Perameles gunnii	eastern barred bandicoot	100	502930	5226918	2345	Sighting	1992- 10-18	Day	Present	rk_c1 roadkill:rk_C1:2014/1	<u>NVA</u>
Perameles gunnii	eastern barred bandicoot	100	502934	5226464	1969	Sighting	1991- 10-28	Day	Present	rk_c1 roadkill:rk_C1:2016/1	NVA
Perameles gunnii	eastern barred bandicoot	1688	502934	5226464	1969	Sighting	1992- 05-31	Day	Present	rk_c1 roadkill:rk_C1:2016/2	NVA
Perameles gunnii	eastern barred bandicoot	1569	502951	5226723	2190	Sighting	1992- 01-19	Day	Present	rk_c1 roadkill:rk_C1:2018/1	<u>NVA</u>
Perameles gunnii	eastern barred bandicoot	1902	503555	5225489	1907	Sighting	1992- 05-31	Day	Present	rk_c1 roadkill:rk_C1:2051/1	<u>NVA</u>
Perameles gunnii	eastern barred bandicoot	1973	503862	5224889	2119	Sighting	1992- 12-01	Day	Present	rk_c1 roadkill:rk_C1:2067/1	<u>NVA</u>
Perameles gunnii	eastern barred bandicoot	305	505000	5223638	3492	Sighting	1992- 08-30	Day	Present	rk_c1 roadkill:rk_C1:2126/1	NVA
Perameles gunnii	eastern barred bandicoot	1688	505630	5222551	4540	Sighting	1992- 05-31	Day	Present	rk_c1 roadkill:rk_C1:2154/1	NVA
Dasyurus viverrinus	eastern quoll	1030	498096	5223183	4029	Sighting	1986- 05-06	Day	Present	rk_hh roadkill:rk_HH:1854/1	NVA
Perameles gunnii	eastern barred bandicoot	1030	498224	5222836	4078	Sighting	1986- 05-06	Day	Present	rk_hh roadkill:rk_HH:1863/2	NVA
Perameles gunnii	eastern barred bandicoot	306	498224	5222836	4078	Sighting	1993- 01-31	Day	Present	rk_hh roadkill:rk_HH:1863/1	NVA
Perameles gunnii	eastern barred bandicoot	306	498271	5221601	4787	Sighting	1993- 01-31	Day	Present	rk_hh roadkill:rk_HH:1866/1	NVA
Perameles gunnii	eastern barred bandicoot	203	498429	5221937	4443	Sighting	1992- 08-30	Day	Present	rk_hh roadkill:rk_HH:1876/1	NVA

Species name	Common name	Reported Position accuracy (m)	x	Y	Distance (m)	Obs. type	Obs. date	Date accuracy	Obs. state	Project code + Foreign id	NVA id
Perameles gunnii	eastern barred bandicoot	199	499543	5226502	2724	Sighting	1992- 05-31	Day	Present	rk_hh roadkill:rk_HH:1914/1	NVA
Perameles gunnii	eastern barred bandicoot	203	499857	5226859	2722	Sighting	1992- 08-30	Day	Present	rk_hh roadkill:rk_HH:1923/1	NVA
Perameles gunnii	eastern barred bandicoot	199	500066	5227566	3153	Sighting	1992- 05-31	Day	Present	rk_hh roadkill:rk_HH:1930/1	NVA
Perameles gunnii	eastern barred bandicoot	542	502039	5228766	3881	Sighting	1992- 12-01	Day	Present	rk_c1 roadkill:rk_C1:1979/1	NVA
Perameles gunnii	eastern barred bandicoot	2776	502512	5228139	3333	Sighting	1993- 03-30	Day	Present	rk_c1 roadkill:rk_C1:1995/4	NVA
Perameles gunnii	eastern barred bandicoot	1080	502659	5227880	3121	Sighting	1994- 09-08	Day	Present	rk_c1 roadkill:rk_C1:2004/1	NVA
Dasyurus viverrinus	eastern quoll	100	502742	5227592	2875	Sighting	1992- 05-31	Day	Present	rk_c1 roadkill:rk_C1:2006/1	<u>NVA</u>
Perameles gunnii	eastern barred bandicoot	100	502798	5227400	2717	Sighting	1992- 07-12	Day	Present	rk_c1 roadkill:rk_C1:2009/1	NVA
Perameles gunnii	eastern barred bandicoot	100	502931	5226818	2260	Sighting	1992- 07-12	Day	Present	rk_c1 roadkill:rk_C1:2015/1	NVA
Perameles gunnii	eastern barred bandicoot	305	504127	5224404	2434	Sighting	1992- 08-30	Day	Present	rk_c1 roadkill:rk_C1:2083/1	NVA
Perameles gunnii	eastern barred bandicoot	305	504441	5224035	2832	Sighting	1992- 08-30	Day	Present	rk_c1 roadkill:rk_C1:2100/1	NVA
Perameles gunnii	eastern barred bandicoot	305	505407	5222882	4181	Sighting	1992- 08-30	Day	Present	rk_c1 roadkill:rk_C1:2141/1	NVA
Perameles gunnii	eastern barred bandicoot	1080	505721	5222373	4711	Sighting	1994- 09-08	Day	Present	rk_c1 roadkill:rk_C1:2157/1	NVA
Perameles gunnii	eastern barred bandicoot	1902	505721	5222373	4711	Sighting	1992- 05-31	Day	Present	rk_c1 roadkill:rk_C1:2157/2	NVA
Perameles gunnii	eastern barred bandicoot	306	498130	5224488	3636	Sighting	1993- 01-31	Day	Present	rk_hh roadkill:rk_HH:1855/1	NVA
Perameles gunnii	eastern barred bandicoot	1730	499166	5225004	2579	Sighting	1994- 09-08	Day	Present	rk_hh roadkill:rk_HH:1900/2	NVA
Dasyurus viverrinus	eastern quoll	1030	499170	5225389	2620	Sighting	1986- 05-06	Day	Present	rk_hh roadkill:rk_HH:1902/1	<u>NVA</u>
Perameles gunnii	eastern barred bandicoot	306	500050	5227075	2759	Sighting	1993- 01-31	Day	Present	rk_hh roadkill:rk_HH:1928/1	NVA
Perameles gunnii	eastern barred bandicoot	1730	500052	5227274	2918	Sighting	1994- 09-08	Day	Present	rk_hh roadkill:rk_HH:1929/1	NVA
Perameles gunnii	eastern barred bandicoot	734	500228	5227817	3291	Sighting	1991- 06-13	Day	Present	rk_hh roadkill:rk_HH:1932/1	NVA
Perameles gunnii	eastern barred bandicoot	306	500304	5228000	3421	Sighting	1993- 01-31	Day	Present	rk_hh roadkill:rk_HH:1935/1	NVA
Perameles gunnii	eastern barred bandicoot	1850	502823	5226395	1848	Sighting	1976- 11-14	Unknown	Present	tpo tpo:tpo:3298/1	NVA

Species name	Common name	Reported Position accuracy (m)	х	Υ	Distance (m)	Obs. type	Obs. date	Date accuracy	Obs. state	Project code + Foreign id	NVA id
Perameles gunnii	eastern barred bandicoot	1850	504180	5228244	4141	Sighting	1979- 04-26	Unknown	Present	tpo tpo:tpo:3315/1	NVA
Perameles gunnii	eastern barred bandicoot	1850	500112	5228246	3726	Sighting	1978- 09-20	Unknown	Present	tpo tpo:tpo:3316/1	NVA
Perameles gunnii	eastern barred bandicoot	1850	500112	5228246	3726	Sighting	1975- 11-22	Unknown	Present	tpo tpo:tpo:3389/1	NVA
Perameles gunnii	eastern barred bandicoot	1850	498755	5228246	4489	Sighting	1974- 01-26	Unknown	Present	tpo tpo:tpo:3426/1	<u>NVA</u>
Perameles gunnii	eastern barred bandicoot	1850	498755	5228246	4489	Sighting	1975- 06-11	Unknown	Present	tpo tpo:tpo:3427/1	NVA
Perameles gunnii	eastern barred bandicoot	1850	505534	5224542	3807	Sighting	1976- 11-01	Unknown	Present	tpo tpo:tpo:3453/1	NVA
Perameles gunnii	eastern barred bandicoot	1850	502824	5228246	3520	Sighting	1977- 07-16	Unknown	Present	tpo tpo:tpo:3469/1	<u>NVA</u>
Perameles gunnii	eastern barred bandicoot	18500	500112	5220843	4369	Sighting	1968- 02-14	Unknown	Present	tpo tpo:tpo:3806/1	<u>NVA</u>
Dasyurus viverrinus	eastern quoll	1850	505534	5224542	3807	Sighting	1976- 02-29	Unknown	Present	tpo tpo:4192/1	NVA
Perameles gunnii	eastern barred bandicoot	10000	501512	5225383	539	Sighting	1991- 01-01	Unknown	Present	tpo tpo:tpo:8598/2	NVA
Dasyurus viverrinus	eastern quoll	5	503686	5227682	3397	Sighting	2010- 03-16	Day	Present	dpiw-fauna	<u>NVA</u>
Dasyurus viverrinus	eastern quoll	5	503640	5227765	3439	Sighting	2010- 03-17	Day	Present	dpiw-fauna	NVA
Dasyurus viverrinus	eastern quoll	5	503668	5227695	3397	Sighting	2010- 03-17	Day	Present	dpiw-fauna	NVA
Dasyurus viverrinus	eastern quoll	5	503723	5227634	3379	Sighting	2010- 03-19	Day	Present	dpiw-fauna	<u>NVA</u>
Dasyurus viverrinus	eastern quoll	5	503625	5227726	3399	Sighting	2010- 03-20	Day	Present	dpiw-fauna	NVA
Dasyurus viverrinus	eastern quoll	5	503625	5227726	3399	Sighting	2010- 03-17	Day	Present	dpiw-fauna	<u>NVA</u>
Dasyurus viverrinus	eastern quoll	5	503839	5227543	3376	Sighting	2010- 03-19	Day	Present	dpiw-fauna	NVA
Dasyurus viverrinus	eastern quoll	5	503763	5227486	3285	Sighting	2010- 03-18	Day	Present	dpiw-fauna	NVA
Dasyurus viverrinus	eastern quoll	5	503660	5227621	3332	Sighting	2010- 03-19	Day	Present	dpiw-fauna	NVA
Dasyurus viverrinus	eastern quoll	5	503661	5227563	3285	Sighting	2010- 03-20	Day	Present	dpiw-fauna	NVA
Dasyurus viverrinus	eastern quoll	5	503839	5227543	3376	Sighting	2010- 05-17	Day	Present	dpiw-fauna	NVA
Dasyurus viverrinus	eastern quoll	5	503660	5227515	3246	Sighting	2010- 05-19	Day	Present	dpiw-fauna	NVA
Dasyurus viverrinus	eastern quoll	5	503727	5227436	3223	Sighting	2010- 05-20	Day	Present	dpiw-fauna	NVA
Dasyurus viverrinus	eastern quoll	5	503607	5227566	3256	Sighting	2010- 05-21	Day	Present	dpiw-fauna	NVA
Dasyurus viverrinus	eastern quoll	5	503660	5227515	3246	Sighting	2010- 05-17	Day	Present	dpiw-fauna	NVA
Dasyurus viverrinus	eastern quoll	5	503568	5227480	3163	Sighting	2010- 05-17	Day	Present	dpiw-fauna	NVA
Dasyurus viverrinus	eastern quoll	5	503607	5227566	3256	Sighting	2010- 05-18	Day	Present	dpiw-fauna	NVA

Species name	Common name	Reported Position accuracy (m)	x	Y	Distance (m)	Obs. type	Obs. date	Date accuracy	Obs. state		Project code + Foreign id	NVA id
Dasyurus viverrinus	eastern quoll	5	503644	5227711	3397	Sighting	2010- 05-19	Day	Present	dpiw-fauna		NVA
Dasyurus viverrinus	eastern quoll	5	503764	5227613	3386	Sighting	2010- 05-20	Day	Present	dpiw-fauna		<u>NVA</u>
Dasyurus viverrinus	eastern quoll	5	503660	5227621	3332	Sighting	2010- 05-21	Day	Present	dpiw-fauna		<u>NVA</u>
Dasyurus viverrinus	eastern quoll	5	503644	5227711	3397	Sighting	2010- 05-18	Day	Present	dpiw-fauna		<u>NVA</u>
Dasyurus viverrinus	eastern quoll	5	503839	5227543	3376	Sighting	2010- 05-19	Day	Present	dpiw-fauna		NVA
Dasyurus viverrinus	eastern quoll	5	503794	5227481	3300	Sighting	2010- 05-18	Day	Present	dpiw-fauna		NVA
Dasyurus viverrinus	eastern quoll	5	503764	5227613	3386	Sighting	2010- 05-19	Day	Present	dpiw-fauna		NVA
Dasyurus viverrinus	eastern quoll	5	503698	5227658	3384	Sighting	2010- 05-20	Day	Present	dpiw-fauna		NVA
Dasyurus viverrinus	eastern quoll	5	503607	5227566	3256	Sighting	2010- 05-19	Day	Present	dpiw-fauna		NVA
Dasyurus viverrinus	eastern quoll	5	503804	5227567	3374	Sighting	2010- 05-19	Day	Present	dpiw-fauna		NVA
Dasyurus viverrinus	eastern quoll	5	503686	5227682	3397	Sighting	2010- 05-19	Day	Present	dpiw-fauna		NVA
Dasyurus viverrinus	eastern quoll	5	503600	5227779	3429	Sighting	2010- 05-19	Day	Present	dpiw-fauna		NVA
Dasyurus viverrinus	eastern quoll	5	503804	5227567	3374	Sighting	2010- 05-20	Day	Present	dpiw-fauna		NVA
Dasyurus viverrinus	eastern quoll	5	503698	5227658	3384	Sighting	2010- 05-21	Day	Present	dpiw-fauna		NVA
Dasyurus viverrinus	eastern quoll	5	503607	5227566	3256	Sighting	2010- 07-14	Day	Present	dpiw-fauna		NVA
Dasyurus viverrinus	eastern quoll	5	503698	5227658	3384	Sighting	2010- 07-15	Day	Present	dpiw-fauna		NVA
Dasyurus viverrinus	eastern quoll	5	503644	5227711	3397	Sighting	2010- 07-16	Day	Present	dpiw-fauna		NVA
Dasyurus viverrinus	eastern quoll	5	503686	5227682	3397	Sighting	2010- 07-17	Day	Present	dpiw-fauna		NVA
Dasyurus viverrinus	eastern quoll	5	503723	5227634	3379	Sighting	2010- 07-18	Day	Present	dpiw-fauna		NVA
Dasyurus viverrinus	eastern quoll	5	503839	5227543	3376	Sighting	2010- 07-14	Day	Present	dpiw-fauna		NVA
Dasyurus viverrinus	eastern quoll	5	503640	5227765	3439	Sighting	2010- 07-15	Day	Present	dpiw-fauna		NVA
Dasyurus viverrinus	eastern quoll	5	503686	5227682	3397	Sighting	2010- 07-16	Day	Present	dpiw-fauna		NVA
Dasyurus viverrinus	eastern quoll	5	503764	5227613	3386	Sighting	2010- 07-17	Day	Present	dpiw-fauna		NVA
Dasyurus viverrinus	eastern quoll	5	503764	5227613	3386	Sighting	2010- 07-18	Day	Present	dpiw-fauna		NVA
Dasyurus viverrinus	eastern quoll	5	503668	5227695	3397	Sighting	2010- 07-14	Day	Present	dpiw-fauna		NVA
Dasyurus viverrinus	eastern quoll	5	503659	5227700	3396	Sighting	2010- 07-15	Day	Present	dpiw-fauna		NVA
Dasyurus viverrinus	eastern quoll	5	503723	5227634	3379	Sighting	2010- 07-16	Day	Present	dpiw-fauna		NVA
Dasyurus viverrinus	eastern quoll	5	503659	5227700	3396	Sighting	2010- 07-17	Day	Present	dpiw-fauna		NVA
Dasyurus viverrinus	eastern quoll	5	503668	5227695	3397	Sighting	2010- 07-18	Day	Present	dpiw-fauna		NVA
Dasyurus viverrinus	eastern quoll	5	503644	5227711	3397	Sighting	2010- 07-14	Day	Present	dpiw-fauna		NVA

Species name	Common name	Reported Position accuracy (m)	x	Υ	Distance (m)	Obs. type	Obs. date	Date accuracy	Obs. state	Project code + Foreign id	NVA id
Dasyurus viverrinus	eastern quoll	5	503727	5227436	3223	Sighting	2010- 07-15	Day	Present	dpiw-fauna	NVA
Dasyurus viverrinus	eastern quoll	5	503794	5227481	3300	Sighting	2010- 07-16	Day	Present	dpiw-fauna	<u>NVA</u>
Dasyurus viverrinus	eastern quoll	5	503764	5227613	3386	Sighting	2010- 07-16	Day	Present	dpiw-fauna	<u>NVA</u>
Dasyurus viverrinus	eastern quoll	5	503668	5227695	3397	Sighting	2010- 07-17	Day	Present	dpiw-fauna	NVA
Dasyurus viverrinus	eastern quoll	5	503600	5227779	3429	Sighting	2010- 07-18	Day	Present	dpiw-fauna	NVA
Dasyurus viverrinus	eastern quoll	5	503804	5227567	3374	Sighting	2010- 07-17	Day	Present	dpiw-fauna	NVA
Dasyurus viverrinus	eastern quoll	5	503698	5227658	3384	Sighting	2010- 07-18	Day	Present	dpiw-fauna	NVA
Dasyurus viverrinus	eastern quoll	5	503839	5227543	3376	Sighting	2010- 07-18	Day	Present	dpiw-fauna	NVA
Alcedo azurea subsp. diemenensis	azure kingfisher or azure kingfisher (tasmanian)	5000	501150	5229200	4345	Sighting	1950- 01-01	Decade	Present	wakd WapCey65	NVA
Alcedo azurea subsp. diemenensis	azure kingfisher or azure kingfisher (tasmanian)	10000	504026	5226101	2581	Sighting	1900- 01-01	Unknown	Present	wakd WapCey274	<u>NVA</u>
Dasyurus viverrinus	eastern quoll	1000	503654	5225355	1965	Carcass	2010- 05-14	Day	Present	dpiw-fauna FA10116	NVA
Perameles gunnii	eastern barred bandicoot	500	504266	5226576	3031	Sighting	2011- 09-21	Day	Present	tfncmisc	<u>NVA</u>
Perameles gunnii	eastern barred bandicoot	10	497876	5222899	4352	Sighting	2008- 10-13	Day	Present	dpiw-fauna	<u>NVA</u>
Perameles gunnii	eastern barred bandicoot	10	503406	5225385	1733	Sighting	2008- 02-14	Day	Present	dpiw-fauna	NVA
Perameles gunnii	eastern barred bandicoot	10	497937	5224222	3865	Sighting	2008- 01-03	Day	Present	dpiw-fauna	NVA
Haliaeetus leucogaster	white- bellied sea- eagle	10	498488	5224993	3256	Nest	2007- 01-01	Day	Present	rnd 835	NVA
Accipiter novaehollandiae	grey goshawk	10	498245	5225010	3500	Nest	1985- 01-01	Decade	Present	rnd 836	<u>NVA</u>
Haliaeetus leucogaster	white- bellied sea- eagle	50	498400	5225050	3347	Nest	2007- 10-11	Day	Present	rnd 1587	NVA
Dasyurus viverrinus	eastern quoll	10	502407	5229395	4548	Carcass	2012- 01-16	Day	Present	dpiw-fauna	NVA
Dasyurus viverrinus	eastern quoll	10	503685	5227682	3396	Sighting	2011- 05-15	Day	Present	dpiw-fauna FA 11295	NVA
Dasyurus viverrinus	eastern quoll	10	503603	5227779	3431	Sighting	2011- 05-16	Day	Present	dpiw-fauna FA 11295	<u>NVA</u>
Dasyurus viverrinus	eastern quoll	10	503773	5227608	3388	Sighting	2011- 05-16	Day	Present	dpiw-fauna FA 11295	NVA
Dasyurus viverrinus	eastern quoll	10	503763	5227618	3390	Sighting	2011- 05-16	Day	Present	dpiw-fauna FA 11295	NVA
Dasyurus viverrinus	eastern quoll	10	503625	5227727	3399	Sighting	2011- 05-17	Day	Present	dpiw-fauna FA 11295	NVA
Dasyurus viverrinus	eastern quoll	10	503745	5227628	3387	Sighting	2011- 05-16	Day	Present	dpiw-fauna FA 11295	NVA
Dasyurus viverrinus	eastern quoll	10	503745	5227628	3387	Sighting	2011- 05-17	Day	Present	dpiw-fauna FA 11295	<u>NVA</u>

Species name	Common name	Reported Position accuracy (m)	x	Υ	Distance (m)	Obs. type	Obs. date	Date accuracy	Obs. state	Project code + Foreign id	NVA id
Dasyurus viverrinus	eastern quoll	10	503607	5227621	3302	Sighting	2011- 07-18	Day	Present	dpiw-fauna FA 11295	NVA
Dasyurus viverrinus	eastern quoll	10	503663	5227564	3287	Sighting	2011- 07-19	Day	Present	dpiw-fauna FA 11295	NVA
Dasyurus viverrinus	eastern quoll	10	503790	5227586	3380	Sighting	2011- 07-20	Day	Present	dpiw-fauna FA 11295	NVA
Dasyurus viverrinus	eastern quoll	10	503834	5227556	3383	Sighting	2011- 07-20	Day	Present	dpiw-fauna FA 11295	NVA
Dasyurus viverrinus	eastern quoll	10	503603	5227779	3431	Sighting	2011- 07-20	Day	Present	dpiw-fauna FA 11295	NVA
Dasyurus viverrinus	eastern quoll	10	503834	5227556	3383	Sighting	2011- 09-16	Day	Present	dpiw-fauna FA 11295	NVA
Dasyurus viverrinus	eastern quoll	10	503745	5227628	3387	Sighting	2011- 09-18	Day	Present	dpiw-fauna FA 11295	NVA
Dasyurus viverrinus	eastern quoll	10	503727	5227634	3381	Sighting	2011- 09-16	Day	Present	dpiw-fauna FA 11295	NVA
Dasyurus viverrinus	eastern quoll	10	503650	5227521	3245	Sighting	2011- 09-17	Day	Present	dpiw-fauna FA 11295	NVA
Dasyurus viverrinus	eastern quoll	10	503700	5227661	3387	Sighting	2011- 09-18	Day	Present	dpiw-fauna FA 11295	NVA
Dasyurus viverrinus	eastern quoll	10	503804	5227572	3378	Sighting	2011- 11-14	Day	Present	dpiw-fauna FA 11295	NVA
Dasyurus viverrinus	eastern quoll	10	503642	5227763	3439	Sighting	2011- 11-16	Day	Present	dpiw-fauna FA 11295	NVA
Dasyurus viverrinus	eastern quoll	10	503544	5227441	3118	Sighting	2011- 11-15	Day	Present	dpiw-fauna FA 11295	NVA
Dasyurus viverrinus	eastern quoll	10	503663	5227543	3270	Sighting	2011- 11-15	Day	Present	dpiw-fauna FA 11295	NVA
Dasyurus viverrinus	eastern quoll	10	503650	5227521	3245	Sighting	2011- 11-16	Day	Present	dpiw-fauna FA 11295	NVA
Dasyurus viverrinus	eastern quoll	10	503603	5227779	3431	Sighting	2011- 11-15	Day	Present	dpiw-fauna FA 11295	NVA
Dasyurus viverrinus	eastern quoll	10	503680	5227471	3222	Sighting	2012- 01-16	Day	Present	dpiw-fauna FA 11295	NVA
Dasyurus viverrinus	eastern quoll	10	503647	5227705	3393	Sighting	2012- 01-17	Day	Present	dpiw-fauna FA 11295	NVA
Dasyurus viverrinus	eastern quoll	10	503650	5227521	3245	Sighting	2012- 01-18	Day	Present	dpiw-fauna FA 11295	NVA
Dasyurus maculatus	spotted-tail quoll	5000	498556	5224860	3187	Sighting	2006- 11-26	Day	Present	tmagvert A2490	NVA
Tyto novaehollandiae	masked owl	5000	500997	5229303	4470	Sighting	1983- 06-16	Day	Present	tmagvert B4078	NVA
Dasyurus viverrinus	eastern quoll	10	503848	5227539	3379	Sighting	2012- 05-18	Day	Present	dpiw-fauna	NVA
Dasyurus viverrinus	eastern quoll	10	503848	5227539	3379	Sighting	2012- 05-19	Day	Present	dpiw-fauna	NVA
Dasyurus viverrinus	eastern quoll	10	503847	5227559	3394	Sighting	2012- 03-19	Day	Present	dpiw-fauna	NVA
Dasyurus viverrinus	eastern quoll	10	503847	5227559	3394	Sighting	2012- 03-21	Day	Present	dpiw-fauna	NVA
Dasyurus viverrinus	eastern quoll	10	503790	5227586	3380	Sighting	2012- 03-20	Day	Present	dpiw-fauna	NVA
Dasyurus viverrinus	eastern quoll	10	503745	5227628	3387	Sighting	2012- 03-19	Day	Present	dpiw-fauna	NVA
Dasyurus viverrinus	eastern quoll	10	503727	5227634	3381	Sighting	2012- 07-17	Day	Present	dpiw-fauna	NVA
Dasyurus viverrinus	eastern quoll	10	503727	5227634	3381	Sighting	2013- 01-16	Day	Present	dpiw-fauna	NVA
Dasyurus viverrinus	eastern quoll	10	503685	5227682	3396	Sighting	2012- 03-21	Day	Present	dpiw-fauna	<u>NVA</u>

Species name	Common name	Reported Position accuracy (m)	x	Y	Distance (m)	Obs. type	Obs. date	Date accuracy	Obs. state		Project code + Foreign id	NVA id
Dasyurus viverrinus	eastern quoll	10	503672	5227694	3399	Sighting	2012- 07-17	Day	Present	dpiw-fauna		NVA
Dasyurus viverrinus	eastern quoll	10	503672	5227694	3399	Sighting	2012- 07-18	Day	Present	dpiw-fauna		<u>NVA</u>
Dasyurus viverrinus	eastern quoll	10	503625	5227727	3399	Sighting	2012- 03-20	Day	Present	dpiw-fauna		<u>NVA</u>
Dasyurus viverrinus	eastern quoll	10	503603	5227779	3431	Sighting	2012- 03-19	Day	Present	dpiw-fauna		NVA
Dasyurus viverrinus	eastern quoll	10	503603	5227779	3431	Sighting	2012- 05-20	Day	Present	dpiw-fauna		NVA
Dasyurus viverrinus	eastern quoll	10	503603	5227779	3431	Sighting	2013- 01-17	Day	Present	dpiw-fauna		NVA
Dasyurus viverrinus	eastern quoll	10	503642	5227763	3439	Sighting	2012- 05-20	Day	Present	dpiw-fauna		NVA
Dasyurus viverrinus	eastern quoll	10	503642	5227763	3439	Sighting	2013- 01-18	Day	Present	dpiw-fauna		NVA
Dasyurus viverrinus	eastern quoll	10	503799	5227480	3302	Sighting	2012- 05-20	Day	Present	dpiw-fauna		NVA
Dasyurus viverrinus	eastern quoll	10	503748	5227534	3313	Sighting	2012- 05-19	Day	Present	dpiw-fauna		NVA
Dasyurus viverrinus	eastern quoll	10	503748	5227534	3313	Sighting	2012- 05-18	Day	Present	dpiw-fauna		NVA
Dasyurus viverrinus	eastern quoll	10	503748	5227534	3313	Sighting	2012- 05-20	Day	Present	dpiw-fauna		NVA
Dasyurus viverrinus	eastern quoll	10	503585	5227539	3222	Sighting	2012- 05-18	Day	Present	dpiw-fauna		NVA
Dasyurus viverrinus	eastern quoll	10	503561	5227470	3151	Sighting	2013- 01-18	Day	Present	dpiw-fauna		NVA
Dasyurus viverrinus	eastern quoll	10	503544	5227441	3118	Sighting	2012- 05-19	Day	Present	dpiw-fauna		NVA
Dasyurus viverrinus	eastern quoll	200	503667	5227615	3331	Sighting	2012- 02-15	Week	Present	dpiw-fauna		NVA
Dasyurus maculatus	spotted-tail quoll	200	503667	5227615	3331	Sighting	2012- 02-15	Week	Present	dpiw-fauna		NVA
Perameles gunnii	eastern barred bandicoot	200	503667	5227615	3331	Sighting	2012- 02-15	Week	Present	dpiw-fauna		NVA
Dasyurus viverrinus	eastern quoll	200	503667	5227615	3331	Sighting	2012- 06-13	Week	Present	dpiw-fauna		NVA
Dasyurus maculatus	spotted-tail quoll	200	503667	5227615	3331	Sighting	2012- 06-13	Week	Present	dpiw-fauna		NVA
Perameles gunnii	eastern barred bandicoot	200	503667	5227615	3331	Sighting	2012- 06-13	Week	Present	dpiw-fauna		NVA
Dasyurus viverrinus	eastern quoll	200	503667	5227615	3331	Sighting	2012- 12-15	Week	Present	dpiw-fauna		NVA
Dasyurus maculatus	spotted-tail quoll	200	503667	5227615	3331	Sighting	2012- 12-15	Week	Present	dpiw-fauna		NVA
Perameles gunnii	eastern barred bandicoot	200	503667	5227615	3331	Sighting	2012- 12-15	Week	Present	dpiw-fauna		NVA
Dasyurus viverrinus	eastern quoll	25	503933	5226831	2922	Carcass	2010- 03-13	Day	Present	dpiw-fauna		NVA
Dasyurus viverrinus	eastern quoll	50	505419	5222834	4215	Carcass	2013- 06-01	Day	Present	ucandna UC1	1214	NVA
Haliaeetus leucogaster	white- bellied sea- eagle	10	498708	5224704	3041	Nest	2016- 02-15	Month	Present	rnd 2282		NVA
Dasyurus viverrinus	eastern quoll	200	505527	5222717	4367	Carcass	2018- 07-15	Day	Present	rtar		NVA

Species name	Common name	Reported Position accuracy (m)	x	Υ	Distance (m)	Obs. type	Obs. date	Date accuracy	Obs. state	Project code + Foreign id	NVA id
Perameles gunnii	eastern barred bandicoot	200	498454	5222208	4248	Carcass	2018- 07-29	Day	Present	rtar	NVA
Perameles gunnii	eastern barred bandicoot	200	502180	5219917	4998	Carcass	2018- 07-31	Day	Present	rtar	NVA
Perameles gunnii	eastern barred bandicoot	200	505232	5221900	4599	Carcass	2018- 08-02	Day	Present	rtar	NVA
Sarcophilus harrisii	tasmanian devil	80	498972	5227015	3488	Camera Trap	2018- 11-05	Day	Present	hvc-ts	NVA
Sarcophilus harrisii	tasmanian devil	100	501587	5222979	1923	Camera Trap	2017- 11-30	Day	Present	hvc-ts	<u>NVA</u>
Sarcophilus harrisii	tasmanian devil	200	499516	5228282	4053	Camera Trap	2018- 11-20	Day	Present	hvc-ts	NVA
Perameles gunnii	eastern barred bandicoot	100	498392	5224685	3358	Camera Trap	2018- 11-18	Day	Present	hvc-ts	NVA
Perameles gunnii	eastern barred bandicoot	80	499986	5228051	3611	Camera Trap	2018- 11-22	Day	Present	hvc-ts	NVA
Dasyurus viverrinus	eastern quoll	100	501620	5222974	1926	Camera Trap	2017- 12-16	Day	Present	hvc-ts	<u>NVA</u>
Dasyurus viverrinus	eastern quoll	200	502350	5223444	1574	Camera Trap	2018- 01-06	Day	Present	hvc-ts	NVA
Dasyurus viverrinus	eastern quoll	80	498395	5224690	3354	Camera Trap	2018- 11-20	Day	Present	hvc-ts	NVA
Dasyurus viverrinus	eastern quoll	150	498980	5227004	3475	Camera Trap	2018- 10-15	Day	Present	hvc-ts	NVA
Dasyurus viverrinus	eastern quoll	250	499520	5228293	4060	Camera Trap	2018- 11-08	Day	Present	hvc-ts	NVA
Perameles gunnii	eastern barred bandicoot	200	504122	5221614	4054	Carcass	2019- 01-06	Day	Present	rtar	NVA
Dasyurus viverrinus	eastern quoll	200	504194	5221587	4118	Carcass	2019- 01-21	Day	Present	rtar	NVA
Perameles gunnii	eastern barred bandicoot	500	500680	5220565	4460	Carcass	2019- 02-26	Day	Present	rtar	NVA
Dasyurus maculatus	spotted-tail quoll	200	498371	5225030	3375	Carcass	2018- 12-15	Day	Present	rtar	<u>NVA</u>
Perameles gunnii	eastern barred bandicoot	200	498354	5221677	4674	Carcass	2018- 12-15	Day	Present	rtar	NVA
Dasyurus viverrinus	eastern quoll	200	500678	5228825	4071	Carcass	2018- 12-05	Day	Present	rtar	<u>NVA</u>
Sarcophilus harrisii	tasmanian devil	20	499984	5221466	3855	Camera Trap	2018- 02-21	Day	Present	hvc-ts	<u>NVA</u>
Sarcophilus harrisii	tasmanian devil	20	499308	5228192	4098	Camera Trap	2017- 10-25	Day	Present	hvc-ts	<u>NVA</u>
Sarcophilus harrisii	tasmanian devil	20	500059	5228554	4027	Camera Trap	2017- 10-13	Day	Present	hvc-ts	NVA
Perameles gunnii	eastern barred bandicoot	20	499984	5221466	3855	Camera Trap	2018- 03-01	Day	Present	hvc-ts	NVA
Dasyurus viverrinus	eastern quoll	20	499984	5221466	3855	Camera Trap	2018- 02-26	Day	Present	hvc-ts	<u>NVA</u>
Dasyurus viverrinus	eastern quoll	20	503122	5220723	4395	Camera Trap	2018- 06-25	Day	Present	hvc-ts	<u>NVA</u>
Dasyurus viverrinus	eastern quoll	200	504499	5221540	4343	Carcass	2019- 05-20	Day	Present	rtar	<u>NVA</u>
Dasyurus viverrinus	eastern quoll	200	503530	5225513	1891	Carcass	2019- 06-17	Day	Present	rtar	NVA

Species name	Common name	Reported Position accuracy (m)	x	Υ	Distance (m)	Obs. type	Obs. date	Date accuracy	Obs. state	Project code + Foreign id	NVA id
Accipiter novaehollandiae	grey goshawk	20	504563	5221068	4755	Nest	2020- 01-01	Day	Present	rnd 2715	NVA
Accipiter novaehollandiae	grey goshawk	20	498894	5226681	3362	Nest	2020- 01-01	Day	Present	rnd 2716	<u>NVA</u>
Dasyurus viverrinus	eastern quoll	200	498212	5224613	3542	Carcass	2020- 02-04	Day	Present	rtar	NVA
Perameles gunnii	eastern barred bandicoot	200	497768	5223299	4284	Carcass	2020- 06-23	Day	Present	rtar	NVA
Dasyurus viverrinus	eastern quoll	200	503204	5225904	1775	Carcass	2020- 07-04	Day	Present	rtar	NVA
Dasyurus viverrinus	eastern quoll	10	501621	5229118	4224	Camera Trap	2018- 03-26	Day	Present	tlcdata EGIS006	<u>NVA</u>
Dasyurus viverrinus	eastern quoll	10	501621	5229118	4224	Camera Trap	2018- 03-27	Day	Present	tlcdata EGIS006	<u>NVA</u>
Dasyurus viverrinus	eastern quoll	10	501621	5229118	4224	Camera Trap	2018- 03-29	Day	Present	tlcdata EGIS006	NVA
Dasyurus viverrinus	eastern quoll	10	501621	5229118	4224	Camera Trap	2018- 04-01	Day	Present	tlcdata EGIS006	NVA
Dasyurus viverrinus	eastern quoll	10	501621	5229118	4224	Camera Trap	2018- 04-24	Day	Present	tlcdata EGIS006	NVA
Dasyurus viverrinus	eastern quoll	10	501621	5229118	4224	Camera Trap	2018- 04-27	Day	Present	tlcdata EGIS006	NVA
Dasyurus viverrinus	eastern quoll	10	501621	5229118	4224	Camera Trap	2018- 04-27	Day	Present	tlcdata EGIS006	NVA
Dasyurus viverrinus	eastern quoll	10	501621	5229118	4224	Camera Trap	2020- 03-25	Day	Present	tlcdata EGIS006	NVA
Dasyurus viverrinus	eastern quoll	10	501382	5228315	3438	Camera Trap	2018- 03-16	Day	Present	tlcdata EGIS007	NVA
Dasyurus viverrinus	eastern quoll	10	501382	5228315	3438	Camera Trap	2018- 03-21	Day	Present	tlcdata EGIS007	NVA
Dasyurus viverrinus	eastern quoll	10	501382	5228315	3438	Camera Trap	2018- 03-22	Day	Present	tlcdata EGIS007	NVA
Dasyurus viverrinus	eastern quoll	10	501382	5228315	3438	Camera Trap	2018- 03-23	Day	Present	tlcdata EGIS007	NVA
Dasyurus viverrinus	eastern quoll	10	501382	5228315	3438	Camera Trap	2018- 03-27	Day	Present	tlcdata EGIS007	NVA
Dasyurus viverrinus	eastern quoll	10	501382	5228315	3438	Camera Trap	2018- 03-28	Day	Present	tlcdata EGIS007	NVA
Dasyurus viverrinus	eastern quoll	10	501382	5228315	3438	Camera Trap	2018- 03-28	Day	Present	tlcdata EGIS007	NVA
Dasyurus viverrinus	eastern quoll	10	501382	5228315	3438	Camera Trap	2018- 03-29	Day	Present	tlcdata EGIS007	NVA
Dasyurus viverrinus	eastern quoll	10	501382	5228315	3438	Camera Trap	2018- 04-01	Day	Present	tlcdata EGIS007	NVA
Dasyurus viverrinus	eastern quoll	10	501382	5228315	3438	Camera Trap	2018- 04-01	Day	Present	tlcdata EGIS007	NVA
Dasyurus viverrinus	eastern quoll	10	501382	5228315	3438	Camera Trap	2018- 04-06	Day	Present	tlcdata EGIS007	NVA
Dasyurus viverrinus	eastern quoll	10	501382	5228315	3438	Camera Trap	2018- 04-07	Day	Present	tlcdata EGIS007	NVA
Dasyurus viverrinus	eastern quoll	10	501382	5228315	3438	Camera Trap	2018- 04-11	Day	Present	tlcdata EGIS007	NVA
Dasyurus viverrinus	eastern quoll	10	501382	5228315	3438	Camera Trap	2018- 04-12	Day	Present	tlcdata EGIS007	NVA
Dasyurus viverrinus	eastern quoll	10	501382	5228315	3438	Camera Trap	2018- 04-14	Day	Present	tlcdata EGIS007	NVA
Dasyurus viverrinus	eastern quoll	10	501382	5228315	3438	Camera Trap	2018- 04-19	Day	Present	tlcdata EGIS007	NVA
Dasyurus viverrinus	eastern quoll	10	501382	5228315	3438	Camera Trap	2018- 04-20	Day	Present	tlcdata EGIS007	NVA

Species name	Common name	Reported Position accuracy (m)	x	Υ	Distance (m)	Obs. type	Obs. date	Date accuracy	Obs. state	Project code + Foreign id	NVA id
Dasyurus viverrinus	eastern quoll	10	501382	5228315	3438	Camera Trap	2018- 04-22	Day	Present	tlcdata EGIS007	NVA
Dasyurus viverrinus	eastern quoll	10	501382	5228315	3438	Camera Trap	2018- 04-23	Day	Present	tlcdata EGIS007	NVA
Dasyurus viverrinus	eastern quoll	10	501382	5228315	3438	Camera Trap	2018- 04-25	Day	Present	tlcdata EGIS007	NVA
Dasyurus viverrinus	eastern quoll	10	501382	5228315	3438	Camera Trap	2018- 05-02	Day	Present	tlcdata EGIS007	NVA
Dasyurus viverrinus	eastern quoll	10	501354	5229191	4313	Camera Trap	2018- 03-26	Day	Present	tlcdata EGIS011	NVA
Dasyurus viverrinus	eastern quoll	10	501354	5229191	4313	Camera Trap	2018- 03-27	Day	Present	tlcdata EGIS011	NVA
Dasyurus viverrinus	eastern quoll	10	501354	5229191	4313	Camera Trap	2018- 03-29	Day	Present	tlcdata EGIS011	<u>NVA</u>
Dasyurus viverrinus	eastern quoll	10	501354	5229191	4313	Camera Trap	2018- 04-01	Day	Present	tlcdata EGIS011	<u>NVA</u>
Dasyurus viverrinus	eastern quoll	10	501354	5229191	4313	Camera Trap	2018- 04-12	Day	Present	tlcdata EGIS011	<u>NVA</u>
Dasyurus viverrinus	eastern quoll	10	501354	5229191	4313	Camera Trap	2018- 04-12	Day	Present	tlcdata EGIS011	NVA
Dasyurus viverrinus	eastern quoll	10	501458	5229175	4288	Camera Trap	2020- 03-24	Day	Present	tlcdata EGIS012	<u>NVA</u>
Dasyurus maculatus	spotted-tail quoll	10	501621	5229118	4224	Camera Trap	2020- 03-04	Day	Present	tlcdata EGIS006	NVA
Dasyurus maculatus	spotted-tail quoll	10	501354	5229191	4313	Camera Trap	2020- 03-04	Day	Present	tlcdata EGIS011	NVA
Dasyurus maculatus	spotted-tail quoll	10	501354	5229191	4313	Camera Trap	2020- 03-19	Day	Present	tlcdata EGIS011	NVA
Dasyurus maculatus	spotted-tail quoll	10	501354	5229191	4313	Camera Trap	2020- 03-20	Day	Present	tlcdata EGIS011	NVA
Dasyurus maculatus	spotted-tail quoll	10	501458	5229175	4288	Camera Trap	2020- 03-07	Day	Present	tlcdata EGIS012	NVA
Dasyurus maculatus	spotted-tail quoll	10	501458	5229175	4288	Camera Trap	2020- 03-14	Day	Present	tlcdata EGIS012	NVA
Dasyurus maculatus	spotted-tail quoll	10	501466	5229171	4284	Camera Trap	2020- 03-19	Day	Present	tlcdata EGIS015	NVA
Dasyurus maculatus	spotted-tail quoll	10	501652	5229137	4242	Camera Trap	2020- 03-14	Day	Present	tlcdata EGIS016	NVA
Haliaeetus leucogaster	white- bellied sea- eagle	10	501382	5228315	3438	Camera Trap	2015- 12-04	Day	Present	tlcdata EGIS007	NVA
Perameles gunnii	eastern barred bandicoot	10	501621	5229118	4224	Camera Trap	2015- 12-09	Day	Present	tlcdata EGIS006	NVA
Perameles gunnii	eastern barred bandicoot	10	501621	5229118	4224	Camera Trap	2015- 12-29	Day	Present	tlcdata EGIS006	NVA
Perameles gunnii	eastern barred bandicoot	10	501621	5229118	4224	Camera Trap	2016- 01-04	Day	Present	tlcdata EGIS006	NVA
Perameles gunnii	eastern barred bandicoot	200	502404	5229401	4553	Carcass	2020- 08-30	Day	Present	rtar	NVA
Dasyurus viverrinus	eastern quoll	200	503655	5225191	1935	Carcass	2020- 07-23	Day	Present	rtar	NVA
Accipiter novaehollandiae	grey goshawk	25	497743	5222663	4581	Nest	2020- 06-30	6 months	Present	rnd 2794	NVA
Accipiter novaehollandiae	grey goshawk	25	498876	5226733	3405	Nest	2020- 06-30	6 months	Present	rnd 2795	NVA
Accipiter novaehollandiae	grey goshawk	25	502737	5225486	1156	Nest	2020- 06-30	6 months	Present	rnd 2812	NVA

Species name	Common name	Reported Position accuracy (m)	x	Υ	Distance (m)	Obs. type	Obs. date	Date accuracy	Obs. state	Project code + Foreign id	NVA id
Accipiter novaehollandiae	grey goshawk	25	504560	5221068	4753	Nest	2020- 06-30	6 months	Present	rnd 2813	NVA
Dasyurus viverrinus	eastern quoll	200	502861	5227188	2550	Carcass	2020- 09-01	Day	Present	rtar	NVA
Dasyurus viverrinus	eastern quoll	200	502462	5229840	4996	Carcass	2020- 09-04	Day	Present	rtar	NVA
Haliaeetus leucogaster	white- bellied sea- eagle	50	498352	5224635	3401	Nest	2019- 10-15	Month	Present	rnd 2824	NVA
Perameles gunnii	eastern barred bandicoot	200	502702	5227729	2991	Carcass	2020- 10-13	Day	Present	rtar	NVA
Dasyurus viverrinus	eastern quoll	-1	502712	5228080	3328	Not Recorded	1991- 07-28	Day	Present	dr345	NVA
Aquila audax	wedge- tailed eagle	-1	502857	5226895	2288	Not Recorded	2018- 01-03	Day	Present	dr2009	NVA
Dasyurus viverrinus	eastern quoll	-1	502712	5228080	3328	Not Recorded	1986- 05-30	Day	Present	dr345	NVA
Haliaeetus leucogaster	white- bellied sea- eagle	-1	498395	5221503	4767	Not Recorded	2016- 05-27	Day	Present	dr2009	NVA
Accipiter novaehollandiae	grey goshawk	-1	502872	5227083	2461	Not Recorded	2016- 05-14	Day	Present	dr2009	NVA
Haliaeetus leucogaster	white- bellied sea- eagle	-1	500673	5224876	1070	Not Recorded	2016- 03-28	Day	Present	dr2009	<u>NVA</u>
Accipiter novaehollandiae	grey goshawk	-1	501423	5229174	4290	Not Recorded	2016- 12-03	Day	Present	dr2009	NVA
Hirundapus caudacutus	white- throated needletail	-1	500343	5229228	4553	Not Recorded	2015- 03-15	Day	Present	dr2009 URN:CornellLabOfOrnithology:EBIRD:OBS369036696	<u>NVA</u>
Hirundapus caudacutus	white- throated needletail	5000	500271	5229622	4950	Not Recorded	1900- 01-01	Unknown	Present	dr359	<u>NVA</u>
Hirundapus caudacutus	white- throated needletail	500	501358	5228080	3207	Not Recorded	1900- 01-01	Unknown	Present	dr359	NVA

Showing 1 to 284 of 284 entries

Threatened Flora Records

Flora Records within 2000m of 501743E, 5224896N at Mon Jun 07 2021 09:54:32 GMT+1000 (Australian Eastern Standard Time)

Species name Common name Reported Position accuracy (m) X Y Distance (m) Obs. type Obs. date Date accuracy Obs. state NVA id

No data available in table

Showing 0 to 0 of 0 entries

Threatened Flora Survey Notes

SURVEY SKILL LEVEL

Refer to Threatened Flora Species Survey Notes (FPA 2016) for more information.

Survey skill level:

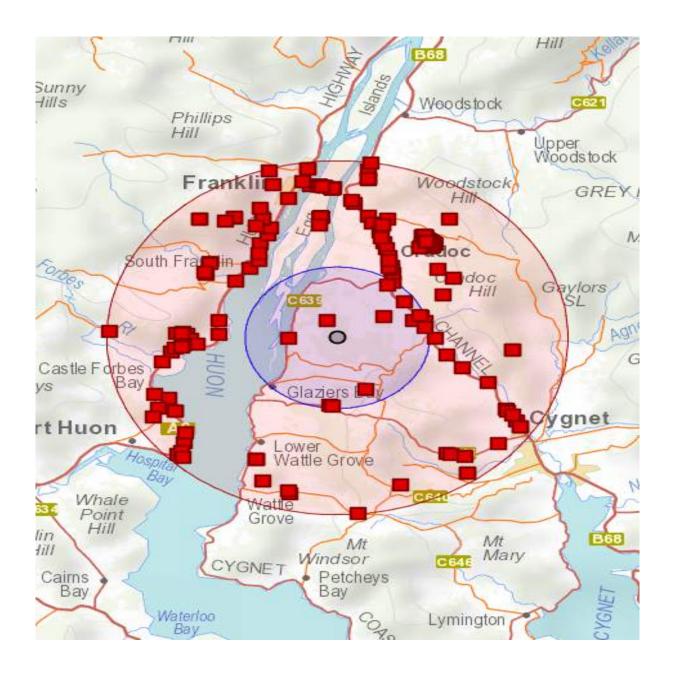
- 1: highly distinctive species an FPO or forest planner can undertake surveys
- 2: distinctive species a flora-competent forest planner can undertake surveys
- 3: non-distinctive species and species occupying specialised niches only experienced field botanists can undertake surveys

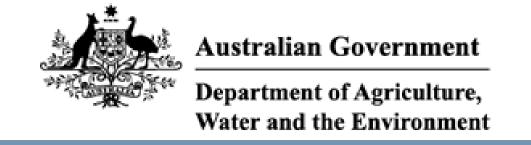
HABITAT DESCRIPTION

Refer to <u>Habitat Descriptions of Threatened Flora in Tasmania (FPA 2016)</u> for more information.

Species name	Common name	Life form	Status TSPA, EPBCA	Habitat description	Survey guidelines	Survey skill level
·			No data available	in table		

Showing 0 to 0 of 0 entries





EPBC Act Protected Matters Report

This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected.

Information on the coverage of this report and qualifications on data supporting this report are contained in the caveat at the end of the report.

Information is available about <u>Environment Assessments</u> and the EPBC Act including significance guidelines, forms and application process details.

Report created: 07/06/21 09:53:54

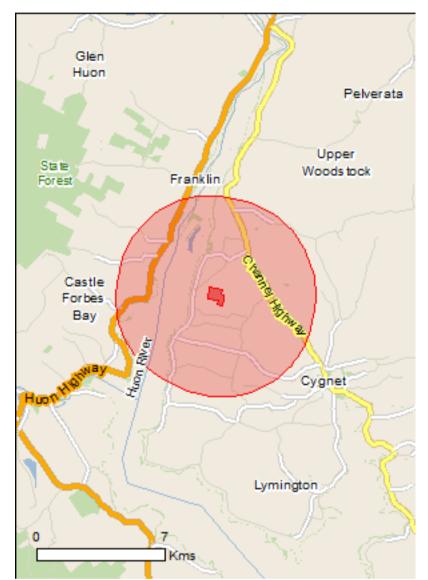
Summary

Details

Matters of NES
Other Matters Protected by the EPBC Act
Extra Information

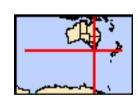
Caveat

<u>Acknowledgements</u>



This map may contain data which are ©Commonwealth of Australia (Geoscience Australia), ©PSMA 2015

Coordinates
Buffer: 5.0Km



Summary

Matters of National Environmental Significance

This part of the report summarises the matters of national environmental significance that may occur in, or may relate to, the area you nominated. Further information is available in the detail part of the report, which can be accessed by scrolling or following the links below. If you are proposing to undertake an activity that may have a significant impact on one or more matters of national environmental significance then you should consider the <u>Administrative Guidelines on Significance</u>.

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Importance:	None
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	2
Listed Threatened Species:	48
Listed Migratory Species:	32

Other Matters Protected by the EPBC Act

This part of the report summarises other matters protected under the Act that may relate to the area you nominated. Approval may be required for a proposed activity that significantly affects the environment on Commonwealth land, when the action is outside the Commonwealth land, or the environment anywhere when the action is taken on Commonwealth land. Approval may also be required for the Commonwealth or Commonwealth agencies proposing to take an action that is likely to have a significant impact on the environment anywhere.

The EPBC Act protects the environment on Commonwealth land, the environment from the actions taken on Commonwealth land, and the environment from actions taken by Commonwealth agencies. As heritage values of a place are part of the 'environment', these aspects of the EPBC Act protect the Commonwealth Heritage values of a Commonwealth Heritage place. Information on the new heritage laws can be found at http://www.environment.gov.au/heritage

A <u>permit</u> may be required for activities in or on a Commonwealth area that may affect a member of a listed threatened species or ecological community, a member of a listed migratory species, whales and other cetaceans, or a member of a listed marine species.

Commonwealth Land:	None
Commonwealth Heritage Places:	None
Listed Marine Species:	49
Whales and Other Cetaceans:	7
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Australian Marine Parks:	None

Extra Information

This part of the report provides information that may also be relevant to the area you have nominated.

State and Territory Reserves:	3
Regional Forest Agreements:	1
Invasive Species:	26
Nationally Important Wetlands:	None
Key Ecological Features (Marine)	None

Details

Matters of National Environmental Significance

Listed Threatened Ecological Communities

plans, State vegetation maps, remote sensing imagery community distributions are less well known, existing vegetation maps.	and other sources. Where	threatened ecological
Name	Status	Type of Presence
Subtropical and Temperate Coastal Saltmarsh	Vulnerable	Community likely to occur within area
Tasmanian Forests and Woodlands dominated by black gum or Brookers gum (Eucalyptus ovata / E. brookeriana)	Critically Endangered	Community likely to occur within area
Listed Threatened Species		[Resource Information]
Name	Status	Type of Presence
Birds		7.
Aquila audax fleayi		
Tasmanian Wedge-tailed Eagle, Wedge-tailed Eagle (Tasmanian) [64435] <u>Botaurus poiciloptilus</u>	Endangered	Breeding likely to occur within area
Australasian Bittern [1001]	Endangered	Species or species habitat known to occur within area
Calidris canutus		
Red Knot, Knot [855]	Endangered	Species or species habitat may occur within area
Calidris ferruginea		
Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
Ceyx azureus diemenensis		
Tasmanian Azure Kingfisher [25977]	Endangered	Species or species habitat known to occur within area
<u>Diomedea antipodensis</u>		
Antipodean Albatross [64458]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Diomedea antipodensis gibsoni	M. da anal la	Fanadan faallan annalstad
Gibson's Albatross [82270]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
<u>Diomedea epomophora</u>		
Southern Royal Albatross [89221]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Diomedea sanfordi Northern Royal Albatross [64456]	Endangered	Foraging, feeding or related behaviour likely to occur within area

For threatened ecological communities where the distribution is well known, maps are derived from recovery

[Resource Information]

Name	Status	Type of Presence
Fregetta grallaria grallaria		
White-bellied Storm-Petrel (Tasman Sea), White- bellied Storm-Petrel (Australasian) [64438]	Vulnerable	Species or species habitat likely to occur within area
Hirundapus caudacutus White-throated Needletail [682]	Vulnerable	Species or species habitat may occur within area
<u>Lathamus discolor</u> Swift Parrot [744]	Critically Endangered	Breeding known to occur within area
<u>Limosa lapponica baueri</u> Nunivak Bar-tailed Godwit, Western Alaskan Bar-tailed Godwit [86380]	Vulnerable	Species or species habitat may occur within area
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Foraging, feeding or related behaviour likely to occur within area
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Species or species habitat may occur within area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area
Pachyptila turtur subantarctica Fairy Prion (southern) [64445]	Vulnerable	Species or species habitat likely to occur within area
Pterodroma leucoptera leucoptera Gould's Petrel, Australian Gould's Petrel [26033]	Endangered	Species or species habitat may occur within area
Sternula nereis nereis Australian Fairy Tern [82950]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Thalassarche bulleri Buller's Albatross, Pacific Albatross [64460]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Thalassarche bulleri platei Northern Buller's Albatross, Pacific Albatross [82273]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Thalassarche cauta Shy Albatross [89224]	Endangered	Foraging, feeding or related behaviour likely to occur within area
Thalassarche chrysostoma Grey-headed Albatross [66491]	Endangered	Species or species habitat may occur within area
<u>Thalassarche impavida</u> Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Thalassarche salvini Salvin's Albatross [64463]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Thalassarche steadi White-capped Albatross [64462]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Thinornis cucullatus cucullatus Eastern Hooded Plover, Eastern Hooded Plover	Vulnerable	Species or species

Name	Status	Type of Presence
[90381]		habitat likely to occur within
		area
Tyto novaehollandiae castanops (Tasmanian population	,	On a standard and a leaf to the
Masked Owl (Tasmanian) [67051]	Vulnerable	Species or species habitat known to occur within area
		Known to occur within area
Fish		
Prototroctes maraena		
Australian Grayling [26179]	Vulnerable	Species or species habitat
		known to occur within area
Thymichthys politus		
Red Handfish [83756]	Critically Endangered	Species or species habitat
	Chinesiny Emailing Constant	may occur within area
<u> </u>		
Insects		
Antipodia chaostola leucophaea Tagmanian Chaostola Skinner Heath and Skinner	Endongorod	Charles or angeles habitat
Tasmanian Chaostola Skipper, Heath-sand Skipper [77672]	Endangered	Species or species habitat may occur within area
[11012]		may occur within area
Mammals		
Balaenoptera musculus		
Blue Whale [36]	Endangered	Species or species habitat
		likely to occur within area
Dasyurus maculatus maculatus (Tasmanian populatio	n)	
Spotted-tail Quoll, Spot-tailed Quoll, Tiger Quoll	Vulnerable	Species or species habitat
(Tasmanian population) [75183]	Valiforable	known to occur within area
Dasyurus viverrinus		
Eastern Quoll, Luaner [333]	Endangered	Species or species habitat
		known to occur within area
Eubalaena australis		
Southern Right Whale [40]	Endangered	Breeding likely to occur
	gog	within area
Megaptera novaeangliae		
Humpback Whale [38]	Vulnerable	Species or species habitat
		likely to occur within area
Perameles gunnii gunnii		
Eastern Barred Bandicoot (Tasmania) [66651]	Vulnerable	Species or species habitat
, in the second of the second		known to occur within area
Sarcophilus harrisii	Fu dan sanad	On a sing on an arian lankitat
Tasmanian Devil [299]	Endangered	Species or species habitat likely to occur within area
		incly to occur within area
Other		
Parvulastra vivipara		
Tasmanian Live-bearing Seastar [85451]	Vulnerable	Species or species habitat
		may occur within area
Plants		
Caladenia caudata		
Tailed Spider-orchid [17067]	Vulnerable	Species or species habitat
		likely to occur within area
Engaria avaceta		
Epacris exserta South Fold Hooth [40970]	Endongorod	Charina ar angaing babitat
South Esk Heath [19879]	Endangered	Species or species habitat may occur within area
		may boom within area
Epacris virgata		
Pretty Heath, Dan Hill Heath [20375]	Endangered	Species or species habitat
		may occur within area
Lanidium hyeeonifolium		
<u>Lepidium hyssopifolium</u> Basalt Pepper-cress, Peppercress, Rubble Pepper-	Endangered	Species or species habitat
cress, Pepperweed [16542]	Lindangered	known to occur within area
, · -pp [·		
Prasophyllum apoxychilum		
Tapered Leek-orchid [64947]	Endangered	Species or species habitat
		may occur within

Name	Status	Type of Presence
Xerochrysum palustre Swamp Everlasting, Swamp Paper Daisy [76215]	Vulnerable	Species or species habitat likely to occur within area
Sharks		
Carcharodon carcharias White Shark, Great White Shark [64470]	Vulnerable	Species or species habitat known to occur within area
Listed Migratory Species * Species is listed under a different scientific name on the	he EPBC Act - Threatened	[Resource Information] Species list.
Name Migratory Marine Birds	Threatened	Type of Presence
Apus pacificus		
Fork-tailed Swift [678]		Species or species habitat likely to occur within area
Ardenna carneipes		
Flesh-footed Shearwater, Fleshy-footed Shearwater [82404]		Foraging, feeding or related behaviour likely to occur within area
Ardenna grisea Sooty Shearwater [82651]		Species or species habitat likely to occur within area
Diomedea antipodensis		
Antipodean Albatross [64458]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Diomedea sanfordi Northern Royal Albatross [64456]	Endangered	Foraging, feeding or related behaviour likely to occur within area
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Foraging, feeding or related behaviour likely to occur within area
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Species or species habitat may occur within area
Thalassarche bulleri		
Buller's Albatross, Pacific Albatross [64460]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Thalassarche cauta Shy Albatross [89224]	Endangered	Foraging, feeding or related behaviour likely to occur within area
Thalassarche chrysostoma Grey-headed Albatross [66491]	Endangered	Species or species habitat may occur within area
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
		within area

Name	Threatened	Type of Presence
Thalassarche salvini Salvin's Albatross [64463] Thalassarche steadi	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
White-capped Albatross [64462]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Migratory Marine Species		
Balaena glacialis australis Southern Right Whale [75529]	Endangered*	Breeding likely to occur within area
Balaenoptera musculus Blue Whale [36]	Endangered	Species or species habitat likely to occur within area
Carcharodon carcharias White Shark, Great White Shark [64470]	Vulnerable	Species or species habitat known to occur within area
<u>Lamna nasus</u> Porbeagle, Mackerel Shark [83288]		Species or species habitat likely to occur within area
Megaptera novaeangliae Humpback Whale [38]	Vulnerable	Species or species habitat likely to occur within area
Migratory Terrestrial Species		
Hirundapus caudacutus White-throated Needletail [682]	Vulnerable	Species or species habitat may occur within area
Myiagra cyanoleuca Satin Flycatcher [612]		Species or species habitat known to occur within area
Migratory Wetlands Species		
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat may occur within area
Calidris acuminata Sharp-tailed Sandpiper [874]		Species or species habitat may occur within area
Calidris canutus Red Knot, Knot [855]	Endangered	Species or species habitat may occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]		Species or species habitat likely to occur within area
Limosa Iapponica Bar-tailed Godwit [844]		Species or species habitat may occur within area
Ni una qui un una de mana de minurale		
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area

Name	Threatened	Type of Presence
		area

Other Matters Protected by the EPBC Act

Listed Marine Species	ha EDDO Ast. Thursdays d	[Resource Information]
* Species is listed under a different scientific name on t Name	Threatened	Type of Presence
Birds	Till Catchica	Type of Frescrice
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat may occur within area
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area
Ardea ibis Cattle Egret [59542]		Species or species habitat may occur within area
Calidris acuminata Sharp-tailed Sandpiper [874]		Species or species habitat may occur within area
Calidris canutus Red Knot, Knot [855]	Endangered	Species or species habitat may occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area
Diomedea antipodensis Antipodean Albatross [64458]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area

Name	Threatened	Type of Presence
Diomedea gibsoni Gibson's Albatross [64466] Diomedea sanfordi	Vulnerable*	Foraging, feeding or related behaviour likely to occur within area
Northern Royal Albatross [64456]	Endangered	Foraging, feeding or related behaviour likely to occur within area
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]		Species or species habitat likely to occur within area
Haliaeetus leucogaster White-bellied Sea-Eagle [943]		Breeding known to occur within area
Hirundapus caudacutus White-throated Needletail [682]	Vulnerable	Species or species habitat may occur within area
Lathamus discolor Swift Parrot [744]	Critically Endangered	Breeding known to occur within area
Limosa lapponica Bar-tailed Godwit [844]		Species or species habitat may occur within area
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Foraging, feeding or related behaviour likely to occur within area
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Species or species habitat may occur within area
Myiagra cyanoleuca Satin Flycatcher [612]		Species or species habitat known to occur within area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area
Pachyptila turtur Fairy Prion [1066]		Species or species habitat likely to occur within area
Puffinus carneipes Flesh-footed Shearwater, Fleshy-footed Shearwater [1043]		Foraging, feeding or related behaviour likely to occur within area
Puffinus griseus Sooty Shearwater [1024]		Species or species habitat likely to occur within area
Thalassarche bulleri Buller's Albatross, Pacific Albatross [64460]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Thalassarche cauta Shy Albatross [89224]	Endangered	Foraging, feeding or related behaviour likely to occur within area
Thalassarche chrysostoma Grey-headed Albatross [66491]	Endangered	Species or species habitat may occur within area
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Foraging, feeding or related behaviour likely

Name	Threatened	Type of Presence
		to occur within area
Thalassarche salvini Salvin's Albatross [64463]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Thalassarche sp. nov. Pacific Albatross [66511]	Vulnerable*	Foraging, feeding or related behaviour likely to occur within area
Thalassarche steadi		William Grou
White-capped Albatross [64462]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Thinornis rubricollis rubricollis Hooded Plover (eastern) [66726]	Vulnerable*	Species or species habitat likely to occur within area
Tringa nebularia		
Common Greenshank, Greenshank [832]		Species or species habitat may occur within area
Fish		
Hippocampus abdominalis Big-belly Seahorse, Eastern Potbelly Seahorse, New Zealand Potbelly Seahorse [66233]		Species or species habitat may occur within area
Hippocampus breviceps Short-head Seahorse, Short-snouted Seahorse [66235]		Species or species habitat may occur within area
Histiogamphelus briggsii Crested Pipefish, Briggs' Crested Pipefish, Briggs' Pipefish [66242]		Species or species habitat may occur within area
Maroubra perserrata Sawtooth Pipefish [66252]		Species or species habitat may occur within area
Mitotichthys mollisoni Mollison's Pipefish [66260]		Species or species habitat may occur within area
Mitotichthys semistriatus Halfbanded Pipefish [66261]		Species or species habitat may occur within area
Mitotichthys tuckeri Tucker's Pipefish [66262]		Species or species habitat may occur within area
Phyllopteryx taeniolatus Common Seadragon, Weedy Seadragon [66268]		Species or species habitat may occur within area
Solegnathus spinosissimus Spiny Pipehorse, Australian Spiny Pipehorse [66275]		Species or species habitat may occur within area
Stigmatopora argus Spotted Pipefish, Gulf Pipefish, Peacock Pipefish [66276]		Species or species habitat may occur within area
Stigmatopora nigra Widebody Pipefish, Wide-bodied Pipefish, Black Pipefish [66277]		Species or species habitat may occur within area
Urocampus carinirostris Hairy Pipefish [66282]		Species or species habitat may occur within area
Vanacampus phillipi Port Phillip Pipefish [66284]		Species or species habitat may occur within

		<i>7</i> I
		area
Mammals		
Arctocephalus forsteri		
Long-nosed Fur-seal, New Zealand Fur-seal [20]		Species or species habitat may occur within area
Arctocephalus pusillus		
Australian Fur-seal, Australo-African Fur-seal [21]		Species or species habitat may occur within area
Whales and other Cetaceans		[Resource Information]
Name	Status	Type of Presence
Mammals		31
Balaenoptera acutorostrata		
Minke Whale [33]		Species or species habitat may occur within area
Balaenoptera musculus		
Blue Whale [36]	Endangered	Species or species habitat likely to occur within area
Delphinus delphis Common Dolphin, Short-beaked Common Dolphin [60]		Species or species habitat may occur within area
Eubalaena australis		
Southern Right Whale [40]	Endangered	Breeding likely to occur within area
Grampus griseus Risso's Dolphin, Grampus [64]		Species or species habitat may occur within area
Megaptera novaeangliae		
Humpback Whale [38]	Vulnerable	Species or species habitat likely to occur within area
Tursiops truncatus s. str. Bottlenose Dolphin [68417]		Species or species habitat may occur within area

Threatened

Type of Presence

Extra Information

Name

State and Territory Reserves	[Resource Information]
Name	State
Egg Islands	TAS
Egg Islands Reserve	TAS
Franklin	TAS
Regional Forest Agreements	[Resource Information]
Note that all areas with completed RFAs have been included.	
Name	State
Tasmania RFA	Tasmania
Invasive Species	[Resource Information]
Weeds reported here are the 20 species of national significant	ce (WoNS), along with other introduced plants

Weeds reported here are the 20 species of national significance (WoNS), along with other introduced plants that are considered by the States and Territories to pose a particularly significant threat to biodiversity. The following feral animals are reported: Goat, Red Fox, Cat, Rabbit, Pig, Water Buffalo and Cane Toad. Maps from Landscape Health Project, National Land and Water Resouces Audit, 2001.

Name	Status	Type of Presence
Birds		

Name	Status	Type of Presence
Alauda arvensis Skylark [656]		Species or species habitat likely to occur within area
Anas platyrhynchos Mallard [974]		Species or species habitat likely to occur within area
Carduelis carduelis European Goldfinch [403]		Species or species habitat likely to occur within area
Carduelis chloris European Greenfinch [404]		Species or species habitat likely to occur within area
Columba livia Rock Pigeon, Rock Dove, Domestic Pigeon [803]		Species or species habitat likely to occur within area
Passer domesticus House Sparrow [405]		Species or species habitat likely to occur within area
Streptopelia chinensis Spotted Turtle-Dove [780]		Species or species habitat likely to occur within area
Sturnus vulgaris Common Starling [389]		Species or species habitat likely to occur within area
Turdus merula Common Blackbird, Eurasian Blackbird [596]		Species or species habitat likely to occur within area
Mammals		
Canis lupus familiaris Domestic Dog [82654]		Species or species habitat likely to occur within area
Capra hircus Goat [2]		Species or species habitat likely to occur within area
Felis catus Cat, House Cat, Domestic Cat [19]		Species or species habitat likely to occur within area
Mus musculus House Mouse [120]		Species or species habitat likely to occur within area
Oryctolagus cuniculus Rabbit, European Rabbit [128]		Species or species habitat likely to occur within area
Rattus norvegicus Brown Rat, Norway Rat [83]		Species or species habitat likely to occur within area
Rattus rattus Black Rat, Ship Rat [84]		Species or species habitat likely to occur within area
Vulpes vulpes Red Fox, Fox [18]		Species or species habitat likely to occur within area
Plants		
Asparagus asparagoides Bridal Creeper, Bridal Veil Creeper, Smilax, Florist's Smilax, Smilax Asparagus [22473]		Species or species habitat likely to occur

Name	Status	Type of Presence
		within area
Chrysanthemoides monilifera Bitou Bush, Boneseed [18983]		Species or species habitat likely to occur within area
Chrysanthemoides monilifera subsp. monilifera Boneseed [16905]		Species or species habitat likely to occur within area
Cytisus scoparius Broom, English Broom, Scotch Broom, Common Broom, Scottish Broom, Spanish Broom [5934]		Species or species habitat likely to occur within area
Genista monspessulana Montpellier Broom, Cape Broom, Canary Broom, Common Broom, French Broom, Soft Broom [2012]	6]	Species or species habitat likely to occur within area
Nassella trichotoma Serrated Tussock, Yass River Tussock, Yass Tusso Nassella Tussock (NZ) [18884]	ock,	Species or species habitat likely to occur within area
Rubus fruticosus aggregate Blackberry, European Blackberry [68406]		Species or species habitat likely to occur within area
Salix spp. except S.babylonica, S.x calodendron & Willows except Weeping Willow, Pussy Willow and Sterile Pussy Willow [68497]	S.x reichardtii	Species or species habitat likely to occur within area
Ulex europaeus Gorse, Furze [7693]		Species or species habitat likely to occur within area

Caveat

The information presented in this report has been provided by a range of data sources as acknowledged at the end of the report.

This report is designed to assist in identifying the locations of places which may be relevant in determining obligations under the Environment Protection and Biodiversity Conservation Act 1999. It holds mapped locations of World and National Heritage properties, Wetlands of International and National Importance, Commonwealth and State/Territory reserves, listed threatened, migratory and marine species and listed threatened ecological communities. Mapping of Commonwealth land is not complete at this stage. Maps have been collated from a range of sources at various resolutions.

Not all species listed under the EPBC Act have been mapped (see below) and therefore a report is a general guide only. Where available data supports mapping, the type of presence that can be determined from the data is indicated in general terms. People using this information in making a referral may need to consider the gualifications below and may need to seek and consider other information sources.

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

Threatened, migratory and marine species distributions have been derived through a variety of methods. Where distributions are well known and if time permits, maps are derived using either thematic spatial data (i.e. vegetation, soils, geology, elevation, aspect, terrain, etc) together with point locations and described habitat; or environmental modelling (MAXENT or BIOCLIM habitat modelling) using point locations and environmental data layers.

Where very little information is available for species or large number of maps are required in a short time-frame, maps are derived either from 0.04 or 0.02 decimal degree cells; by an automated process using polygon capture techniques (static two kilometre grid cells, alpha-hull and convex hull); or captured manually or by using topographic features (national park boundaries, islands, etc). In the early stages of the distribution mapping process (1999-early 2000s) distributions were defined by degree blocks, 100K or 250K map sheets to rapidly create distribution maps. More reliable distribution mapping methods are used to update these distributions as time permits.

Only selected species covered by the following provisions of the EPBC Act have been mapped:

- migratory and
- marine

The following species and ecological communities have not been mapped and do not appear in reports produced from this database:

- threatened species listed as extinct or considered as vagrants
- some species and ecological communities that have only recently been listed
- some terrestrial species that overfly the Commonwealth marine area
- migratory species that are very widespread, vagrant, or only occur in small numbers

The following groups have been mapped, but may not cover the complete distribution of the species:

- non-threatened seabirds which have only been mapped for recorded breeding sites
- seals which have only been mapped for breeding sites near the Australian continent

Such breeding sites may be important for the protection of the Commonwealth Marine environment.

Coordinates

-43.126693 147.024496,-43.128212 147.024131,-43.1284 147.025419,-43.132111 147.024496,-43.131767 147.021985,-43.13053 147.022264,-43.129794 147.017093,-43.125816 147.01808,-43.126693 147.024496

Acknowledgements

This database has been compiled from a range of data sources. The department acknowledges the following custodians who have contributed valuable data and advice:

- -Office of Environment and Heritage, New South Wales
- -Department of Environment and Primary Industries, Victoria
- -Department of Primary Industries, Parks, Water and Environment, Tasmania
- -Department of Environment, Water and Natural Resources, South Australia
- -Department of Land and Resource Management, Northern Territory
- -Department of Environmental and Heritage Protection, Queensland
- -Department of Parks and Wildlife, Western Australia
- -Environment and Planning Directorate, ACT
- -Birdlife Australia
- -Australian Bird and Bat Banding Scheme
- -Australian National Wildlife Collection
- -Natural history museums of Australia
- -Museum Victoria
- -Australian Museum
- -South Australian Museum
- -Queensland Museum
- -Online Zoological Collections of Australian Museums
- -Queensland Herbarium
- -National Herbarium of NSW
- -Royal Botanic Gardens and National Herbarium of Victoria
- -Tasmanian Herbarium
- -State Herbarium of South Australia
- -Northern Territory Herbarium
- -Western Australian Herbarium
- -Australian National Herbarium, Canberra
- -University of New England
- -Ocean Biogeographic Information System
- -Australian Government, Department of Defence
- Forestry Corporation, NSW
- -Geoscience Australia
- -CSIRO
- -Australian Tropical Herbarium, Cairns
- -eBird Australia
- -Australian Government Australian Antarctic Data Centre
- -Museum and Art Gallery of the Northern Territory
- -Australian Government National Environmental Science Program
- -Australian Institute of Marine Science
- -Reef Life Survey Australia
- -American Museum of Natural History
- -Queen Victoria Museum and Art Gallery, Inveresk, Tasmania
- -Tasmanian Museum and Art Gallery, Hobart, Tasmania
- -Other groups and individuals

The Department is extremely grateful to the many organisations and individuals who provided expert advice and information on numerous draft distributions.

Please feel free to provide feedback via the Contact Us page.

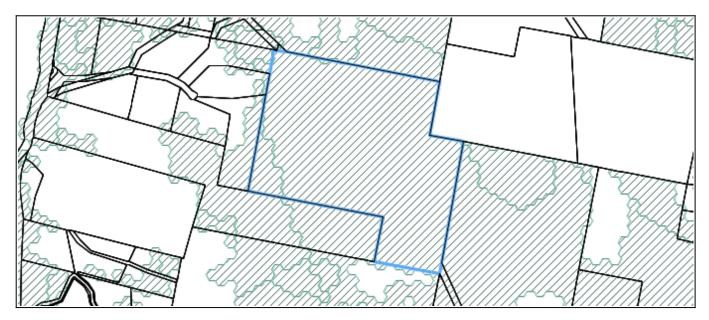


Priority Vegetation Report

PID	СТ	Address	Locality	Improvements	Area (m²)
5857214	209116/1	CYGNET COAST RD	CRADOC		299418

Priority Vegetation Overview

PRIORITY VEGETATION OVERVIEW MAP



This Priority Vegetation Area overlay report shows a subset of the Regional Ecosystem Model. The overlay contained in the planning scheme is shown only over zones to which it can apply.

The Regional Ecosystem Model (REM) is a comprehensive, high resolution spatial analysis that identifies:

- native vegetation and threatened species and their relative conservation status and management priority;
- the characteristics of the landscape that may affect its ability to sustain these elements.

The subsets of information that are included are:

- Threatened native vegetation communities is based on TasVeg 3.0, but has been corrected for inherent logical consistency issues and includes credible field-based mapping where it was available.
- Threatened flora and fauna species locations and habitat are modelled using two methods:
 - Rules applied to Natural Values Atlas (NVA) records that are customised for each species to reflect their patterns of local distribution (e.g. riparian species), based on a limited number of habitat variables; and
 - More detailed habitat models for about 100 threatened fauna species that reflect agreed habitat definitions used by the Forest Practices Authority but utilise a much wider range of data, including landforms and vegetation structural maturity, to more accurately identify habitat and potential habitat.
- Native vegetation of local importance includes:
 - a subset of threatened fauna species habitat models,

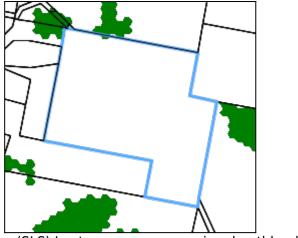
 native vegetation with limited bioregional reservation and extent and native vegetation remnants on heavily cleared types of land where local factors affect ecological sustainability of the landscape.

Each local area contributes to the survival of threatened vegetation communities, threatened flora and threatened fauna within a State wide mosaic that enables the distribution of species to be maintained and provides for mobility of fauna through connected habitat.

Each subset of data that is identified on the property is described below.

Priority Vegetation Details

Relative Rarity



• (SLS) Leptospermum scoparium heathland and scrub

Relative rarity, or extent, is scaled to reflect increased importance for vegetation types which are more restricted, and less importance for those which are relatively extensive. The threshold of 2,000 ha is used by the Forest Practices Authority.

Why is it included?

• Less than 2000 hectares of the community in the bioregion

Data Source:

• TasVeg 3.0 (minor exceptions)

Reliability:

• Highly variable

Management:

- Check TasVeg for field verification
- Consider local extent, condition & management options
- Potentially require on-ground field verification

Threatened Fauna and Significant Habitat



Threatened Fauna Habitat
• eastern barred bandicoot

tasmanian devil

These are species listed as threatened fauna under the Tasmanian Threatened Species Protection Act (1975) or Commonwealth Environment Protection and Biodiversity Conservation Act (1999). Listed threatened species have statutory recognition that they are likely to become extinct if the factors causing them to be threatened are not managed. Species may be listed due to historical loss since settlement, natural rarity giving rise to potential risk, or impacts of particular land use and land management practices.

Threatened fauna habitat characteristics are extremely varied and are modelled as significant based on Natural Values Atlas records with a limited number of habitat variables or more detailed customised models for about 100 fauna species. Some species habitat occurs across the landscape but not all sites may be essential for species survival and not all suitable habitat may be occupied. Species that rely on this type of habitat are classified as landscape-dependent and are regarded as being of local importance, however the relative importance of the site to the survival of the species can only be known in response to field verification, the context and the nature of a proposal.

Why is it included?

• Statutory recognition that species extinction is likely, however not all sites are important or occupied

Data Source:

- NVA records combined with REM point-based modelling rules
- · Habitat-based models

Reliability:

Variable

Management:

- Check species observation source
- · Check data on habitat and local context
- Potentially require on-ground field verification

Contacts

Telephone: 03 6264 0300

Email: HVC@huonvalley.tas.gov.au

