

Matthew Brereton and Tracey Marriott
306 Silver Hill Road
Cygnet TAS 7112
Phone: 0417 5761 119 or 0437 237 557

General Manager
Huron Valley Council
PO Box 210
Huronville TAS 7109

Dear General Manager

RE: Representation regarding the Draft Huon Valley Local Provisions Schedule relating to the rezoning of my property at 359 Silver Hill Road PID 2590462 Title Reference 139542/7. (noting the property address is now 306 Silver Hill Road, Cygnet Tas 7112)

The current zone on the property under the Interim Planning Scheme is Rural Resource. The proposed zone under the Tasmanian Planning Scheme is Landscape Conservation.

I believe our property is being re-zoned incorrectly and would like you to reconsider the zoning based on the attached documents to the email sent with this letter and the below information:

Based on the description of this Zone in Section 8A Guidelines No 1 Local Provisions Schedule (LPS): zone and code application, I disagree with the rezoning of our property to Landscape Conservation.

I do not believe our property meets the guidelines of this zone, supported by the report attached, this report was part of our Approved planning and building application on this property by the Huon Valley Council which allows us to build a residential dwelling and shed. The report supports the fact that our property does not fit under the Landscape Conservation Zone application guidelines and therefore is not the correct zoning for our property.

I would also like to point out that the Zone application guidelines at LCZ4 state that Landscape Conservation should not be applied to:

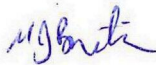
- (a) Land where the priority is for **residential use** and development (see Rural Living Zone)
 - **Noting we have Approved planning and building approval for Residential dwelling from the Huon Valley Council on this property.**

I would like consideration given that our property be rezoned from Rural Resource to either Rural or Rural Living Zone, allowing us going forward to be able to use the property for Residential Dwelling and rural purposes, also noting that other properties under CT 139542 have been advised that these will be rezoned Rural.

This property has been cleared to allow for the approved build of residence and shed and we would also want to be able to use the property for a small hobby farm. Rezoning to Landscape Conservation we believe would devalue our property also and could affect any future use of our land.

For any further liaising on this matter Tracey Marriott, my partner will represent me. Our email address is matt@breretonbuilders.com.au and our contact details are provided at the top of this letter.

Regards



Matthew Brereton
Land Owner

27 May 2022



28 Suncrest Avenue
Lenah Valley, TAS 7008
mark@ecotas.com.au
www.ecotas.com.au
(03) 62 283 220
0407 008 685
ABN 83 464 107 291

Matthew Brereton & Tracey Marriott
350 Silver Hill Road
Cygnet TAS 7112

2 April 2019

Dear Matthew & Tracey

**RE: 359 Silver Hill Road (PID 2590462; C.T. 139542/7), Cygnet
Planning advice (ecological values)
Dwelling and associated access and bushfire hazard management plan
(DA-303/2018)**

Please find following a statement of findings on ecological values associated with your title at 359 Silver Hill Road (PID 2590462; C.T. 139542/7), Cygnet, Tasmania.

I recommend that this cover letter and attached report (including the appended *Natural Values Atlas*, *Biodiversity Values Database* and *Protected Matters Search Tool* reports) be provided with any planning applications, as it addresses the potential concerns in regard to ecological values usually raised at the local government level of assessment.

Note that this letter and attached reports do not constitute legal advice. It is recommended that formal advice be sought from the relevant agency prior to acting on any aspect of this report.

Please do not hesitate to contact me further if additional information is required.

Kind regards

Mark Wapstra
Senior Scientist/Manager

Mark Wapstra
28 Suncrest Avenue
Lenah Valley, TAS 7008

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**ECOLOGICAL ASSESSMENT OF PROPOSED DWELLING AND
ASSOCIATED ACCESS AND BUSHFIRE HAZARD MANAGEMENT
ZONE AT 359 SILVER HILL ROAD (PID 2590462;
C.T. 139542/7), CYGNET, TASMANIA (DA-303/2018)**



**Environmental Consulting Options Tasmania (ECOtas) for
Matthew Brereton & Tracey Marriott
2 April 2019**

Mark Wapstra
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ECOLOGICAL ASSESSMENT OF PROPOSED DWELLING AND ASSOCIATED ACCESS AND BUSHFIRE HAZARD MANAGEMENT ZONE AT 359 SILVER HILL ROAD (PID 2590462; C.T. 139542/7), CYGNET, TASMANIA

SUPPORT DOCUMENTATION FOR DEVELOPMENT APPLICATION DA-303/2018 UNDER HUON VALLEY INTERIM PLANNING SCHEME 2015

Prepared by Mark Wapstra for Matthew Brereton & Tracey Marriott, 2 April 2019

INTRODUCTION

Preamble

Matthew Brereton & Tracey Marriott (applicants and owners-in-part) engaged Environmental Consulting Options Tasmania (ECOtas) to provide planning advice in relation to the management of ecological (flora and fauna) values associated with a private title at 359 Silver Hill Road (PID 2590462; C.T. 139542/7), Cygnet, Tasmania (Figures 1-4), subject to DA-303/2018 under the *Huon Valley Interim Planning Scheme 2015*.

The assessment and report have been undertaken and prepared in accordance with the Department of Primary Industries, Parks, Water & Environment's *Guidelines for Natural Values Surveys - Terrestrial Development Proposals* (DPIPWE 2015), a document that outlines the various ecological values that need to be assessed for most types of land use proposals. The present report and associated "compliance statement" address the provisions of the Rural Resource zone of the *Huon Valley Interim Planning Scheme 2015* related to "native vegetation" and "environmental impact" and the intent and specifics of the Biodiversity Code of the *Scheme*. In addition, I am in receipt of the formal Request for Further Information (RFI) from Huon Valley Council dated 28 February 2019, and I address several of the matters raised in that document.

Land use proposal and description of title

For the purposes of assessment, the ecological values of the whole title were assessed. This included the existing paddock in the north of the title, the native forest areas in the southern c. ¾ of the title, now including an area of more recently cleared native vegetation.

Under the *Huon Valley Interim Planning Scheme 2015*, the title is zoned as Rural Resource and not subject to the Biodiversity Protection Area overlay (other overlays are not covered by the present report).

The title is bounded to the southwest by Silver Hill Road and on all other sides by private property. The boundary with the title to the north is fenced, as is some of the boundary along Silver Hill Road (through the forested section the fence is in disrepair but posts and wires are still locatable). The boundary with the forested title to the east is marked by new stakes that represent the historical cadastral markers. It is understood that the boundary line for c. 6-7 m width has been long-maintained as an open area devoid of canopy trees and tall shrubs on the flatter terrain (i.e. not along the steeper slope down to Silver Hill Road).

The topography of the title is mainly a gentle saddle between hills, with the existing pasture area on the saddle and the forested area on gentle northwest-facing slopes (northern half of title) and steeper west- to southwest-facing slopes (above Silver Hill Road).

Elevation of the title varies from c. 245 m a.s.l. (northeast corner of title) to c. 210 m a.s.l. (southern end of title near Silver Hill Road).

The title does not include any defined drainage features. A dam is present on the title to the north and there existing pasture area on the subject title is in a saddle with three poorly-defined drainage "dips", noticeable because of the slightly poorer drainage in the pasture, as well as small patches of *Juncus pallidus* (pale rush).



The title supports both native vegetation (eucalypt forest) and existing pasture. Examination of various aerial images and on-ground observations indicate that the pasture area was created a long time ago but remains actively used for small-scale primary production (e.g. large hay bales – see Plate 1).



Plate 1. Existing pasture on the northern end of the title, showing active primary production activities (hay baling)

Evidence from burnt out tree bases and other fire scarring combined with the predominantly regrowth nature of the forest, suggests a significant fire event c. 50+ years ago. Interestingly, TheList’s Fire History layer shows that the 1967 wildfire missed the title but this does not accord with the observed structure of the vegetation. TheList’s Fire History layer does not indicate any recent fire events, which also does not accord with my site assessment, which suggested at least one more recent event (see Plates 2 & 3). The predominantly regrowth structure of the forest probably also reflects historical clearing (M. Brereton pers. comm. – mother’s memory from youth of walking through “paddocks” across the hill).



Plate 2. (LHS) Evidence of at least two fire events – the deeper scar (red arrow) is indicative of a major fire c. 50 years ago, while the shallow surface bark-level scorching on smaller stems (blue arrows) is indicative of a much more recent fire event

Plate 3. (RHS). Massive fire scar in stag of *Eucalyptus obliqua*, strongly indicative of a severe fire c. 50 years ago



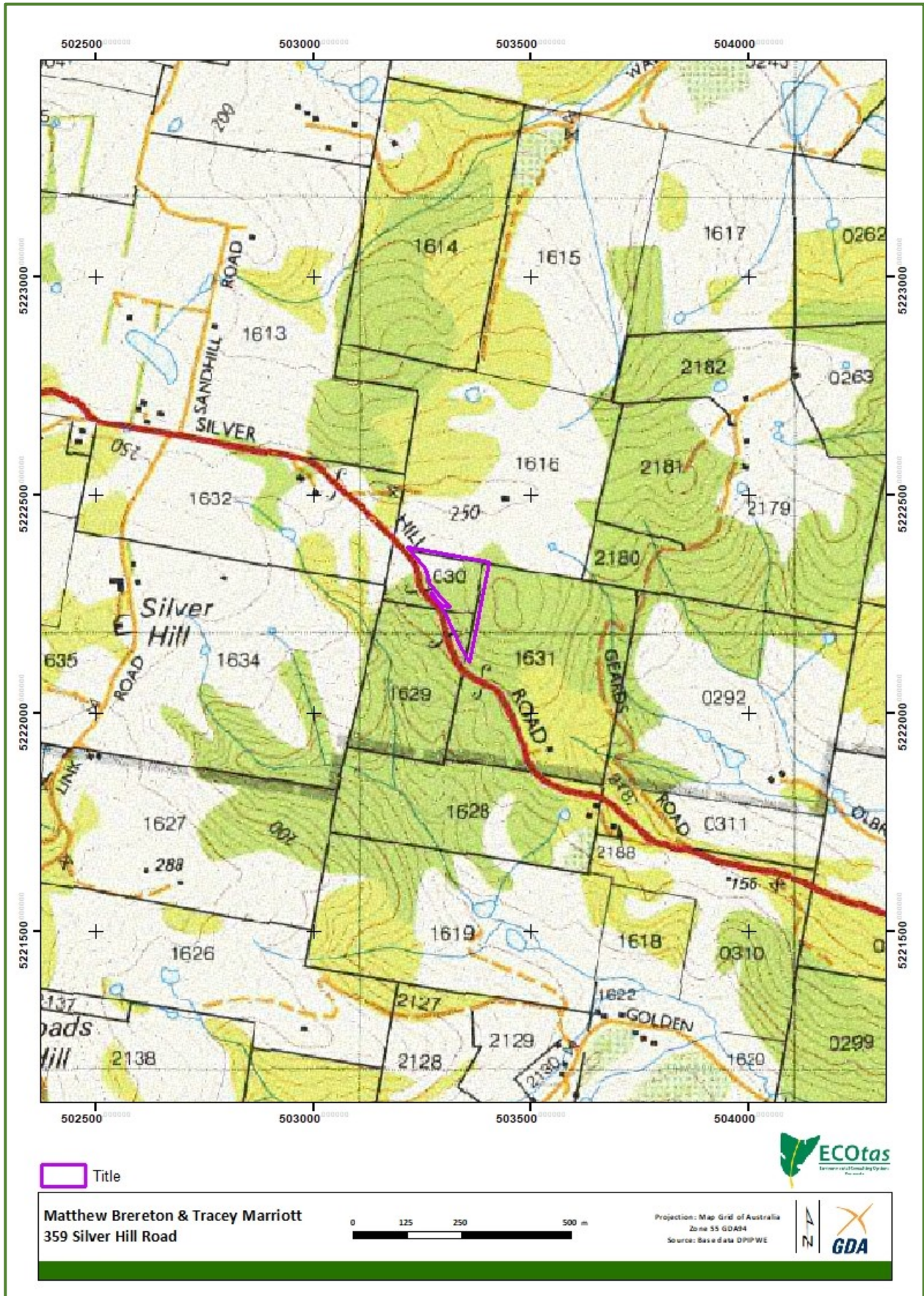


Figure 1. General location of the subject title





Figure 2. Detailed location of the subject title (topographic and cadastral)



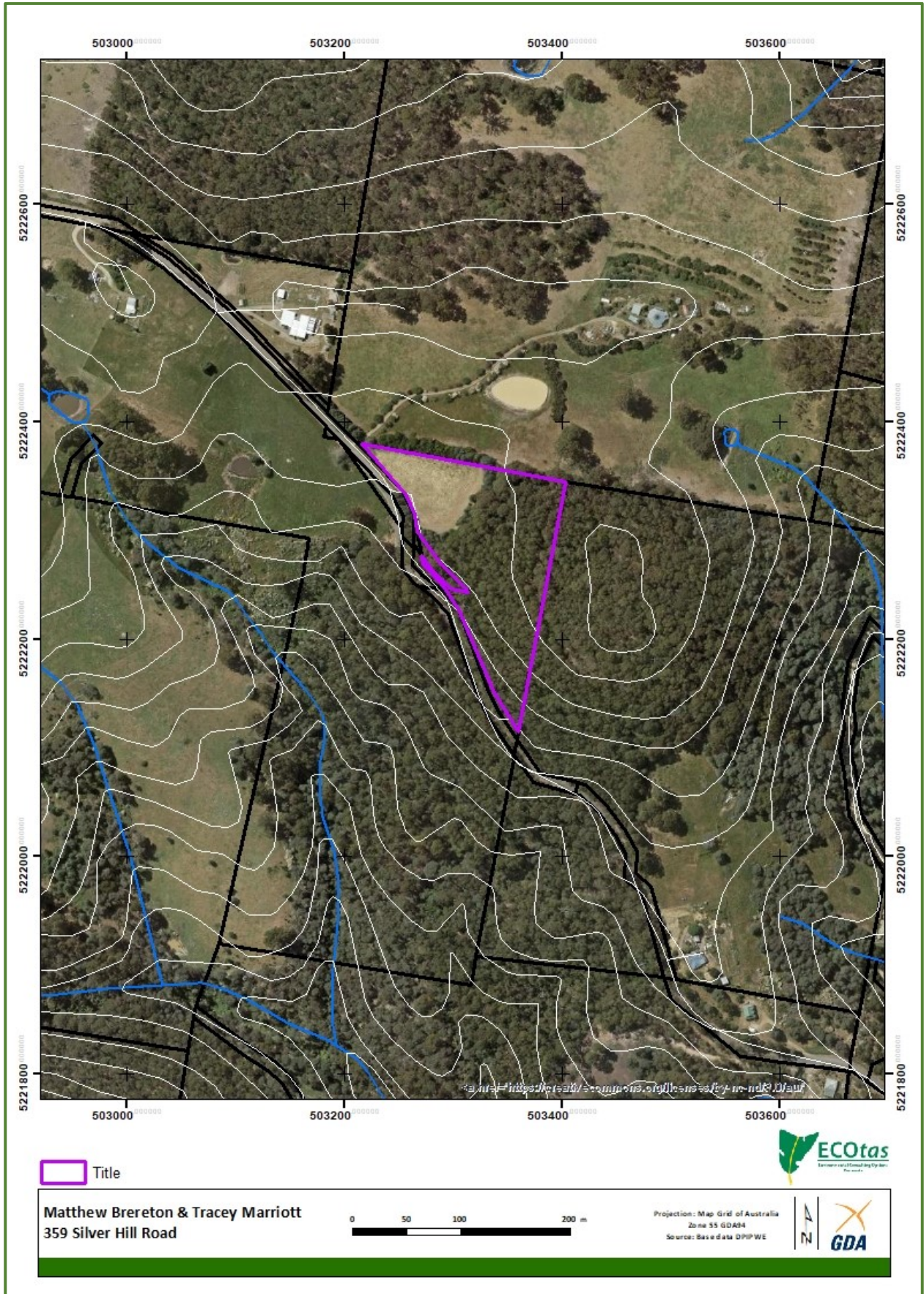


Figure 3. Detailed location of the subject title (aerial photography as per TheList)



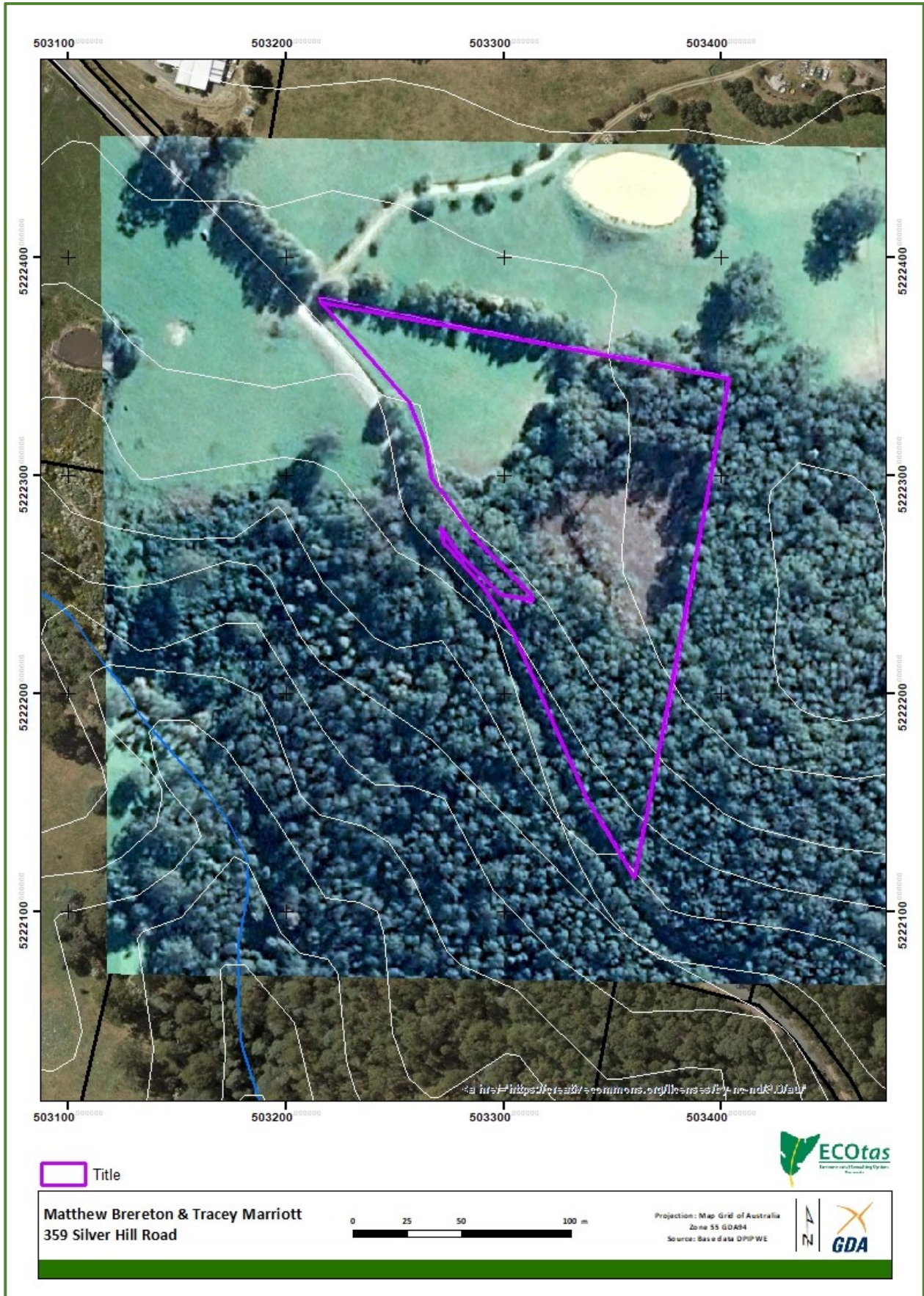


Figure 4. Detailed location of the subject title (aerial photography as per GoogleEarth Pro)



The geology of the title (Figure 5) is mapped as:

- Permian-age Lower Parmeener Supergroup “lower glaciomarine sequences of mudstone, pebbly mudstone, pebbly sandstone, minor limestone and Tasmanite oil shale” (geocode: Pl): approximate southern half of the title, essentially reflecting the current forest extent; and
- Quaternary-age (Cainozoic) “talus, vegetated and active” (geocode: Qpt): approximately northern half of the title, noting that the existing pasture is wholly on this substrate (presumably reflecting its often greater fertility than mudstone-derived soils).

The geological mapping was confirmed informally by site by examination of the clay-loam soils and occasional minor outcrops of fine-grained sedimentary rocks in the forested areas and by reference to the roadside cutting along Silver Hill Road.

The geology is mentioned because it has a strong influence on the classification of vegetation and the potential occurrence of threatened flora (and to a lesser extent, threatened fauna). It also influences the structure of the forest, especially with respect to the stature of the regrowth canopy post-disturbance events. In this case, the relatively nutrient-poor soils derived from Permian sediments has obviously stunted the growth of trees, which if developed on fertile soils (e.g. as derived from Jurassic dolerite or Tertiary basalt) would probably have been at least 10-15 m taller and at least 20-30 cm wider.

METHODS

Database checks

TheList was examined to determine existing vegetation mapping and known sites for threatened flora and fauna. Database reports were produced under DPIPWE’s *Natural Values Atlas* (DPIPWE 2019), the Forest Practices Authority’s *Biodiversity Values Database* (FPA 2019) and the Commonwealth Department of the Environment & Energy’s *Protected Matters Search Tool* (CofA 2019) to support the assessment process (all appended for reference).

Field assessment

The subject area was assessed on 30 March 2018 by Mark Wapstra in the company of Matthew Brereton (owner). The assessment included the entire title, which was easily accessed from Silver Hill Road across the existing pasture and from the road itself. The boundaries were all walked (by reference to the title boundary on a hand-held device running iGIS), as well as meandering transects throughout the balance of the forested area.

The assessment also included a consideration of the recently cleared area, with the objective of “reconstructing” the pre-disturbance classification, structure and composition of the forest. This was undertaken primarily by examining the boundaries of the cleared area, recording any adventive plant species within the cleared area and assessing the piles of felled trees (classified by reference to bark characteristics).

Vegetation types were classified according to TASVEG mapping units as described in *From Forest to Fjaeldmark: Descriptions of Tasmania’s Vegetation* (Kitchener & Harris 2013+) with specific reference to the structure and composition of the vegetation. Hand-held GPS (Garmin Oregon 600) was used to waypoint vegetation transitions and mark the assessment route for later cross-reference to aerial photography. For the purposes of later vegetation mapping, GoogleEarth Pro provided the most recent and clearest image of the vegetation and extent of previous clearing, with TheList’s orthoimage (and also the ESRI image on TheList) being more out-of-date.

Surveys for threatened fauna were practically limited to an examination of “potential habitat” (i.e. comparison of on-site habitat features to habitat descriptions for threatened fauna), and



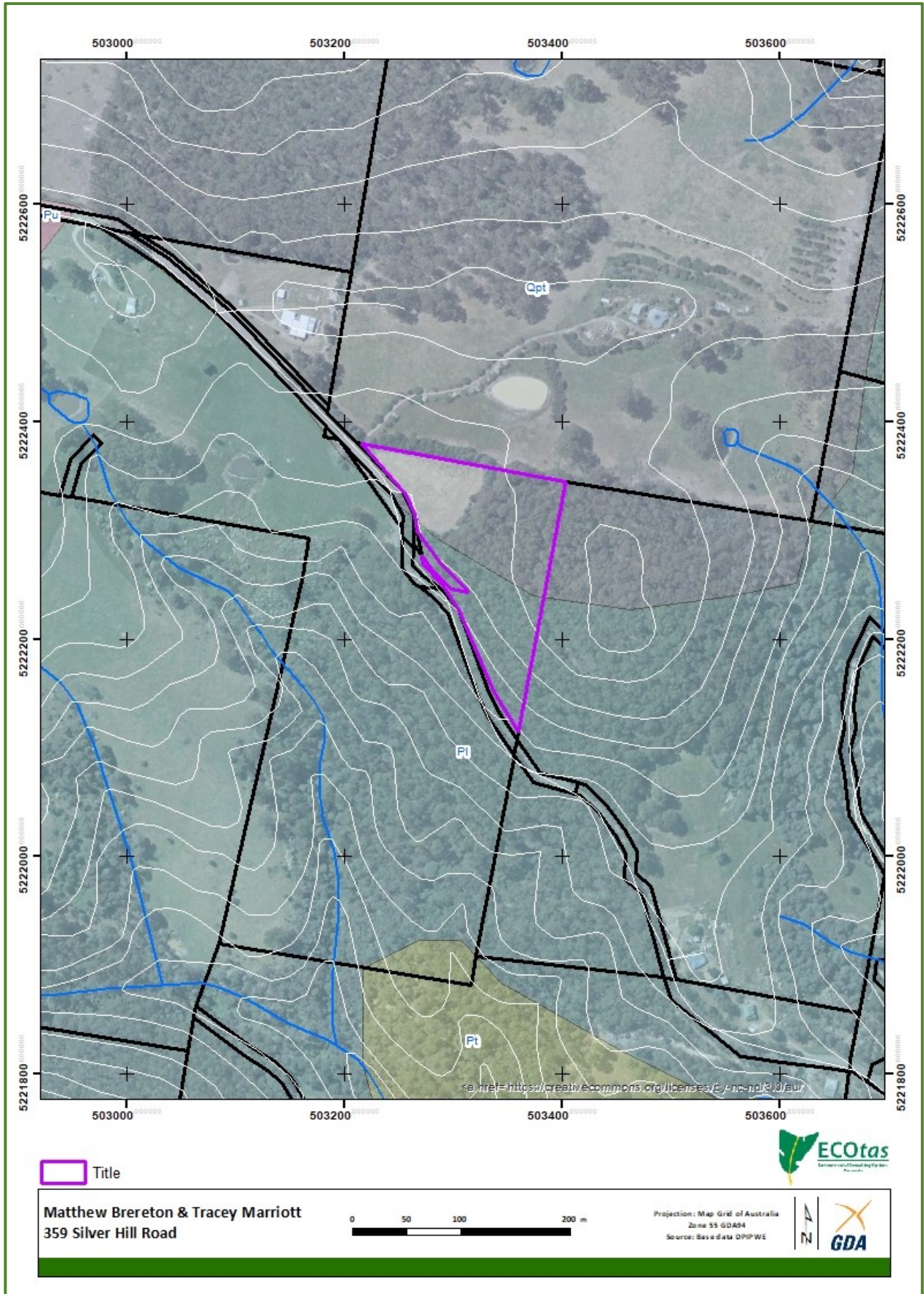


Figure 5. Geology of the subject title and surrounds (refer to text for codes)



detection of tracks, scats and other signs. hand-held GPS (Garmin Oregon 600) was used to waypoint hollow-bearing trees and individuals of *Eucalyptus globulus* (refer to **FINDINGS Individual trees** for significance of these in relation to vegetation classification and potential habitat of threatened fauna).

No threatened flora was recorded, so further methods are not described.

For the record, the site 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). However, such species were not detected so further methods are not described.

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

Existing vegetation mapping

This section, which comments on the existing TASVEG 3.0 and TASVEG Live 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 pre-assessment exercise to gain an understanding of the range of habitat types likely to be present and the level of previous botanical surveys.

TASVEG 3.0 and TASVEG Live (identical in relation to the title) map the following vegetation types across the title (Figure 6):

- *Eucalyptus obliqua* dry forest (TASVEG code: DOB): most of the forested part of the title;
- *Eucalyptus globulus* dry forest and woodland (TASVEG code: DGL); band of forest between the DGL and FAG (see below); and
- agricultural land (TASVEG code: FAG): existing pasture in northern part of title.

It is not unusual for TASVEG to be inaccurate at a lot-level scale (such as the present project's extent) but in this case, it is also seemingly erroneous across much of the wider area such that little reliance can be placed on it. In particular, the band of DGL cuts across both forest and obvious pasture, as well as extending to the west across Silver Hill Road and further into pasture on that side of the road. The extent of FAG does not match the extent of the older clearing, missing approximately a third of the area of obvious open pasture. Disappointingly the polygons of DGL and DOB that occur on the title are shown on TASVEG 3.0/Live as from the "HUON_VALLEY-HVC-2009) project and apparently field-checked on 01/09/2009. This is assumed to be in error because even a roadside field-check would have confirmed the forest on the title as most likely supporting *Eucalyptus obliqua* forest with broad-leaf shrubs (TASVEG code: WOB), possibly mappable as DOB (see next section), but certainly no forest classifiable as DGL. The apparent reliance on TASVEG mapping in correspondence from Huon Valley Council does not reflect the manner in which TASVEG is intended to be used i.e. as a guideline only, alerting land owners and managers to the possible presence of particular vegetation types but always requiring ground-truthing, the latter classification to be used for land management decision-making. That is, the fact that TASVEG may mis-map some patches of native vegetation (in this case, DGL instead of DOB or WOB and not enough FAG) is of little consequence if the ground-truthed classification is then relied on.



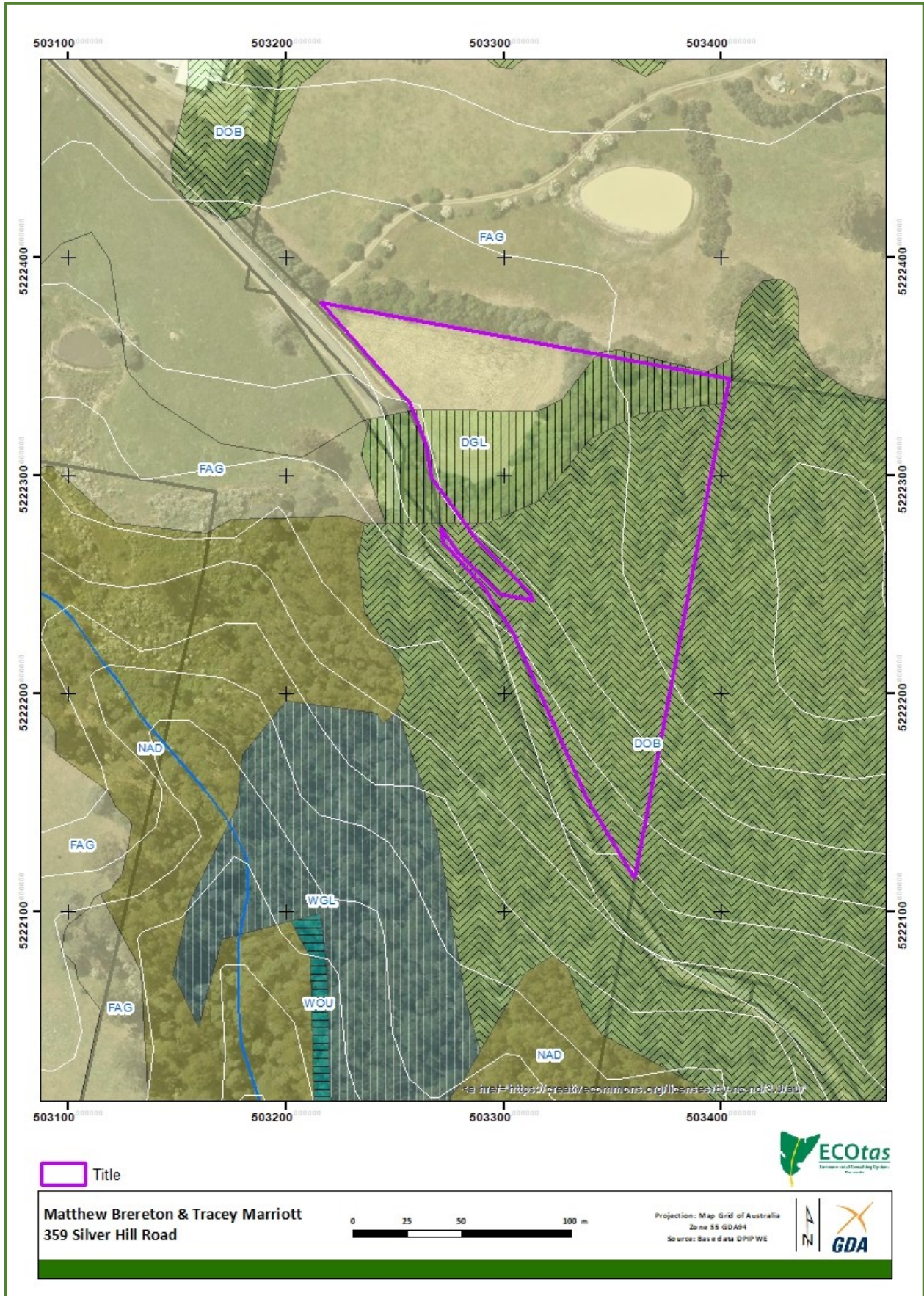


Figure 6. Existing TASVEG 3.0 vegetation mapping for the subject title and surrounds (refer to text for codes)



Revised vegetation mapping

I am presenting two maps of the revised vegetation of the subject title. The first is the current vegetation that takes account of the recent clearing (Figure 7), the second is the re-constructed vegetation assuming no clearing, except for the existing pasture (Figure 8). In both versions, there is definitely no *Eucalyptus globulus* dry forest and woodland (TASVEG code: DGL), with no notion that this vegetation type ever occurred on the title.

Site assessment indicated that the title can be mapped as (Figures 7 & 8, Plates 1-8):

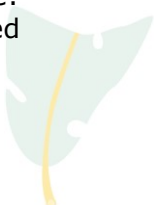
- agricultural land (TASVEG code: FAG): same area in both versions of my revised vegetation mapping but reasonably different to existing TASVEG mapping;
- *Eucalyptus obliqua* forest with broad-leaf shrubs (TASVEG code: WOB): re-coding of forest areas mapped on TASVEG as DGL and DOB (see discussion below on the allocation to WOB rather than DOB) – area differs according to the map version with the recent clearing having occurred in this vegetation type; and
- extra-urban miscellaneous (TASVEG code: FUM): area of recent clearing (see discussion below on classification of this area).

The area now mapped as FAG is very clear on both aerial imagery and on the ground, defined by fenced boundaries on the northern and southwestern boundaries, and a well-defined transition between open grass (paddock) and forest to the southwest (Plates 4 & 5). This area has been long-used for small-scale primary production with GoogleEarth’s historical imagery clearly indicating no material change in the extent of the area of pasture and obvious land management including machinery slashing and hay production. The most notable difference is that between 2009 and 2012, a line of trees had been planted on the adjacent property to the north.



Plates 4 & 5. Views of the area mapped as FAG from south to north (Plate 4) and north to south (Plate 5), showing well-defined boundaries and active primary production

The area of recent clearing in the forested southern part of the title is more complex to classify. It is effectively devoid of native plants, bar a few adventive individuals of a low diversity of species (e.g. *Solanum laciniatum*, *Pteridium esculentum*, *Gonocarpus teucroides*, *Olearia ramulosa*, *Microlaena stipoides*, *Goodenia ovata*). Under the TASVEG mapping unit options, it is clearly one of the “modified land” units (Kitchener & Harris 2013+). At present, it is not agricultural land (TASVEG code: FAG), although could easily be shifted to this (albeit acknowledging the excavation). The extensive bare ground and highly limited and localised recovery of vegetation precludes allocation to regenerating cleared land (TASVEG code: FRG), although if left to recover naturally the site would certainly pass through FRG, or perhaps *Pteridium esculentum* fernland (TASVEG code: FPF), on the way to forest regeneration. At present, it could be argued that the site meets the loose intent of urban areas (TASVEG code: FUR) and this may best acknowledge the now proposed land use – certainly once a house, shed



and associated gardens are established, the clearing would be best mapped as FUR. However, at present and acknowledging that the initial land use proposal was some clearing to create some further primary production land but that subsequent to this the site has been chosen for a single residential dwelling (and associated elements) and this has included some excavation, I am allocating the recently cleared area to extra-urban miscellaneous (TASVEG code: FUM). This is not the "best fit" by any means but perhaps the closest available unit. Refer to Plates 6-9 for more details.



Plates 6-9. Views of the area presently allocated to FUM – note the extensive areas of bare ground and highly limited and localised cover of native (or indeed exotic) plants

The balance of the title supports forest dominated by *Eucalyptus obliqua* (stringybark). Note that some of the individuals of *Eucalyptus obliqua* have gum (smooth) bark on the upper trunk and larger branches, which is usually indicative of *Eucalyptus delegatensis*. However, I examined several juveniles and all were definitely *Eucalyptus obliqua*. There is a form of *Eucalyptus obliqua* that demonstrates this gum-topped feature, which occurs on the Tasman Peninsula, South Bruny and parts of the wider "Southern Forests". The I could only find three individuals of other eucalypt species, which were all *Eucalyptus globulus* (blue gum), which have been mapped (see **FINDINGS Individual trees**). structure of the forest is maturing regrowth (c. 25-30 m tall, c. 40% cover) with only scattered older-growth trees (c. 35-50 m tall, <5% cover) emergent over this layer. As discussed previously, my feeling is that the structure represents a combination of at least one major fire event combined with at least some historical clearing. The understorey is a 4-9 m tall with 30-50% cover layer of shrubs (*Acacia dealbata*, *Nematolepis squamea*, *Acacia leprosa* var. *graveolens*, *Monotoca glauca*, *Pittosporum bicolor*, *Exocarpos cupressiformis*). There is a lower and sparser (<2 m tall, <10% cover) layer of shrubs (*Goodenia ovata*, *Pultenaea daphnoides*, *Coprosma quadrifida*, *Zieria arborescens*). Herbs (*Gonocarpus teucroides*, *Senecio biserratus*) and grasses (*Microlaena stipoides*, *Deyeuxia quadriseta*) are virtually absent and restricted to old tracks and natural canopy gaps. Ferns only include *Pteridium esculentum*, which is variably dense (rarely exceeding 20% cover). Graminoids only



include *Dianella tasmanica*, which is localised (less than 5% cover across the site). Climbers are absent.

This site is presently mapped as *Eucalyptus obliqua* dry forest (TASVEG code: DOB) but is structurally and compositionally much closer to *Eucalyptus obliqua* with broad-leaf shrubs (TASVEG code: WOB). Disturbance history has shifted the composition to a slightly drier facies of typical wet sclerophyll forest but the even-aged regrowth structure with a dense secondary canopy of mainly broad-leaved shrubs is typical for wet sclerophyll forest.

Refer to Plates 10 & 11 for examples of the structure and composition of WOB but also refer to Plates 6-9 that show the fringes of WOB around the recently cleared area.



Plates 10 & 11. Structure and composition of WOB outside the recently cleared area – the image on the left (Plate 10) is along the eastern boundary and shows the new stakes placed in the southern end of the original “fenceline” clearing

I have no doubt that the area of recent clearing supported identical vegetation to that described above i.e. WOB. I make this statement based on the relatively small size of the new canopy gap, meaning it is difficult to envisage a highly localised area of a different vegetation type that may have once occupied this site, especially in the context of wet sclerophyll forest, which tend to be homogenous for quite large areas. In addition, there is strong evidence that the felled trees were all *Eucalyptus obliqua* (rough, fibrous, stringy bark on all trunks – no smooth-barked trunks amongst the piles of logs, refer Plates 12 & 13).



Plate 12. (LHS) Pile of logs in southwestern part of recent clearing – all are very clearly *Eucalyptus obliqua*

Plate 13. (RHS) Pile of logs in northeastern part of recent clearing – all are very clearly *Eucalyptus obliqua*



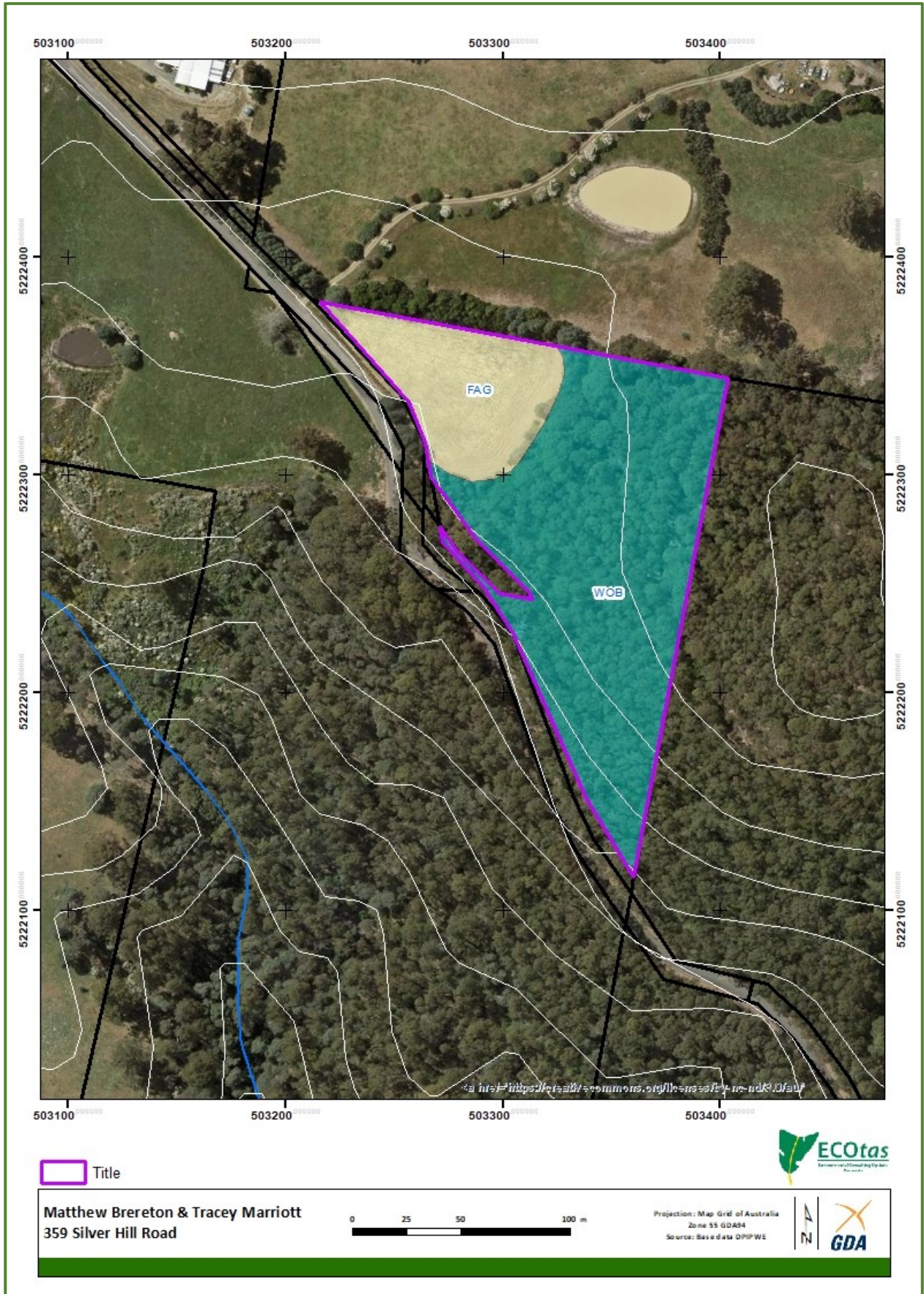


Figure 7. Revised vegetation mapping for the subject title (refer to text for codes) – prior to recent clearing



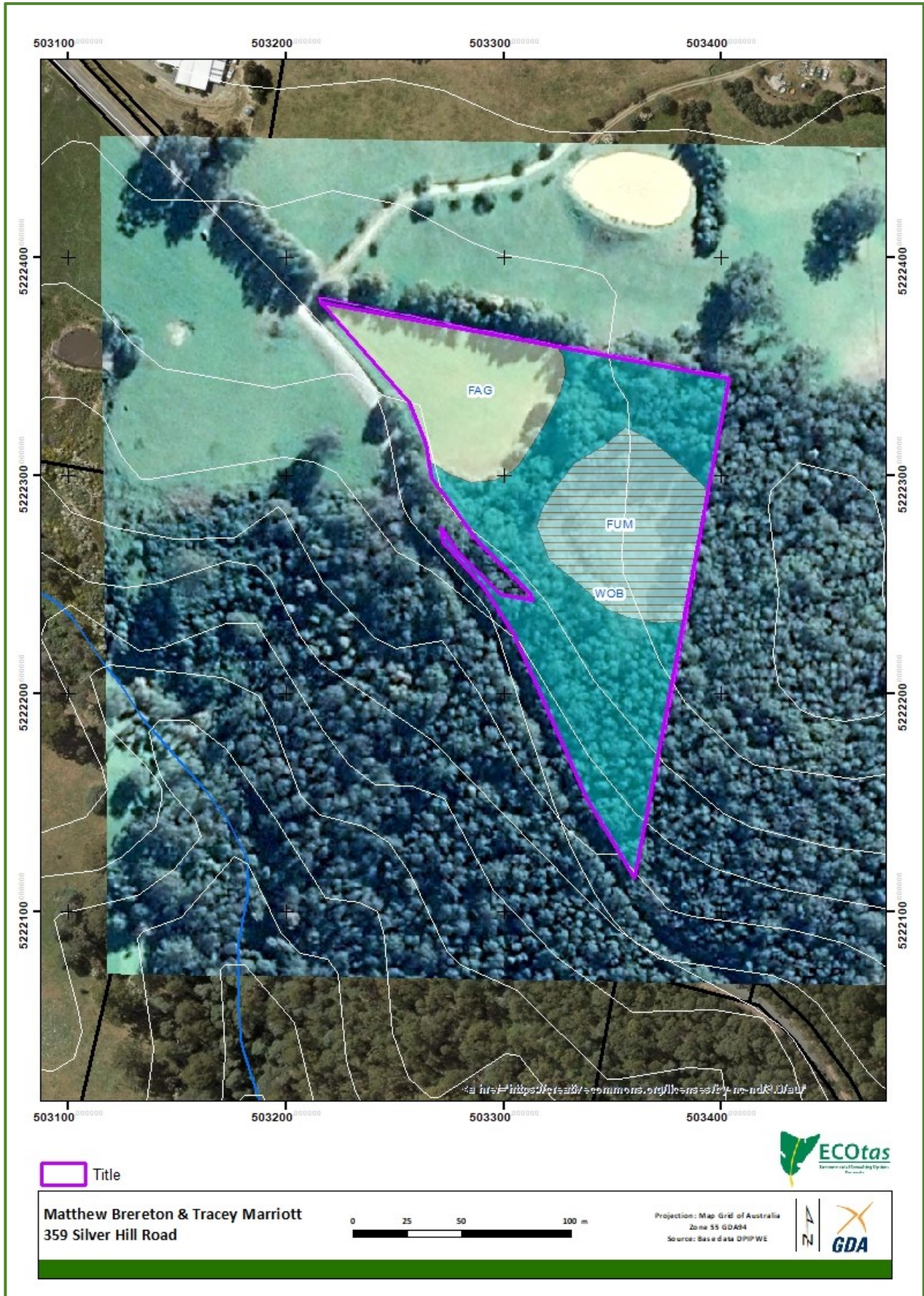


Figure 8. Revised vegetation mapping for the subject title (refer to text for codes) – after recent clearing



WOB does not equate to a threatened ecological community under the Commonwealth *Environment Protection and Biodiversity Protection Act 1999*. It is not listed as threatened under Schedule 3A of the Tasmanian *Nature Conservation Act 2002*. It equates to a low priority biodiversity value (as a vegetation type) within the meaning of the Biodiversity Code of the *Huon Valley Interim Planning Scheme 2015*.

It is noted that correspondence from Huon Valley Council dated 28 Feb. 2019 states that “the property comprises a paddock and natural vegetation at a ratio of 1:4” and that TasVeg Live indicates that the natural vegetation is *Eucalyptus obliqua* dry forest grading into a strip of threatened *Eucalyptus globulus* (*E. globulus*) dry forest and woodland which ends at the start of the paddock”. I further note that this correspondence clearly indicates that a site assessment on 25 Feb. 2019 and that this includes an “inspection to assess the level of clearing and potential impact of the works upon the natural state of the vegetation for fauna habitat”. Logically, to be able to make any such conclusions, the vegetation must have been classified as to type but I note no mention that the site does not support DGL and that the DOB is better mapped as WOB, both of which are self-evident. Indeed, the correspondence further mentions that “*E. globulus* is critical foraging habitat for Critically Endangered Swift Parrots”, that “the current building site will require clearing of native vegetation, including mapped threatened *E. globulus* and therefore does not meet Acceptable Solution A1” and “in the absence of further substantive information, Council requires the proposed building site to be located in an area which precludes the need for vegetation clearing, thereby meeting the acceptable solution for the Rural Resource Zone, retaining threatened vegetation which is critical foraging habitat for Critically Endangered swift parrots...”. These statements imply that the Council assessment concluded that DGL is present. It is reiterated that any land management must rely on ground-truthed vegetation mapping and not on existing TASVEG 3.0/Live mapping. Refer to the “compliance statement” that further addresses the specific provisions of the Rural Resource Zone.

Threatened flora

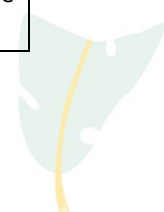
Database information indicates that the subject title does not support known populations of flora listed as threatened on either the Tasmanian *Threatened Species Protection Act 1995* or the Commonwealth *Environment Protection and Biodiversity Protection Act 1999*. Field assessment did not detect any threatened flora species from the subject title.

The *Natural Values Atlas* report indicates few records of threatened flora within 5,000 m of the subject title (see appended report). These are listed below with a brief commentary on the likelihood of the site supporting the species, and the potential impacts of the development on these species (Table 1).

Table 1. Threatened flora reported from within 5,000 m of the subject title

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 2019) and other sources where indicated. Habitat descriptions are taken from TSS (2003+) and FPA (2016), except where otherwise indicated. Species marked with # are listed in CofA (2019).

Scientific name Common name	Status TSPA EPBCA	Tasmanian habitat description (and distribution)	Comments on project area and database records
<i>Caladenia caudata</i> tailed spider-orchid	v VU # only	<i>Caladenia caudata</i> has highly variable habitat, which includes the central north: <i>Eucalyptus obliqua</i> heathy forest on low undulating hills; the northeast: <i>E. globulus</i> grassy/heathy coastal forest, <i>E. amygdalina</i> heathy woodland and forest, <i>Allocasuarina</i> woodland; and the southeast: <i>E. amygdalina</i> forest and woodland on sandstone, coastal	Potential habitat absent (atypical of all known sites). The survey was conducted outside the flowering period (for southern Tasmania) of the species (Wapstra 2018) but a further timed targeted survey is not considered warranted based on the lack of potential habitat.



359 Silver Hill Road, Cygnet: Ecological Assessment

Scientific name Common name	Status TSPA EPBCA	Tasmanian habitat description (and distribution)	Comments on project area and database records
		<i>E. viminalis</i> 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. A high degree of insolation is typical of many sites.	
<i>Dianella amoena</i> grassland flaxlily	r EN # only	<i>Dianella amoena</i> occurs mainly in the northern and southern Midlands, where it grows in native grasslands and grassy woodlands.	Potential habitat absent (not native grassland or grassy woodland).
<i>Epacris exserta</i> south esk heath	e EN # only	<i>Epacris exserta</i> 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 (2019) is entirely erroneous as the species does not occur in southern Tasmania.
<i>Epacris virgata</i> Kettering pretty heath	v EN # only	<i>Epacris virgata</i> (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 <i>Eucalyptus ovata</i> woodland/forest, but is also occasionally found in grassy/heathy <i>E. pulchella</i> woodland/forest.	Potential habitat absent (site is on mudstone not dolerite). The listing in CofA (2019) is indicated as <i>Epacris virgata</i> , presumably referring only to the northern Tasmanian entity recognised as <i>Epacris virgata</i> Beaconsfield as CofA (2019) refers to a common name of "Dan Hill heath". The habitat description used in this table, however, is for <i>Epacris virgata</i> Kettering, which is restricted to southeastern Tasmania.
<i>Juncus amabilis</i> gentle rush	r -	<i>Juncus amabilis</i> occurs in a variety of habitats, usually poorly-drained sites such as damp grasslands and grassy woodlands, wet pastures, roadside ditches and edges of still and slow-flowing waterbodies. As presently understood, the species is mainly confined to lowland areas in the eastern half of the State but there are potential higher elevation and more western records that require confirmation.	Potential habitat absent from development footprint but present in the minor drainage depressions in northern part of the title. The species was not detected (no restriction on timing of survey for detection and/or identification of this perennial rush). Only <i>Juncus pallidus</i> was present in the drainage lines. Note that the Scientific Advisory Committee recently recommended the removal of <i>Juncus amabilis</i> from the Act.
<i>Lepidium hyssopifolium</i> soft peppergrass	e EN #	The native habitat of <i>Lepidium hyssopifolium</i> is the growth suppression zone beneath large trees in grassy woodlands and grasslands (e.g. over-mature black wattles and isolated eucalypts in rough pasture). <i>Lepidium hyssopifolium</i> 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 metres 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. It can also occur on frequently slashed grassy/weedy roadside verges where shade trees are absent.	Potential habitat absent. For the record, the database record of the species from the Cygnet area was discounted by Wapstra (2018).



Scientific name Common name	Status TSPA EPBCA	Tasmanian habitat description (and distribution)	Comments on project area and database records
<i>Prasophyllum apoxychilum</i> tapered leek-orchid	v EN # only	<i>Prasophyllum apoxychilum</i> 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 (atypical of known sites). The survey was conducted outside the flowering period of the species (Wapstra 2018) but a timed targeted survey is not considered warranted based on the statistically very low chance of the species being present due to the type of habitat. Note that the taxonomic status of the forest occurrences of <i>Prasophyllum apoxychilum</i> in the greater Channel/Huon area is questionable because the species-complex requires review.
<i>Westringia angustifolia</i> narrowleaf westringia	r -	<i>Westringia angustifolia</i> occurs mainly in mid elevations, always on dolerite (but can be close to dolerite-sediment contact zones), in dry to wet sclerophyll forest on broad ridges, slopes and dense riparian shrubberies.	Potential habitat absent (site is not on dolerite).
<i>Thelymitra jonesii</i> skyblue sun-orchid	e EN # only	<i>Thelymitra jonesii</i> occurs in moist coastal heath on sandy to peaty soils and in <i>Eucalyptus obliqua</i> forest in deep loam soil over dolerite.	Potential habitat absent (site is in wet forest and not on dolerite).
<i>Xerochrysum palustre</i> swamp everlasting	v VU # only	<i>Xerochrysum palustre</i> 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 <i>Eucalyptus ovata</i> woodlands. Sites are usually inundated for part of the year.	Potential habitat absent.

Threatened fauna

Database information indicates that the subject title does not support known populations of fauna listed as threatened on either the Tasmanian *Threatened Species Protection Act 1995* or the Commonwealth *Environment Protection and Biodiversity Protection Act 1999*.

The *Natural Values Atlas* report indicates several records of threatened fauna within 5,000 m of the subject title (see appended report). These (except wholly marine and pelagic species) are listed below with a brief commentary on the likelihood of the site supporting the species, and the potential impacts of the development on these species (Table 2).

It is noted that the correspondence from Huon Valley Council dated 28 Feb. 2019 makes specific reference to three species of threatened fauna, apparently based on a site assessment, as follows:

- “*E. globulus* is critical habitat for Critically Endangered Swift Parrots”

This statement refers to *Eucalyptus globulus* dry forest and woodland (TASVEG code: DGL) and not individuals of *Eucalyptus globulus* because it follows a previous statement on that vegetation type. I do not dispute that DGL (and WGL) as well as some other vegetation types are appropriately recognised as potential habitat for the swift parrot but the term “critical habitat” must be used with caution because it has legal meaning under both the Tasmanian *Threatened Species Protection Act 1995* or the Commonwealth *Environment Protection and Biodiversity Protection Act 1999*, and neither Act has defined such habitat for the species.



- threatened eastern barred bandicoot have been recorded within 2kms and eastern quoll within 5 kms of the property boundary and the site contains potential suitable habitat for both species”

Table 2 provides a much more detailed analysis of the database records of threatened fauna within 5 km of the subject title. It is noted that these include records also of the Tasmanian devil, spotted-tailed quoll, swift parrot, grey goshawk and wedge-tailed eagle, all of which are considered in detail in Table 2. It is uncertain as to why the Council correspondence only makes mention of the eastern barred bandicoot and eastern quoll.

- “the current building site will require clearing of native vegetation, including mapped threatened *E. globulus* and therefore does not meet Acceptable Solution A1”

This refers to the putative occurrence of the DGL vegetation as mapped on TASVEG 3.0/Live and apparently confirmed by Council’s site assessment. The statement is ambiguous in concluding that the Acceptable Solution A1 is not met because of the presence of the threatened vegetation type, when in fact the Acceptable Solution A1 is not met because of the presence of “native vegetation”. Refer to the “compliance statement” that further addresses the specific provisions of the Rural Resource Zone.

- “in the absence of further substantive information, Council requires the proposed building site to be located in an area which precludes the need for vegetation clearing, thereby meeting the acceptable solution for the Rural Resource Zone, retaining threatened vegetation which is critical foraging habitat for Critically Endangered swift parrots, and retaining potential habitat for eastern quoll and eastern barred bandicoot”.

Again, the specification of these three species in particular and no reference to potential habitat of several other species of threatened fauna also potentially present is not understood. Table 2 considers all threatened fauna species with potential to be present. The statement on the swift parrot is reliant on the previous obviously erroneous statements about the presence of the DGL vegetation type. Refer to the “compliance statement” that further addresses the specific provisions of the Rural Resource Zone, which does not make any mention of potential habitat of threatened species.

Table 2. Threatened fauna potentially present within 5,000 m of the subject title

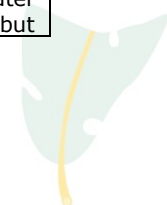
Species listed below are listed as rare (r), vulnerable (v), endangered (e), or extinct (x) on the Tasmanian *Threatened Species Protection Act 1995* (TSPA); vulnerable (VU), endangered (EN), critically endangered (CR) or extinct (EX) on the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBCA). Information below is sourced from the DPIPWE’s *Natural Values Atlas* (DPIPWE 2019), Bryant & Jackson (1999) and FPA (2019); marine, wholly pelagic and littoral species such as marine mammals, fish and offshore seabirds are excluded. Species marked with # are listed in CofA (2019).

Scientific name Common name	Status TSPA EPBCA	Tasmanian habitat description (and distribution)	Comments on project 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 marginally present (albeit as a regrowth facies of marginal wet forest). The species probably utilises the greater title area as part of a home range and for foraging but small-scale development will not have a significant impact on this aspect of the life history of the species.
<i>Antipodia chaostola</i> tax. <i>leucophaea</i> chaostola skipper	e EN #	Potential habitat is dry forest and woodland supporting <i>Gahnia radula</i> (usually on sandstone and other sedimentary rock types) or <i>Gahnia microstachya</i> (usually on granite-based substrates).	Potential habitat absent. <i>Gahnia radula</i> is not present.



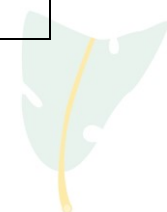
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Scientific name Common name	Status TSPA EPBCA	Tasmanian habitat description (and distribution)	Comments on project area and database records
<i>Aquila audax</i> subsp. <i>fleayi</i> wedge-tailed eagle	e EN #	Potential nesting habitat is tall eucalypt 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.	Potential nesting habitat absent. No known nests within 1,000 m of subject title; all surrounding forest of similar regrowth form as within subject title (also high levels of disturbance). The species probably utilises the greater title area as part of a home range and for foraging but small-scale development will not have a significant impact on this aspect of the life history of the species.
<i>Alcedo azurea</i> subsp. <i>diemenensis</i> Tasmanian azure kingfisher	e EN #	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. No permanent waterbodies or drainage features present within or close to the subject title. Listed in CofA (2019) as <i>Ceyx azureus</i> subsp. <i>diemenensis</i> .
<i>Botaurus poiciloptilus</i> 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</i> , <i>Cyperus</i> , <i>Eleocharis</i> , <i>Juncus</i> , <i>Typha</i> , <i>Baumea</i> , <i>Bolboschoenus</i>) or cutting grass (<i>Gahnia</i>) growing over a muddy or peaty substrate (TSSC 2011).	Not listed in FPA (2019) or DPIPWE (2019). No database records within 5,000 m. Potential habitat is absent.
<i>Dasyurus maculatus</i> subsp. <i>maculatus</i> 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 present. No evidence (e.g. scats) of the species was observed. The site is unlikely to support dens of the species because of the open understorey lacking large coarse woody debris, rock piles, wombat burrows and dense shrubby vegetation patches. The species probably utilises the greater title area as part of a home range and for foraging but development at the scale proposed and within the context of surrounding land uses will not have a significant impact on potential habitat 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.	Potential habitat present. See 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	Potential nesting habitat absent. No known nests within 1,000 m of subject title; all surrounding forest of similar regrowth form as within subject title (also high levels of disturbance). The species probably utilises the greater title area as part of a home range but



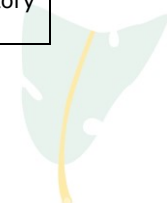
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Scientific name Common name	Status TSPA EPBCA	Tasmanian habitat description (and distribution)	Comments on project area and database records
		nesting habitat is tall eucalypt trees in large tracts (usually more than 10 ha) of eucalypt or mixed forest 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.	small-scale development will not have a significant impact on this aspect of the life history of the species.
<i>Lathamus discolor</i> swift parrot	e CR #	Potential foraging habitat comprises <i>E. globulus</i> or <i>E. ovata</i> trees that are old enough to flower. Potential nesting habitat is considered to comprise eucalypt forests that contain hollow-bearing trees.	<p>The subject title does not support <i>Eucalyptus ovata</i> so this aspect of potential foraging for the species is absent.</p> <p>The subject title supports three larger individuals of <i>Eucalyptus globulus</i>, two of which are possibly just off-title along Silver Hill Road, and one on the edge of the recent clearing. While any individual <i>Eucalyptus globulus</i> could be used by the swift parrot, where the species occurs as a minor component of the canopy (as is the case at this site, which is 99% <i>Eucalyptus obliqua</i>) and is also not a generally substantially more widespread species (in this case, <i>Eucalyptus globulus</i> appears to rarely dominate forest in the wider area), it is far less likely that individual should be regarded as "critical habitat". In this case, it is understood that the individual blue gums can be retained, noting that I can find no evidence that the recently cleared area supported any individuals of the species (refer to FINDINGS Vegetation types). However, while I am concluding that the site proposed for development does not contain potential foraging habitat of the swift parrot, the management of individual blue gums is further considered (refer to FINDINGS Individual trees).</p> <p>Potential nesting habitat is effectively absent because of the regrowth structure of the forest, virtually devoid of hollow-bearing trees (reflection of fire and other land use history). However, see FINDINGS Individual trees for a discussion of a single hollow-bearing tree.</p>
<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. The understorey is virtually devoid of logs, presumably because of the combination of the (presumed) severe 1967 wildfire followed by further disturbance. In addition, the site is a dry facies of wet forest rather than typical wet sclerophyll forest.
<i>Litoria raniformis</i> green and golden frog	v VU	Potential habitat is permanent and temporary waterbodies, usually with vegetation in or around them, including 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.	Potential habitat absent. No permanent waterbodies or drainage features present within or close to the subject title.



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Scientific name Common name	Status TSPA EPBCA	Tasmanian habitat description (and distribution)	Comments on project area and database records
<i>Pardalotus quadragintus</i> forty-spotted pardalote	e EN	Potential habitat is any forest and woodland supporting <i>Eucalyptus viminalis</i> (white gum) where the canopy cover of <i>E. viminalis</i> is greater than or equal to 10% or where <i>E. viminalis</i> occurs as a localised canopy dominant or co-dominant in patches exceeding 0.25 ha.	Potential habitat absent. <i>Eucalyptus viminalis</i> is not present within the subject title.
<i>Perameles gunnii</i> subsp. <i>gunnii</i> 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. Significant habitat for the eastern barred bandicoot is dense tussock grass-sagg-sedge swards, piles of coarse woody debris and denser patches of low shrubs (especially those that are densely branched close to the ground providing shelter) within the core range of the species.	Potential habitat present. The species can occur in a range vegetation types but tends to be most prevalent in grassier and more open habitats. The species would actively utilise the surrounding primary production, hobby farm and residential areas. The species probably utilises the greater title area as part of a home range and for foraging but small-scale development will not have a significant impact on this aspect of the life history of the species. Development is likely to manifestly benefit the species by creating open areas suitable for foraging.
<i>Prototroctes maraena</i> 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. No permanent waterbodies or drainage features present within or close to the subject title.
<i>Pseudemoia pagenstecheri</i> tussock skink	v -	Potential habitat comprises native grasslands dominated by tussock-forming grasses.	Potential habitat absent. Native grassland is absent.
<i>Sarcophilus harrisii</i> 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 (4-27 km ²). 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 (Pemberton 1990). 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.	Potential habitat present. See 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 for the masked owl 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 effectively absent. Large trees with large hollows are virtually absent from the title, except for one <i>Eucalyptus obliqua</i> stag (see FINDINGS Individual trees , which is on the edge of the title and will not be affected by the proposal. The species probably utilises the greater title area as part of a home range and for foraging but small-scale development will not have a significant impact on this aspect of the life history of the species.



Individual trees

While the structure of the vegetation within (and surrounding the title) is even-aged regrowth, presumably the result of a severe wildfire c. 50 years previous and subsequent fire events and preceding/subsequent disturbance, there are scattered mature trees ("fire survivors"). These include three larger individuals of *Eucalyptus globulus* (blue gum) and one stag of *Eucalyptus obliqua*. Refer to Figure 9 that shows the location of these, and Plates 14-16.

It is clear that these trees can be entirely avoided by the access, structures and bushfire hazard management zone (refer also to Figure 9).



Plate 14. (LHS) *Eucalyptus globulus* near northwestern/western edge of recent clearing

Plate 15. (MIDDLE) *Eucalyptus globulus* on western boundary of title above Silver Hill Road

Plate 16. (RHS) Stag of *Eucalyptus obliqua* on western boundary of title above Silver Hill Road

Weeds

The subject title, including the proposed development footprint, does not support any plant species classified as declared weeds within the meaning of the Tasmanian *Weed Management Act 1999* nor any plant species considered as "environmental weeds" (author opinion and as included in *A Guide to Environmental and Agricultural Weeds of Southern Tasmania*, NRM South 2017).

A complex management plan is not considered warranted for this site and owner-occupation remains the most cost-effective and feasible/pragmatic means of weed management for a lot with no currently documented weed occurrences. However, several planning manuals provide guidance on appropriate management actions to minimise the introduction of weeds and disease during works, which can be referred to develop site-specific prescriptions for the project. 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.

Plant and animal disease

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 m a.s.l. 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 m 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).

According to Rudman (2005) and FPA (2009), the native vegetation type recorded from the subject title is not susceptible to PC. No evidence of the pathogen was noted (i.e. no dead or dying susceptible plant species). Formal management in relation to PC is not considered warranted.

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. *Nothofagus cunninghamii* is absent from the subject title. No special management is recommended.

Chytrid fungus and other freshwater pathogens

Native freshwater species and habitat are under threat from freshwater pests and pathogens including *Phytophthora cinnamomi* (root rot), *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 does not support any permanent or ephemeral waterbodies or drainage features. No special management is recommended.





Figure 9. Revised vegetation mapping (refer to text for codes) showing recent clearing and position of individual trees relative to the proposed land use proposal



Bushfire hazard management

It is likely that bushfire hazard management will be able to be contained within the area of existing recent clearing. However, in the event that a formal bushfire hazard management plan requires further modification of fringing forest, it is noted that this would be in a regrowth facies of a non-threatened and widespread vegetation type, with little structural/habitat diversity.

Bushfire hazard management that includes modification of the overstorey and understorey is unlikely to significantly deleteriously impact on the biodiversity values of the subject title. Continued management of the understorey should result in the maintenance of the current floristic diversity, and potentially increase it in in disturbed areas (e.g. some orchids are likely to be encouraged in the open areas). It is recommended that, where practical, the mapped individuals of *Eucalyptus globulus* and the stag of *Eucalyptus obliqua* be retained.

SUMMARY

Refer to following "compliance statement" that addresses the provisions of the Rural Resource zone under the *Huon Valley Interim Planning Scheme 2015*.

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.
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- 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) (2019). *Natural Values Atlas Report ECOTas_359SilverHillRoad* for a polygon defining the title area (centred on 503332mE 522278mN), buffered by 5 km, dated 27 March 2019. [appended]
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“COMPLIANCE STATEMENT” FOR PROPOSED DWELLING AND ASSOCIATED ACCESS AND BUSHFIRE HAZARD MANAGEMENT ZONE AT 359 SILVER HILL ROAD (PID 2590462; C.T. 139542/7), CYGNET, TASMANIA: RURAL RESOURCE ZONE UNDER HUON VALLEY INTERIM PLANNING SCHEME 2015

SUPPORT DOCUMENTATION FOR DEVELOPMENT APPLICATION DA-303/2018 UNDER HUON VALLEY INTERIM PLANNING SCHEME 2015

Prepared by Mark Wapstra for Matthew Brereton & Tracey Marriott, 2 April 2019

Preamble

Note that the following “compliance statement” is my interpretation of the provisions of the *Huon Valley Interim Planning Scheme 2015* and do 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.

Biodiversity Code

Under the *Huon Valley Interim Planning Scheme 2015*, the title proposed for development is not subject to the Biodiversity Protection Area (BPA) overlay.

The application of the code is as follows:

E10.2 Application

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

This means that the Biodiversity Code is not applicable to the current proposal.

Zone provisions

Under the *Huon Valley Interim Planning Scheme 2015*, the title proposed for development (residential dwelling, access, bushfire hazard management zone) is zoned as Rural Resource. I note that the northern part of the title has clearly been long-used, and is still so used, for small-scale primary production (machinery-based slashing and hay production). Historically, the flatter parts of the now forested parts of the title were also probably largely cleared and used for some form of primary production.

Under 26.2 Use Table, “Resource development” is a “No Permit Required” use with the qualification “Only if agriculture, bee keeping, crop production, forest operations in accordance with a Forest Practices Plan, horse stud or tree farming and plantation forestry in accordance with a Forest Practices Plan”. My interpretation of this statement is that the clearing of native vegetation for primary production does not require a planning permit (this is logical under the Rural Resource zone).

I note that clearing of forest can require a Forest Practices Plan (FPP) under the *Tasmanian Forest Practices Act 1985* and associated *Forest Practices Regulations 2017* in some circumstances. In this case, the clearing clearly did not exceed 1 ha or 100 tonnes of timber (I estimate c. 4,700 m² or just under 0.5 ha may have been affected) and in my opinion did not take place on “vulnerable land” such that the aforementioned thresholds are relevant.

Under 26.2 Use Table, “Residential” 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 agricultural uses.

Correspondence from Huon Valley Council indicated that the specific clause requiring consideration was 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" (as applies for the Environmental Living zone). Placement of a dwelling away from the area currently utilised for small-scale primary production and which is adjacent to other such use on contiguous titles would be logically consistent with the objective statement.

The Acceptable Solution is as follows:

Acceptable Solutions

A1

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 will be a new residence, and will require clearing of native vegetation, except if the residence were placed within the area currently used for small-scale primary production. As stated above under the objective statement, it is logically inconsistent, especially on such a small title with limited agricultural options but still zoned as Rural Resource, to effectively negate the only area suitable for such use by placement of a residence. I further note that on-site discussions and evidence indicated that the area of pasture is also quite poorly-drained with three minor drainage "dips", possibly making it less suitable for a house site without more complex planning. While outside my specific area of expertise, I believe it is reasonable to consider that the project is not on a skyline or ridgeline.

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

Performance Criteria

P1

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.

As stated under the Acceptable Solution, I do not believe that P1(a) has application.

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".

P1(c)(i) includes the alternative option of "or the location is necessary for the functional requirements of infrastructure". As stated previously, I believe it is a reasonable proposition that a new residence should not be placed in existing pasture currently used for primary production if there are alternative locations on the title less suitable for agriculture and such an alternative site does not support high priority biodiversity values.

P1(c)(i) also refers to "other significant site constraints such as access difficulties or excessive slope...". It is my understanding that there are other non-ecological constraints on the development including constraints related to waste water management and soil conditions.

With further regard to P1(c), it is necessary to consider two scenarios: (1) current status of the land i.e. residence could be placed within the area of recent clearing with possibly only minor additional modification required for bushfire hazard management; (2) status prior recent clearing i.e. contiguous forest. However, under P1(c)(i), the phrase "there are no sites clear of native vegetation" is used. It is obvious that the site proposed for development is now in such a state and if it is accepted that the clearing was a "no permit required" use if initially intended for agricultural use, it now becomes acceptable to consider the site "clear of native vegetation". However, even if this interpretation is accepted (and I note that correspondence for Huon Valley Council dated 28 Feb. 2019 does not appear to hold this interpretation), I will assume that the development will require at least some "clearing of native vegetation" for peripheral works such as access installation and establishment of a bushfire hazard management zone.

It is accepted that the project as presently conceptualised will result in the "clearing" of "native vegetation". The *Scheme* does not define "clearing" under 4.1. Planning Terms and Definitions, although the term is defined in the Biodiversity Code (which has no application) 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". It is important to note that P1(c) does not refer to the concept of "disturbance", again not defined under 4.1. Planning Terms and Definitions, but under the Biodiversity Code defined 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". That is, the concept of "clearing" does not reasonably include activities such as routine bushfire hazard management that maintains the basic structure and composition of the vegetation community. The *Scheme* defines "native vegetation" under 4.1. Planning Terms and Definitions as: "plants that are indigenous to Tasmania including trees, shrubs, herbs and grasses that have not been planted for domestic or commercial purposes". Interestingly, this is such a broad definition that very few parts of the municipality would not qualify as "native vegetation", including the area of recent clearing on the subject title that is effectively bare dirt with just a few adventive species. I do not believe that this is a reasonable interpretation of the definition of "native vegetation".



Ecologically, and legislatively, placing the development in WOB (one of the most widespread and well-reserved non-threatened vegetation types in the State) would usually be considered an acceptable result. Noting that P1(c) only refers to "clearing", it should be accepted that some bushfire hazard management in the fringing WOB should also be considered a reasonable outcome. In my opinion, P1(c)(i) is satisfied through consideration of less suitable alternatives (i.e. not placing the dwelling in the area of existing pasture) and noting that on the balance of the title "there are no sites clear of native vegetation and clear of other significant site constraints...".

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 fact, WOB in its present structure and composition on the title should be considered a resilient and robust vegetation type and likely to respond positively to disturbance such as understorey management using fire and/or slashing. Such actions rarely result in the loss of vascular plant species, and sometimes the diversity of native vascular plant species (and hence fauna species) increases markedly because of greater structural diversity, especially canopy gaps that allow forest herbs to proliferate. In my opinion, P1(c)(ii) is satisfied.

On the basis of the above analysis, in my opinion the proposed development will 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). This conclusion is in contrast to the statements made in the correspondence from Huon Valley Council dated 28 Feb. 2019. One statement made is "the current building site will require clearing of native vegetation, including mapped threatened *E. globulus* and therefore does not meet Acceptable Solution A1". I concur that the Acceptable Solution A1 will not be met but this is because of the presence of "native vegetation" not the presence of "*E. globulus*" (meaning DGL as mapped on TASVEG 3.0/Live). The other statement made is "in the absence of further substantive information, Council requires the proposed building site to be located in an area which precludes the need for vegetation clearing, thereby meeting the acceptable solution for the Rural Resource Zone, retaining threatened vegetation which is critical foraging habitat for Critically Endangered swift parrots, and retaining potential habitat for eastern quoll and eastern barred bandicoot". The preceding analysis has demonstrated that threatened vegetation is not present (and hence cannot be retained as per the Council statement). Furthermore, it has been demonstrated that while there may be marginal potential foraging habitat for the swift parrot in the form of three individuals of *Eucalyptus globulus*, all can be retained in the context of the proposed land use, such that in no way could the native vegetation be considered as "critical habitat" for the species. The notion that the site supports potential habitat of the eastern barred bandicoot and eastern quoll is not contradicted (in fact, I argue that there is also potential habitat for other species of threatened fauna) but it does not follow that the proposal will have a significant impact on these species. The provisions of the Rural Resource zone do not refer to potential habitat of threatened fauna and as such the requirement to place the residence in the area of pasture rather than embedded in forest is not accepted. To suggest that a small area of predominantly regrowth from forest classified as a non-threatened, widespread and well-reserved vegetation type cannot be cleared because of ubiquitous potential habitat of threatened fauna species with "landscape-scale" occurrences, instead placing the residence in the area of currently functional pasture appears to be a logical contradiction of the purpose of the Rural Resource zoning.



Biodiversity Values Database Search

To browse the web map please click [HERE](#).

GDA Easting (6 digits)

GDA Northing (7 digits)

(this may take some time)

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The coordinate falls within the following threatened species ranges

Common name	Scientific Name	range class	Habitat Description	Web Map
grey goshawk	<i>Accipiter novaehollandiae</i>	Core Range	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. 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.	Web map
swift parrot	<i>Lathamus discolor</i>	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 <i>E. globulus</i> or <i>E. ovata</i> 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.	Web map
swift parrot	<i>Lathamus discolor SPIBA</i>	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 <i>E. globulus</i> or <i>E. ovata</i> 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	Web map

			<p>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.</p>	
eastern quoll	<i>Dasyurus viverrinus</i>	Core Range	<p>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. 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.</p>	Web map
tasmanian devil	<i>Sarcophilus harrisii</i>	Potential Range	<p>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). 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</p>	Web map
eastern barred bandicoot	<i>Perameles gunnii</i>	Potential Range	<p>Potential habitat for the eastern barred bandicoot 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. Significant habitat for the Eastern Barred Bandicoot is dense tussock grass-sagg-sedge swards, piles of coarse woody debris and denser patches of low shrubs (especially those that are densely branched close to the ground providing shelter) within the core range of the species.</p>	Web map
white-bellied sea-eagle	<i>Haliaeetus leucogaster</i>	Potential Range	<p>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 dams) supporting prey items (fish). Potential nesting habitat is eucalypt trees in large tracts (usually more than 10 ha) of eucalypt or mixed forest within 5 km of the coast (nearest coast including</p>	Web map

			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).	
Chaostola Skipper	<i>Antipodia chaostola</i>	Potential Range	Potential habitat for the Chaostola Skipper is dry forest and woodland supporting <i>Gahnia radula</i> (usually on sandstone and other sedimentary rock types) or <i>Gahnia microstachya</i> (usually on granite-based substrates).	Web map
mt. mangana stag beetle	<i>Lissotes menalcas</i>	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.	Web map
wedge-tailed eagle	<i>Aquila audax subsp. fleayi</i>	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).	Web map
masked owl	<i>Tyto novaehollandiae</i>	Core Range	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. 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 low ground' and remote methods.	Web map
spotted-tailed	<i>Dasyurus maculatus</i>	Core Range	Potential habitat for the spotted-tailed quoll is coastal scrub, riparian areas, rainforest, wet forest, damp forest, dry forest and	Web map

quoll			blackwood swamp forest (mature and regrowth), particularly where structurally complex areas are present, and includes remnant patches in cleared agricultural land or plantation areas. Significant habitat for the spotted-tailed quoll is all potential denning habitat within the core range of the species. 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.	
forty-spotted pardalote	<i>Pardalotus quadragintus</i>	Potential Range	Potential habitat for the 40-spotted pardalote is any forest and woodland supporting <i>Eucalyptus viminalis</i> (white gum) where the canopy cover of <i>E. viminalis</i> is greater than or equal to 10% or where <i>E. viminalis</i> occurs as a localised canopy dominant or codominant in patches exceeding 0.25 ha. Significant habitat for the 40-spotted Pardalote is all potential habitat associated with known colonies and such habitat within 500 m of known colonies.	Web map
forty-spotted pardalote	<i>Pardalotus quadragintus</i>	Survey Range	Potential habitat for the 40-spotted pardalote is any forest and woodland supporting <i>Eucalyptus viminalis</i> (white gum) where the canopy cover of <i>E. viminalis</i> is greater than or equal to 10% or where <i>E. viminalis</i> occurs as a localised canopy dominant or codominant in patches exceeding 0.25 ha. Significant habitat for the 40-spotted Pardalote is all potential habitat associated with known colonies and such habitat within 500 m of known colonies.	Web map

N.V.A. threatened fauna records within 5 km

Common Name	Scientific Name	Easting	Northing	Distance (m)	Accuracy (m)	Observation Type	Observation State	NVA Observation ID
eastern barred bandicoot	<i>Perameles gunnii</i>	505232	5221900	1938	200	Carcass	Present	1650326
eastern barred bandicoot	<i>Perameles gunnii</i>	504441	5224035	2078	305	Sighting	Present	745567
eastern barred bandicoot	<i>Perameles gunnii</i>	505000	5223638	2152	305	Sighting	Present	737335
eastern quoll	<i>Dasyurus viverrinus</i>	505419	5222834	2159	50	Carcass	Present	1397811
eastern barred bandicoot	<i>Perameles gunnii</i>	505407	5222882	2162	305	Sighting	Present	745573
eastern quoll	<i>Dasyurus viverrinus</i>	505527	5222717	2238	200	Carcass	Present	1624902
eastern barred bandicoot	<i>Perameles gunnii</i>	504127	5224404	2270	305	Sighting	Present	745550
eastern barred bandicoot	<i>Perameles gunnii</i>	505630	5222551	2314	1688	Sighting	Present	745550

eastern barred bandicoot	<i>Perameles gunnii</i>	501512	5225383	3599	10000	Sighting	Present	902357
azure kingfisher or azure kingfisher (tasmanian)	<i>Alcedo azurea subsp. diemenensis</i>	504026	5226101	3886	10000	Sighting	Present	1229822
tasmanian wedge-tailed eagle	<i>Aquila audax subsp. fleayi</i>	502774	5218395	3923	20	Nest	Present	1256719
tasmanian wedge-tailed eagle	<i>Aquila audax subsp. fleayi</i>	502774	5218395	3923	20	Nest	Present	1256720
tasmanian wedge-tailed eagle	<i>Aquila audax subsp. fleayi</i>	502774	5218395	3923	20	Nest	Present	1256721
eastern quoll	<i>Dasyurus viverrinus</i>	506512	5219883	3981	100	Sighting	Present	357625
eastern barred bandicoot	<i>Perameles gunnii</i>	502823	5226395	4148	1850	Sighting	Present	894955
eastern barred bandicoot	<i>Perameles gunnii</i>	502934	5226464	4205	100	Sighting	Present	737283
eastern barred bandicoot	<i>Perameles gunnii</i>	502934	5226464	4205	1688	Sighting	Present	737284
eastern barred bandicoot	<i>Perameles gunnii</i>	504266	5226576	4399	500	Sighting	Present	1238260
eastern barred bandicoot	<i>Perameles gunnii</i>	502951	5226723	4461	1569	Sighting	Present	737285
eastern barred bandicoot	<i>Perameles gunnii</i>	502931	5226818	4558	100	Sighting	Present	745521
eastern quoll	<i>Dasyurus viverrinus</i>	503933	5226831	4592	25	Carcass	Present	1367293
eastern barred bandicoot	<i>Perameles gunnii</i>	502930	5226918	4657	100	Sighting	Present	737282
eastern quoll	<i>Dasyurus viverrinus</i>	500996	5218198	4702	5000	Sighting	Present	1311340
southern elephant seal	<i>Mirounga leonina subsp. macquariensis</i>	507478	5220047	4708	100	Sighting	Present	1300084
southern elephant seal	<i>Mirounga leonina subsp. macquariensis</i>	507478	5220047	4708	100	Ini sig		3
eastern	<i>Perameles</i>	498454	5222208	4878	200	Carcass	Present	1643988

barred bandicoot	<i>gunnii</i>							
eastern barred bandicoot	<i>Perameles gunnii</i>	498429	5221937	4915	203	Sighting	Present	739655
eastern quoll	<i>Dasyurus viverrinus</i>	500912	5217983	4930	500	Sighting	Present	357991
eastern barred bandicoot	<i>Perameles gunnii</i>	499166	5225004	4978	1730	Sighting	Present	747671



Natural Values Atlas Report

Authoritative, comprehensive information on Tasmania's natural values.

Reference: ECOtas_359SilverHillRoad

Requested For: Mwapstra

Report Type: Summary Report

Timestamp: 01:58:06 PM Wednesday 27 March 2019

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



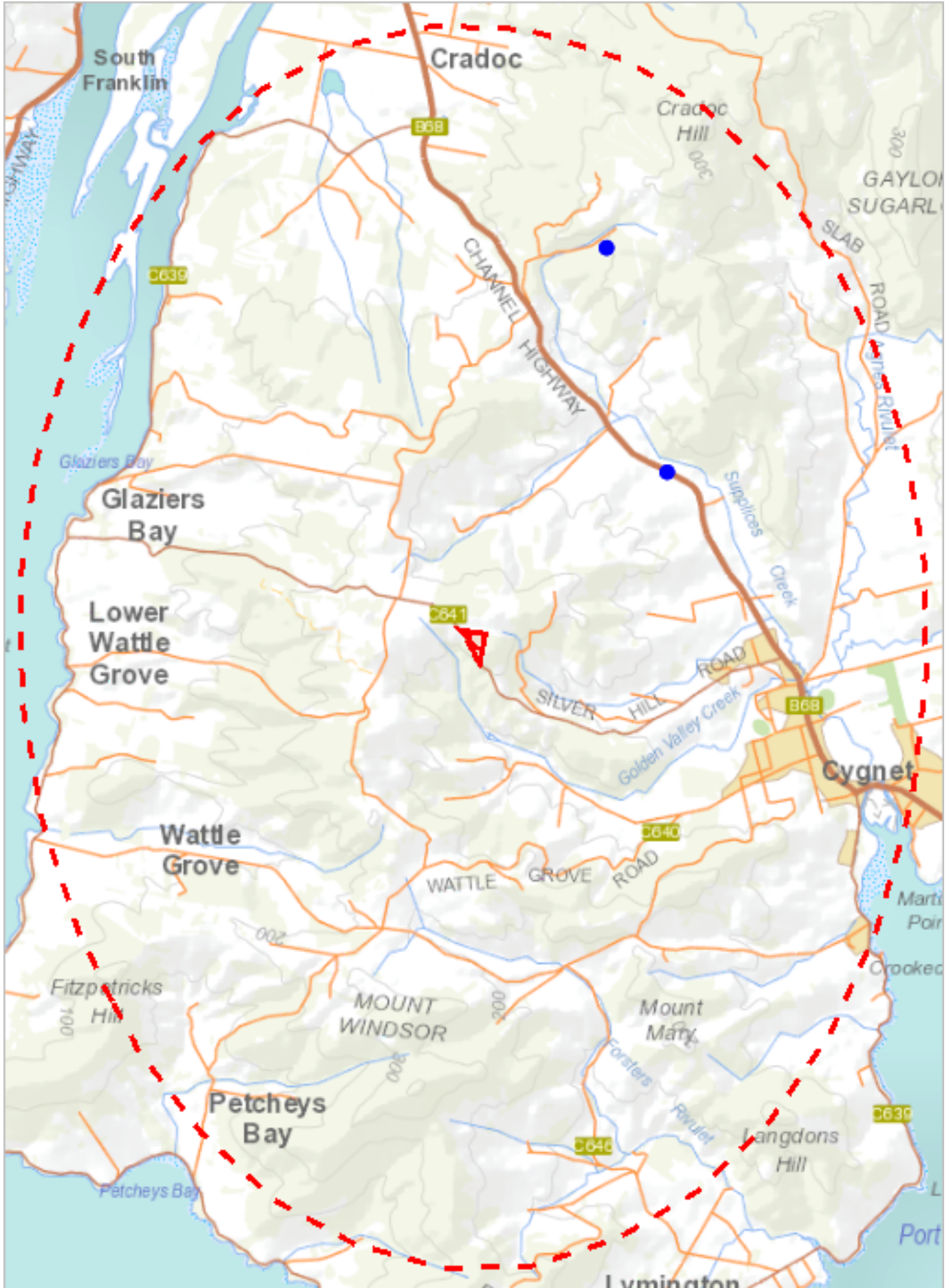
The centroid for this query GDA94: 503332.0, 5222278.0 falls within:

Property: 2590462

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

Threatened flora within 5000 metres

507207, 5227567



499423, 5216931

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

Threatened flora within 5000 metres

Legend: Verified and Unverified observations

● Point Verified

● Point Unverified

— Line Verified

— Line Unverified

□ Polygon Verified

□ Polygon Unverified

Legend: Cadastral Parcels



Threatened flora within 5000 metres

Verified Records

Species	Common Name	SS	NS	Bio	Observation Count	Last Recorded
<i>Juncus amabilis</i>	gentle rush	r?		n	1	10-Aug-2001
<i>Lepidium hyssopifolium</i>	soft peppergrass	e	EN	n	1	01-Jan-1993
<i>Westringia angustifolia</i>	narrowleaf westringia	r		e	24	08-May-2012

Unverified Records

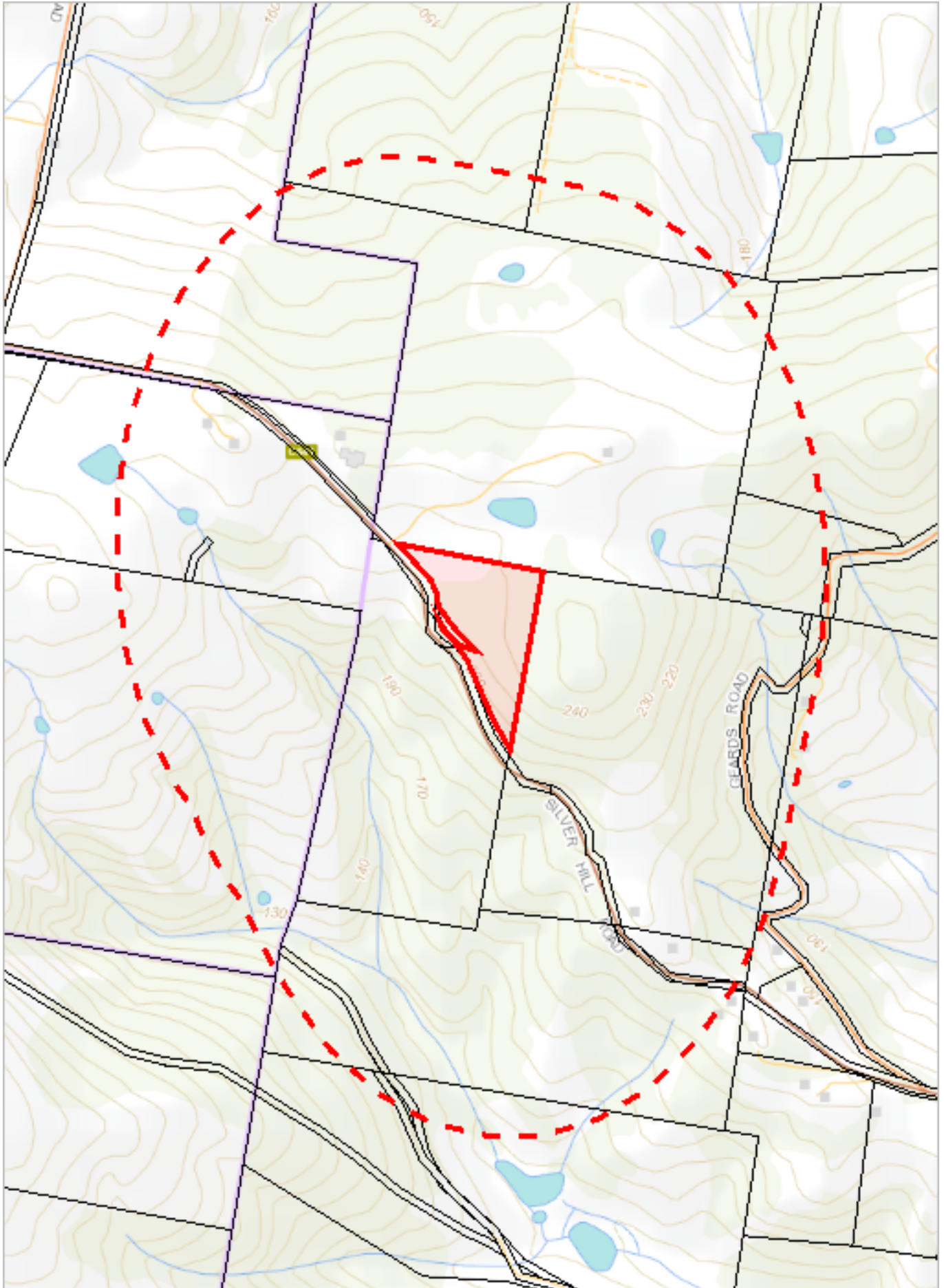
No unverified records were found!

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

Telephone: 1300 368 550

Email: ThreatenedSpecies.Enquiries@dipwe.tas.gov.au

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



502704, 5221416

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

Threatened fauna within 500 metres

Legend: Verified and Unverified observations

● Point Verified

● Point Unverified

— Line Verified

— Line Unverified

□ Polygon Verified

□ Polygon Unverified

Legend: Cadastral Parcels



Threatened fauna within 500 metres

Threatened fauna within 500 metres (based on Range Boundaries)

Species	Common Name	SS	NS	BO	Potential	Known	Core
Lissotes menalcas	mount mangana stag beetle	v		e	1	1	0
Pseudemoia pagenstecheri	tussock skink	v		n	1	0	0
Aquila audax subsp. fleayi	tasmanian wedge-tailed eagle	e	EN	e	1	0	0
Pardalotus quadragintus	forty-spotted pardalote	e	EN	e	1	0	0
Aquila audax	wedge-tailed eagle	pe	PEN	n	1	0	0
Antipodia chaostola	chaostola skipper	e	EN		1	0	0
Tyto novaehollandiae	masked owl	pe	PVU	n	1	0	1
Perameles gunnii	eastern barred bandicoot		VU	n	1	0	0
Dasyurus maculatus	spotted-tail quoll	r	VU	n	1	0	0
Dasyurus viverrinus	eastern quoll		EN	n	0	0	1
Lathamus discolor	swift parrot	e	CR	mbe	1	0	1
Accipiter novaehollandiae	grey goshawk	e		n	1	0	1
Sarcophilus harrisi	tasmanian devil	e	EN	e	1	0	0
Prototroctes maraena	australian grayling	v	VU	ae	1	0	0
Haliaeetus leucogaster	white-bellied sea-eagle	v		n	2	0	0

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

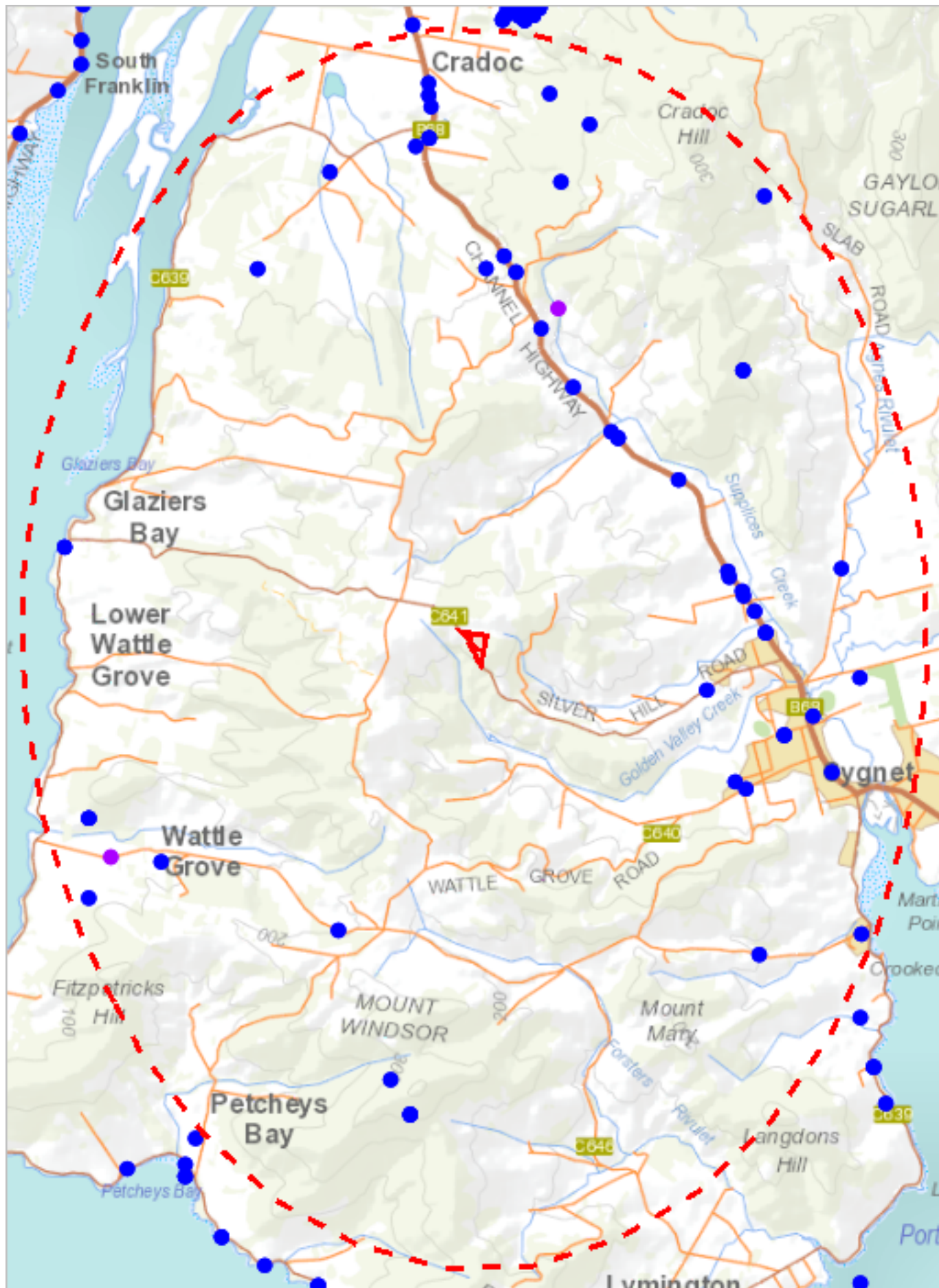
Telephone: 1300 368 550

Email: ThreatenedSpecies.Enquiries@dpiw.tas.gov.au

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

Threatened fauna within 5000 metres

507207, 5227567



499423, 5216931

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

Threatened fauna within 5000 metres

Legend: Verified and Unverified observations

● Point Verified

● Point Unverified

— Line Verified

— Line Unverified

□ Polygon Verified

□ Polygon Unverified

Legend: Cadastral Parcels



Threatened fauna within 5000 metres

Verified Records

Species	Common Name	SS	NS	Bio	Observation Count	Last Recorded
<i>Accipiter novaehollandiae</i>	grey goshawk	e		n	4	01-Jan-1992
<i>Alcedo azurea</i> subsp. <i>diemenensis</i>	azure kingfisher or azure kingfisher (tasmanian)	e	EN	e	1	01-Jan-0001
<i>Aquila audax</i> subsp. <i>fleayi</i>	tasmanian wedge-tailed eagle	e	EN	e	4	17-Sep-2007
<i>Dasyurus maculatus</i> subsp. <i>maculatus</i>	spotted-tail quoll	r	VU	n	1	01-Jan-1996
<i>Dasyurus viverrinus</i>	eastern quoll		EN	n	14	29-Sep-2018
<i>Eubalaena australis</i>	southern right whale	e	EN	m	1	20-Nov-1984
<i>Lathamus discolor</i>	swift parrot	e	CR	mbe	10	24-Oct-2009
<i>Mirounga leonina</i> subsp. <i>macquariensis</i>	southern elephant seal	pe	PVU	n	2	10-Dec-1994
<i>Perameles gunnii</i>	eastern barred bandicoot		VU	n	30	02-Aug-2018
<i>Sarcophilus harrisi</i>	tasmanian devil	e	EN	e	3	31-Aug-2018
<i>Thylacinus cynocephalus</i>	thylacine	x	EX	ex	1	01-Jan-1961

Unverified Records

Species	Common Name	SS	NS	Bio	Observation Count
<i>Sarcophilus harrisi</i>	tasmanian devil	e	EN	e	2

Threatened fauna within 5000 metres (based on Range Boundaries)

Species	Common Name	SS	NS	BO	Potential	Known	Core
<i>Lissotes menalcas</i>	mount mangana stag beetle	v		e	1	1	0
<i>Litoria raniformis</i>	green and gold frog	v	VU	n	1	0	0
<i>Pseudemoia pagenstecheri</i>	tussock skink	v		n	1	0	0
<i>Brachionichthys hirsutus</i>	spotted handfish	e	CR	e	1	0	0
<i>Aquila audax</i> subsp. <i>fleayi</i>	tasmanian wedge-tailed eagle	e	EN	e	1	0	0
<i>Pardalotus quadragintus</i>	forty-spotted pardalote	e	EN	e	1	0	0
<i>Antipodia chaostola</i>	chaostola skipper	e	EN		6	0	0
<i>Aquila audax</i>	wedge-tailed eagle	pe	PEN	n	1	0	0
<i>Tyto novaehollandiae</i>	masked owl	pe	PVU	n	1	0	1
<i>Perameles gunnii</i>	eastern barred bandicoot		VU	n	1	0	0
<i>Dasyurus maculatus</i>	spotted-tail quoll	r	VU	n	1	0	0
<i>Dasyurus viverrinus</i>	eastern quoll		EN	n	0	0	1
<i>Lathamus discolor</i>	swift parrot	e	CR	mbe	1	0	1
<i>Prototroctes maraena</i>	australian grayling	v	VU	ae	2	0	0
<i>Accipiter novaehollandiae</i>	grey goshawk	e		n	1	0	1
<i>Sarcophilus harrisi</i>	tasmanian devil	e	EN	e	1	0	0
<i>Haliaeetus leucogaster</i>	white-bellied sea-eagle	v		n	2	0	0

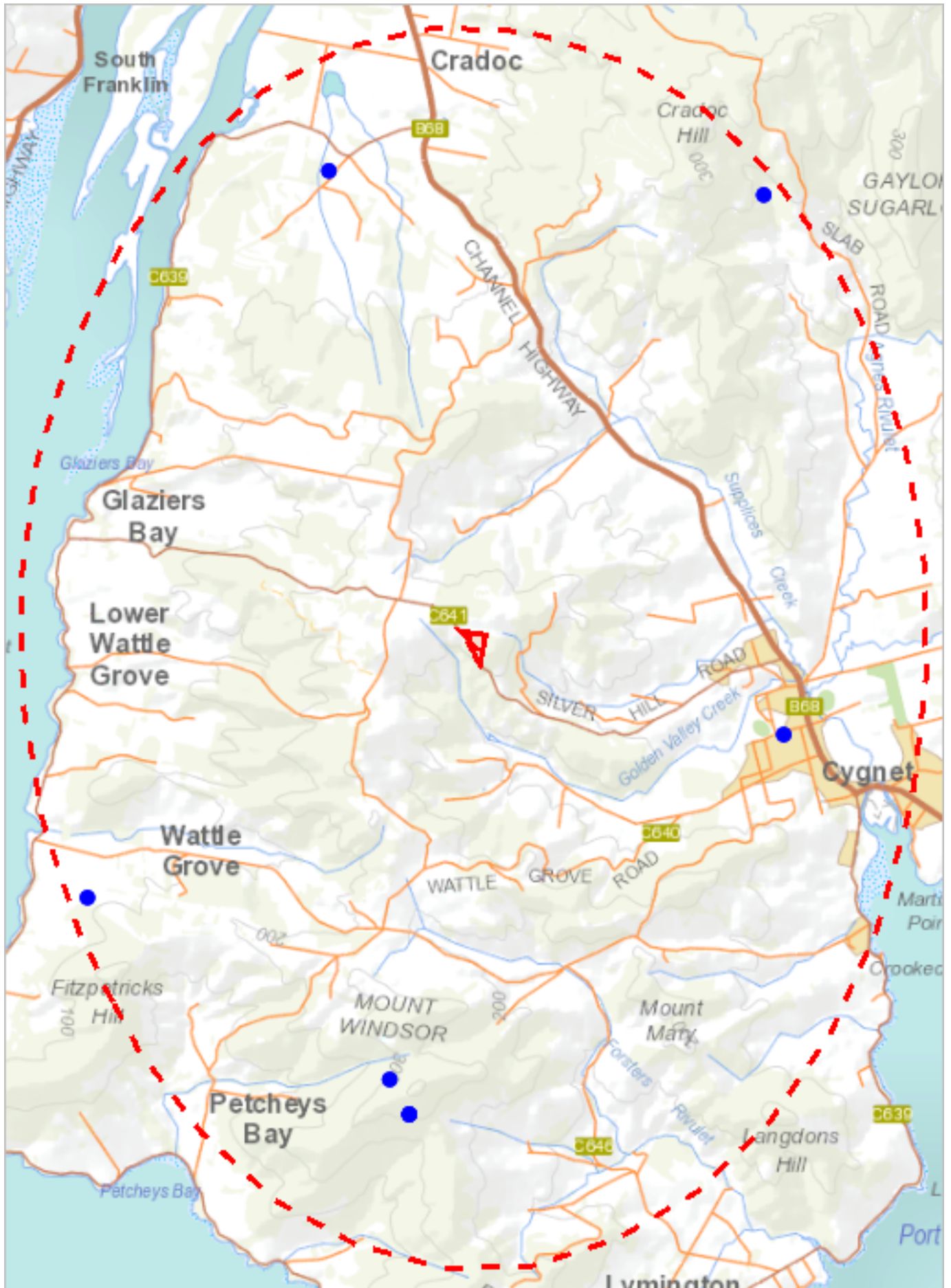
For more information about threatened species, please contact Threatened Species Enquiries.

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. ***



499423, 5216931

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

Raptor nests and sightings within 5000 metres

Legend: Verified and Unverified observations

● Point Verified

● Point Unverified

— Line Verified

— Line Unverified

□ Polygon Verified

□ Polygon Unverified

Legend: Cadastral Parcels



Raptor nests and sightings within 5000 metres

Verified Records

Nest Id/Location Foreign Id	Species	Common Name	Obs Type	Observation Count	Last Recorded
677	Aquila audax subsp. fleayi	tasmanian wedge-tailed eagle	Nest	3	17-Sep-2007
	Accipiter novaehollandiae	grey goshawk	Sighting	4	01-Jan-1992
	Aquila audax subsp. fleayi	tasmanian wedge-tailed eagle	Sighting	1	01-Jan-0001

Unverified Records

No unverified records were found!

Raptor nests and sightings within 5000 metres (based on Range Boundaries)

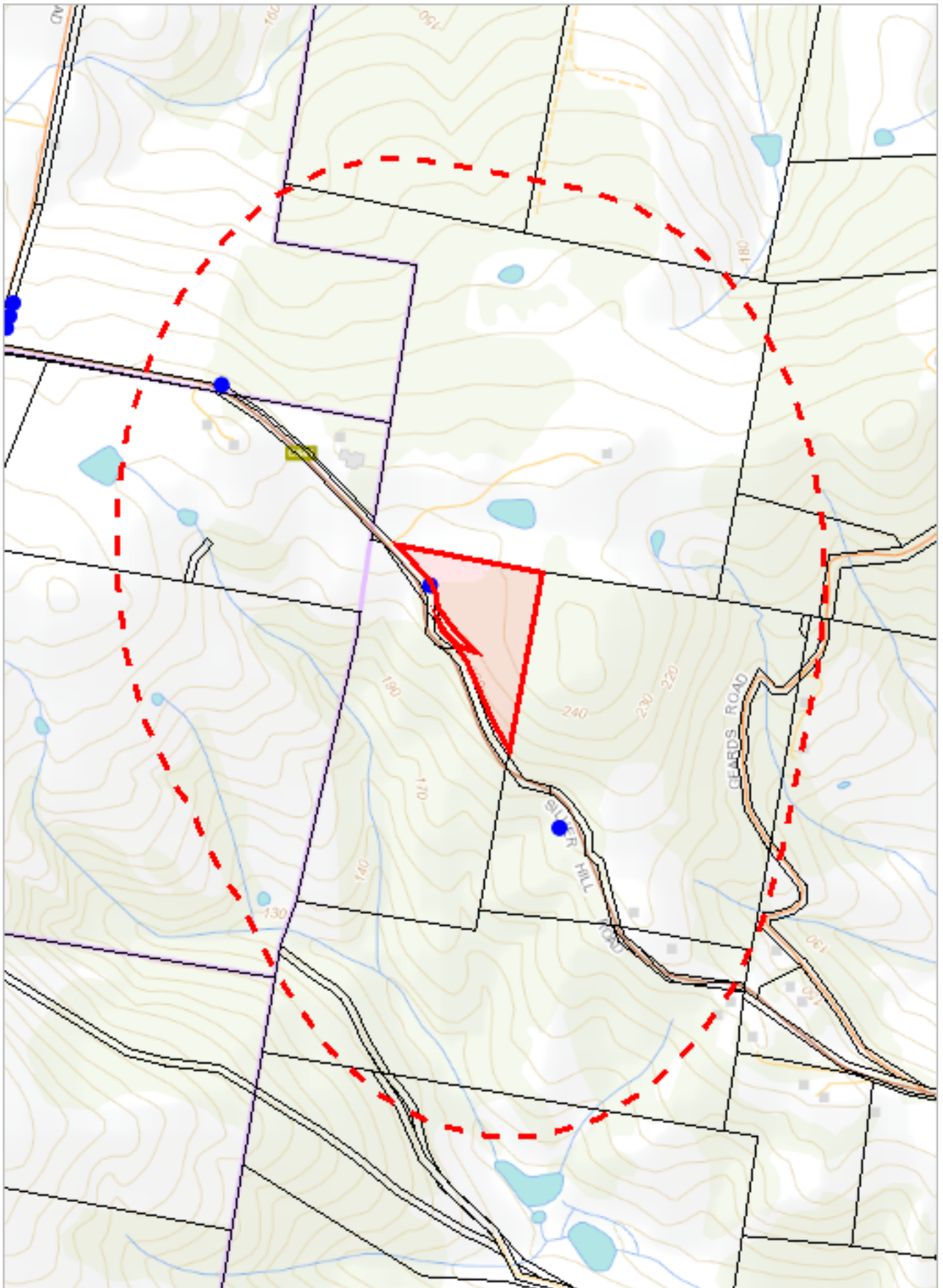
Species	Common Name	SS	NS	Potential	Known	Core
Aquila audax	wedge-tailed eagle	pe	PEN	1	0	0
Aquila audax subsp. fleayi	tasmanian wedge-tailed eagle	e	EN	1	0	0
Tyto novaehollandiae	masked owl	pe	PVU	1	0	1
Accipiter novaehollandiae	grey goshawk	e		1	0	1
Haliaeetus leucogaster	white-bellied sea-eagle	v		2	0	0

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

Telephone: 1300 368 550

Email: ThreatenedSpecies.Enquiries@dpiwve.tas.gov.au

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



502704, 5221416

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

Tas Management Act Weeds within 500 m

Legend: Verified and Unverified observations

● Point Verified

● Point Unverified

▬ Line Verified

▬ Line Unverified

□ Polygon Verified

□ Polygon Unverified

Legend: Cadastral Parcels



Tas Management Act Weeds within 500 m

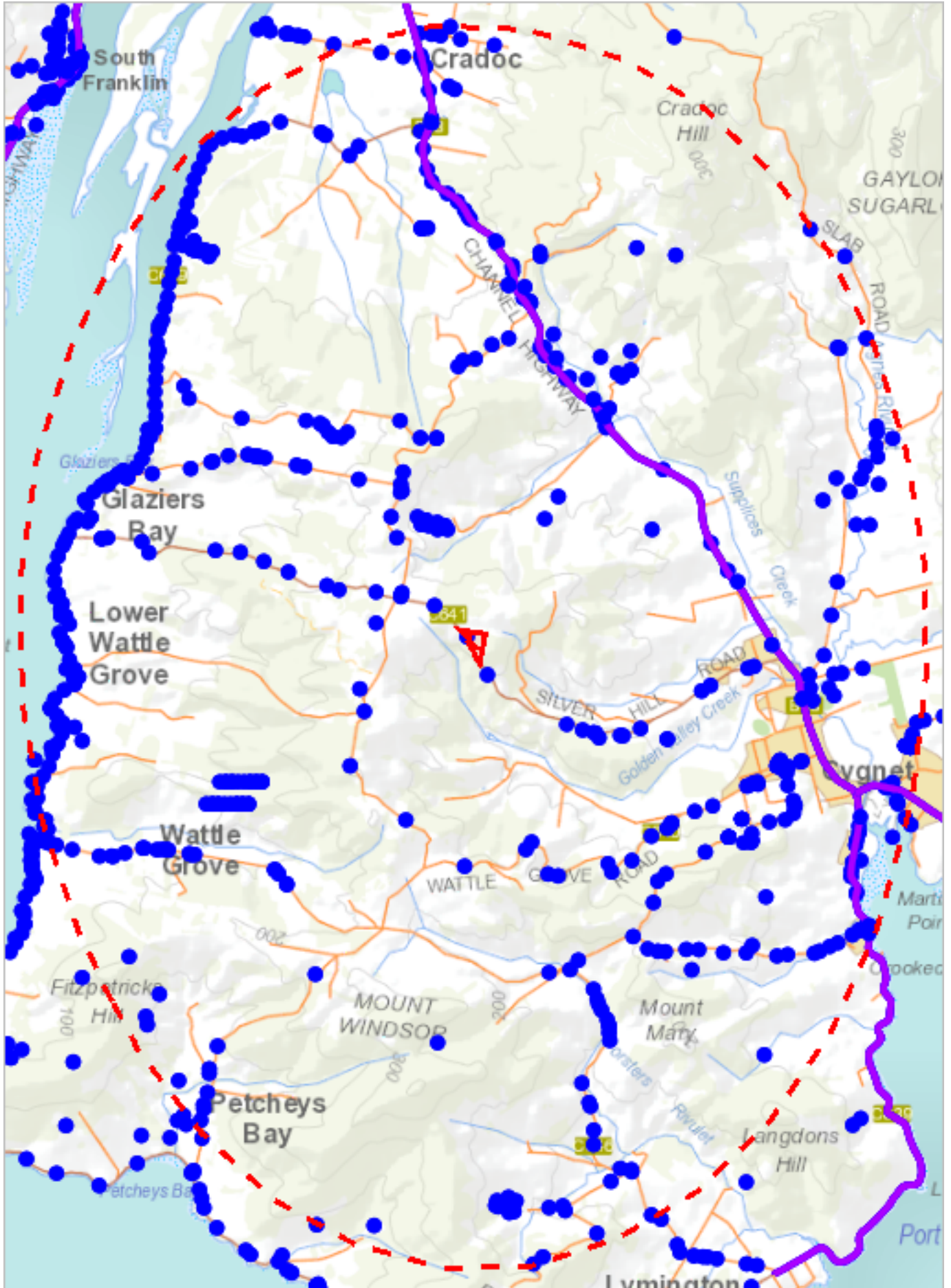
Verified Records

Species	Common Name	Observation Count	Last Recorded
Genista monspessulana	montpellier broom	2	13-Sep-2007
Rubus fruticosus	blackberry	1	13-Sep-2007

Unverified Records

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

<http://dpipwe.tas.gov.au/invasive-species/weeds>



499423, 5216931

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

Tas Management Act Weeds within 5000 m

Legend: Verified and Unverified observations

● Point Verified

● Point Unverified

— Line Verified

— Line Unverified

□ Polygon Verified

□ Polygon Unverified

Legend: Cadastral Parcels



Tas Management Act Weeds within 5000 m

Verified Records

Species	Common Name	Observation Count	Last Recorded
<i>Asparagus asparagoides</i>	bridal creeper	23	27-Sep-2016
<i>Cenchrus macrourus</i>	african feathergrass	1	01-Feb-1969
<i>Chrysanthemoides monilifera</i> subsp. <i>monilifera</i>	boneseed	126	24-Jan-2017
<i>Cirsium arvense</i> var. <i>arvense</i>	creeping thistle	1	10-Jul-2003
<i>Cortaderia jubata</i>	pink pampasgrass	2	10-Jul-2003
<i>Cortaderia selloana</i>	silver pampasgrass	2	13-Sep-2007
<i>Cortaderia</i> sp.	pampas grass	39	24-May-2018
<i>Cytisus scoparius</i>	english broom	25	24-Jan-2017
<i>Echium plantagineum</i>	patersons curse	19	11-Mar-2018
<i>Erica lusitanica</i>	spanish heath	55	24-Jan-2017
<i>Foeniculum vulgare</i>	fennel	11	13-Sep-2007
<i>Genista monspessulana</i>	montpellier broom	93	24-Jan-2017
<i>Hypericum perforatum</i>	perforated st johns-wort	1	28-Nov-2017
<i>Hypericum perforatum</i> subsp. <i>veronense</i>	perforated st johns-wort	3	01-Mar-1930
<i>Ilex aquifolium</i>	holly	7	24-Jan-2017
<i>Leycesteria formosa</i>	himalayan honeysuckle	2	13-Sep-2007
<i>Marrubium vulgare</i>	white horehound	1	16-Oct-2017
<i>Myriophyllum aquaticum</i>	parrotfeather	1	27-Mar-1985
<i>Rubus fruticosus</i>	blackberry	76	15-Sep-2007
<i>Salix caprea</i>	goat willow	9	13-Sep-2007
<i>Salix matsudana</i> x <i>alba</i>	tortured willow	1	13-Sep-2007
<i>Salix</i> x <i>fragilis</i> nothovar. <i>fragilis</i>	crack willow	4	24-Jan-2017
<i>Senecio jacobaea</i>	ragwort	51	26-Feb-2019
<i>Ulex europaeus</i>	gorse	142	24-Jan-2017

Unverified Records

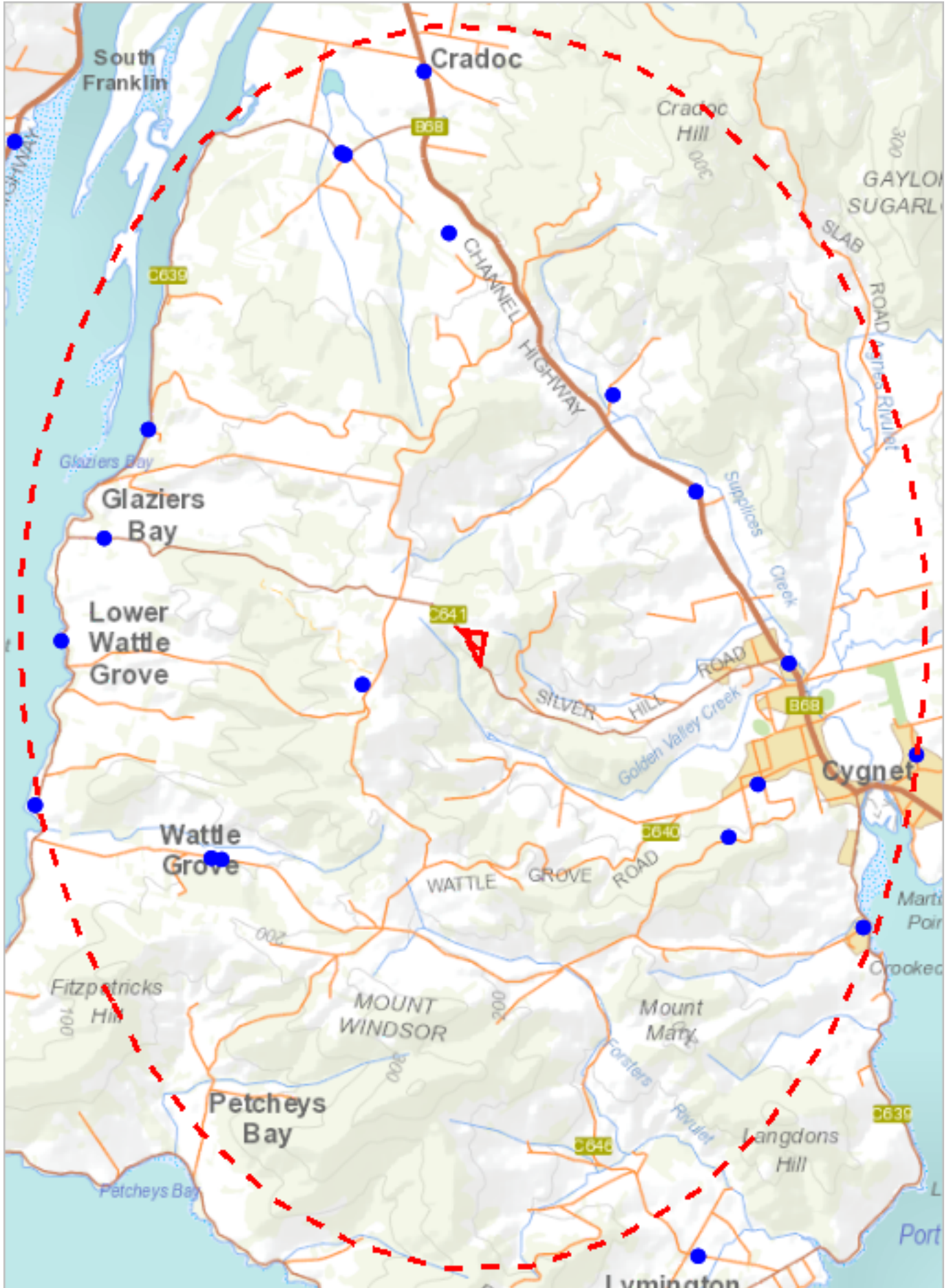
For more information about introduced weed species, please visit the following URL for contact details in your area:

<http://dppwe.tas.gov.au/invasive-species/weeds>

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

Priority Weeds within 5000 m

507207, 5227567



499423, 5216931

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

Priority Weeds within 5000 m

Legend: Verified and Unverified observations

● Point Verified

● Point Unverified

▬ Line Verified

▬ Line Unverified

□ Polygon Verified

□ Polygon Unverified

Legend: Cadastral Parcels



Priority Weeds within 5000 m

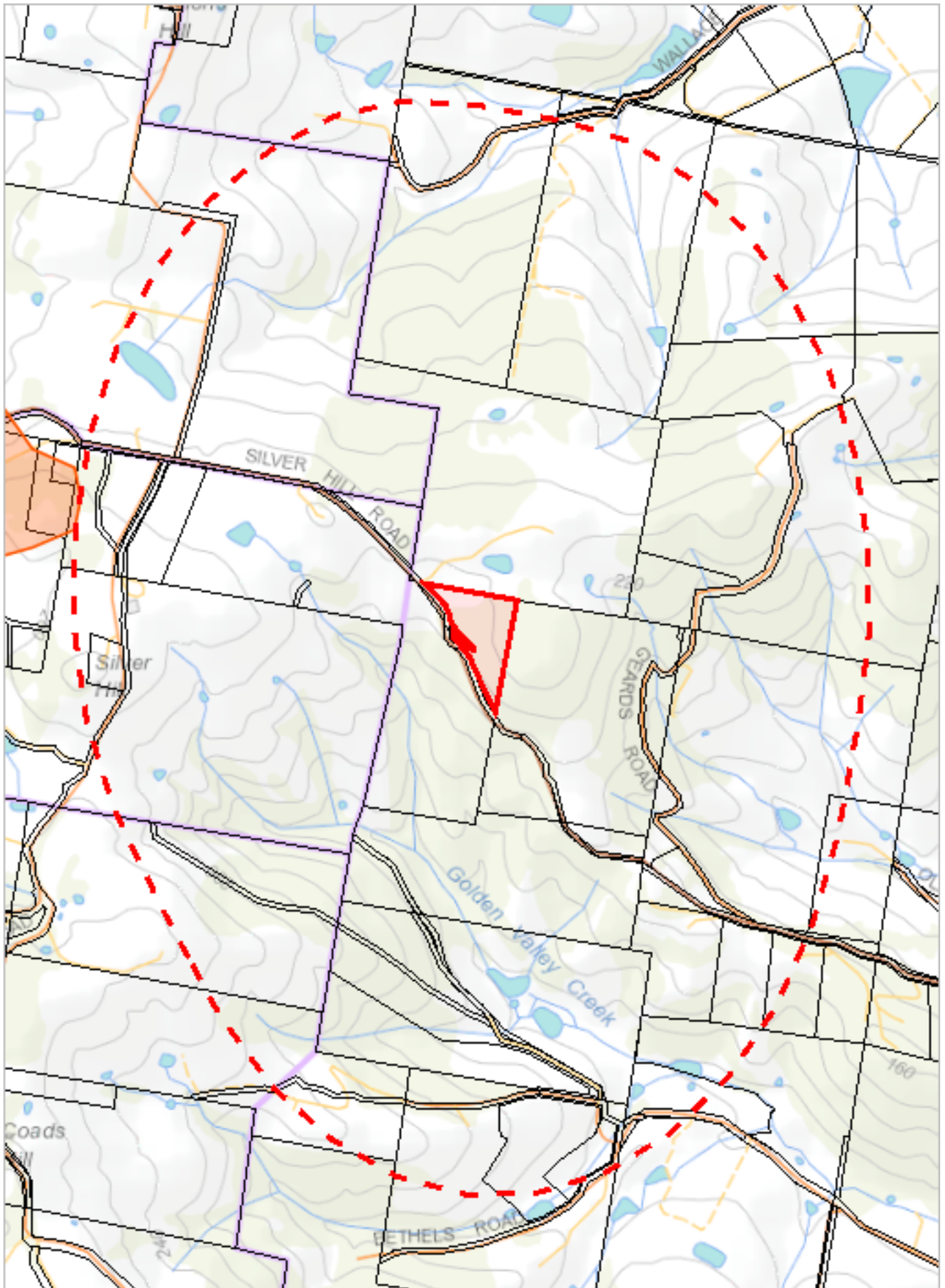
Verified Records

Species	Common Name	Observation Count	Last Recorded
Acacia baileyana	cootamundra wattle	4	13-Sep-2007
Pittosporum undulatum	sweet pittosporum	8	24-Jan-2017
Watsonia meriana var. bulbillifera	bulbil watsonia	8	13-Sep-2007

Unverified Records

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

<http://dpiwpe.tas.gov.au/invasive-species/weeds>



502340, 5220917

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
3117	Cygnets Cretaceous Alkaline Complex	Rarity, geological reference, a Tasmanian type area for the Cretaceous system.	State	Listed

For more information about the Geoconservation Database, please visit the website: <http://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 ***






























































502340, 5220917



























































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

TASVEG 3.0 Communities within 1000 metres












































Legend: TASVEG 3.0

	DAC - Eucalyptus amygdalina coastal forest and woodland
	DAD - Eucalyptus amygdalina forest and woodland on dolerite
	DAS - Eucalyptus amygdalina forest and woodland on sandstone
	DAM - Eucalyptus amygdalina forest on mudstone
	DAZ - Eucalyptus amygdalina inland forest and woodland on Cainozoic deposits
	DSC - Eucalyptus amygdalina - Eucalyptus obliqua damp sclerophyll forest
	DBA - Eucalyptus barberi forest and woodland
	DCO - Eucalyptus coccifera forest and woodland
	DCR - Eucalyptus cordata forest
	DDP - Eucalyptus dalrympleana - Eucalyptus pauciflora forest and woodland
	DDE - Eucalyptus delegatensis dry forest and woodland
	DGL - Eucalyptus globulus dry forest and woodland
	DGW - Eucalyptus gunnii woodland
	DMO - Eucalyptus morrisbyi forest and woodland
	DNI - Eucalyptus nitida dry forest and woodland
	DNF - Eucalyptus nitida Furneaux forest
	DOB - Eucalyptus obliqua dry forest
	DOV - Eucalyptus ovata forest and woodland
	DOW - Eucalyptus ovata heathy woodland
	DPO - Eucalyptus pauciflora forest and woodland not on dolerite
	DPD - Eucalyptus pauciflora forest and woodland on dolerite
	DPE - Eucalyptus perriniana forest and woodland
	DPU - Eucalyptus pulchella forest and woodland
	DRI - Eucalyptus risdonii forest and woodland
	DRO - Eucalyptus rodwayi forest and woodland
	DSO - Eucalyptus sieberi forest and woodland not on granite
	DSG - Eucalyptus sieberi forest and woodland 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
	DVF - Eucalyptus viminalis Furneaux forest and woodland
	DVG - Eucalyptus viminalis grassy forest and woodland
	DVC - Eucalyptus viminalis - Eucalyptus globulus coastal forest and woodland
	DKW - King Island Eucalypt woodland
	DMW - Midlands woodland complex
	WBR - Eucalyptus brookeriana wet forest
	WDA - Eucalyptus dalrympleana forest
	WDL - Eucalyptus delegatensis forest over Leptospermum
	WDR - Eucalyptus delegatensis forest over rainforest
	WDB - Eucalyptus delegatensis forest with broad-leaf shrubs
	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)
	WOL - Eucalyptus obliqua forest over Leptospermum
	WOR - Eucalyptus obliqua forest over rainforest
	WOB - Eucalyptus obliqua forest with broad-leaf shrubs
	WOU - Eucalyptus obliqua wet forest (undifferentiated)
	WRE - Eucalyptus regnans forest
	WSU - Eucalyptus subcrenulata forest and woodland
	WVI - Eucalyptus viminalis wet forest
	RPF - Athrotaxis cupressoides - Nothofagus gunnii short rainforest
	RPW - Athrotaxis cupressoides open woodland
	RPP - Athrotaxis cupressoides rainforest
	RKF - Athrotaxis selaginoides - Nothofagus gunnii short rainforest
	RKP - Athrotaxis selaginoides rainforest
	RKS - Athrotaxis selaginoides subalpine scrub

TASVEG 3.0 Communities within 1000 metres

	RCO - Coastal rainforest
	RSH - Highland low rainforest and scrub
	RKX - Highland rainforest scrub with dead Athrotaxis selaginoides
	RHP - Lagarostrobos franklinii rainforest and scrub
	RMT - Nothofagus - Atherosperma rainforest
	RML - Nothofagus - Leptospermum short rainforest
	RMS - Nothofagus - Phyllocladus short rainforest
	RFS - Nothofagus gunnii rainforest and scrub
	RMU - Nothofagus rainforest (undifferentiated)
	RFE - Rainforest fernland
	NAD - Acacia dealbata forest
	NAR - Acacia melanoxylon forest on rises
	NAF - Acacia melanoxylon swamp forest
	NAL - Allocasuarina littoralis forest
	NAV - Allocasuarina verticillata forest
	NBS - Banksia serrata woodland
	NBA - Bursaria - Acacia woodland and scrub
	NCR - Callitris rhomboidea forest
	NLE - Leptospermum forest
	NLM - Leptospermum lanigerum - Melaleuca squarrosa swamp forest
	NLA - Leptospermum scoparium - Acacia mucronata forest
	NME - Melaleuca ericifolia swamp forest
	NLN - Subalpine Leptospermum nitidum woodland
	AHF - Fresh water aquatic herbland
	ASF - Freshwater aquatic sedgeland and rushland
	AHL - Lacustrine herbland
	AHS - Saline aquatic herbland
	ARS - Saline sedgeland/rushland
	AUS - Saltmarsh (undifferentiated)
	ASS - Succulent saline herbland
	AWU - Wetland (undifferentiated)
	SAL - Acacia longifolia coastal scrub
	SBM - Banksia marginata wet scrub
	SBR - Broad-leaf scrub
	SCH - Coastal heathland
	SSC - Coastal scrub
	SCA - Coastal scrub on alkaline sands
	SRE - Eastern riparian scrub
	SED - Eastern scrub on dolerite
	SCL - Heathland on calcareous substrates
	SKA - Kunzea ambigua regrowth scrub
	SLG - Leptospermum glaucescens heathland and scrub
	SLL - Leptospermum lanigerum scrub
	SLS - Leptospermum scoparium heathland and scrub
	SLW - Leptospermum scrub
	SRF - Leptospermum with rainforest scrub
	SMP - Melaleuca pustulata scrub
	SMM - Melaleuca squamea heathland
	SMR - Melaleuca squarrosa scrub
	SRH - Rookery halophytic herbland
	SSK - Scrub complex on King Island
	SSZ - Spray zone coastal complex
	SHS - Subalpine heathland
	SWR - Western regrowth complex
	SSW - Western subalpine scrub
	SWW - Western wet scrub
	SHW - Wet heathland
	HCH - Alpine coniferous heathland
	HCM - Cushion moorland
	HHE - Eastern alpine heathland
	HSE - Eastern alpine sedgeland

TASVEG 3.0 Communities within 1000 metres

-  HUE - Eastern alpine vegetation (undifferentiated)
-  HHW - Western alpine heathland
-  HSW - Western alpine sedgeland/herbland
-  MAP - Alkaline pans
-  MBU - Buttongrass moorland (undifferentiated)
-  MBS - Buttongrass moorland with emergent shrubs
-  MBE - Eastern buttongrass moorland
-  MGH - Highland grassy sedgeland
-  MBP - Pure buttongrass moorland
-  MRR - Restionaceae rushland
-  MBR - Sparse buttongrass moorland on slopes
-  MSP - Sphagnum peatland
-  MDS - Subalpine Diplarrena latifolia rushland
-  MBW - Western buttongrass moorland
-  MSW - Western lowland sedgeland
-  GHC - Coastal grass and herbfield
-  GPH - Highland Poa grassland
-  GCL - Lowland grassland complex
-  GSL - Lowland grassy sedgeland
-  GPL - Lowland Poa labillardierei grassland
-  GTL - Lowland Themeda triandra grassland
-  GRP - Rockplate grassland
-  FAG - Agricultural land
-  FUM - Extra-urban miscellaneous
-  FMG - Marram grassland
-  FPE - Permanent easements
-  FPL - Plantations for silviculture
-  FPF - Pteridium esculentum fernland
-  FRG - Regenerating cleared land
-  FSM - Spartina marshland
-  FPU - Unverified plantations for silviculture
-  FUR - Urban areas
-  FWU - Weed infestation
-  QCS - Coastal slope complex
-  QCT - Coastal terrace mosaic
-  QKB - Kelp beds
-  QAM - Macquarie alpine mosaic
-  QMI - Mire
-  QST - Short tussock grassland/rushland with herbs
-  QTT - Tall tussock grassland with megaherbs
-  ORO - Lichen lithosere
-  OSM - Sand, mud
-  OAQ - Water, sea

Legend: Cadastral Parcels



TASVEG 3.0 Communities within 1000 metres

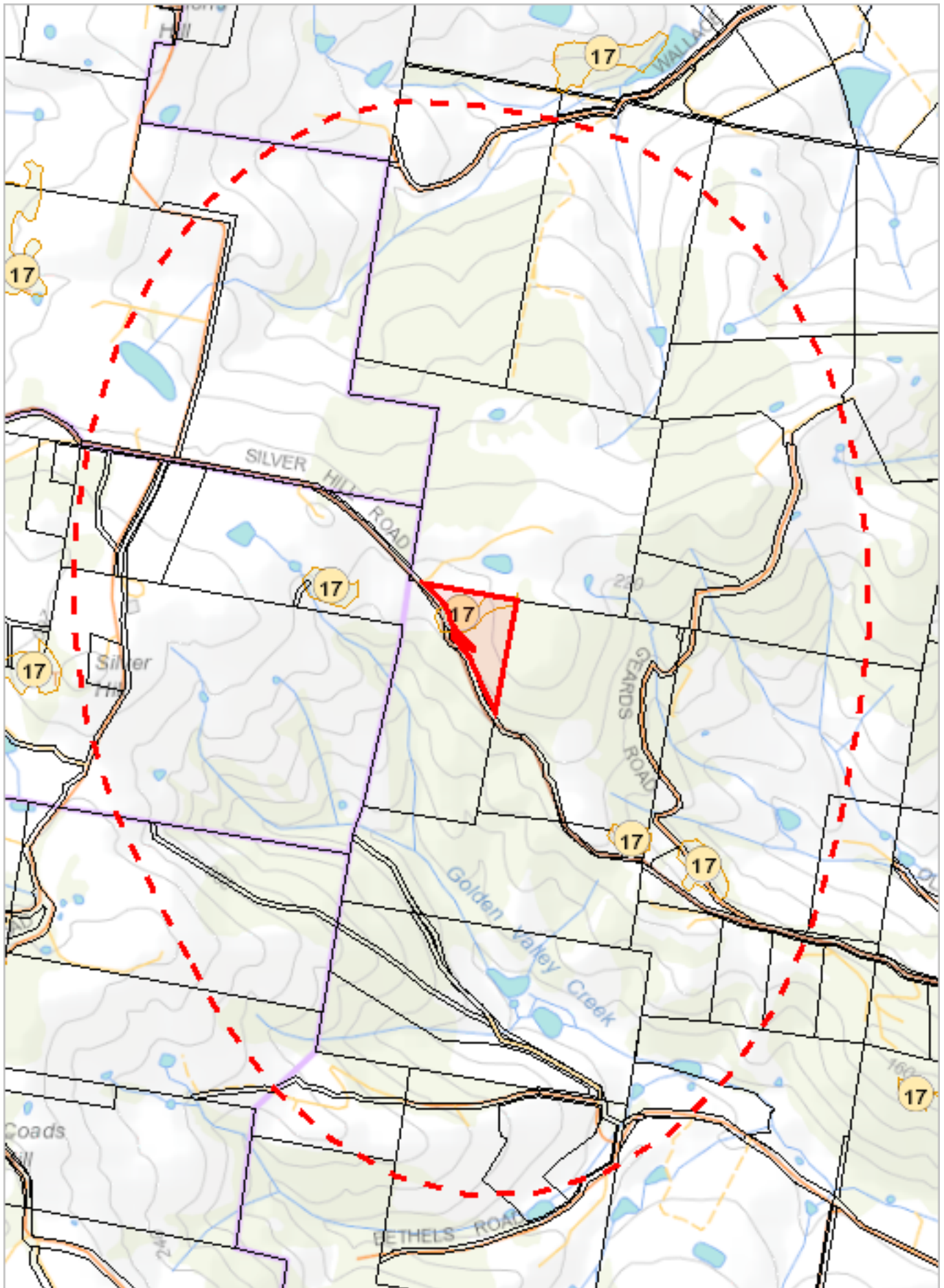
Code	Community	Emergent Species
DGL	(DGL) Eucalyptus globulus dry forest and woodland	
DOB	(DOB) Eucalyptus obliqua dry forest	
FAG	(FAG) Agricultural land	EG
FAG	(FAG) Agricultural land	EL
FAG	(FAG) Agricultural land	
FPF	(FPF) Pteridium esculentum fernland	
FPL	(FPL) Plantations for silviculture	
FPU	(FPU) Unverified plantations for silviculture	
FRG	(FRG) Regenerating cleared land	EL
FRG	(FRG) Regenerating cleared land	
FUR	(FUR) Urban areas	
FWU	(FWU) Weed infestation	
NAD	(NAD) Acacia dealbata forest	
OAQ	(OAQ) Water, sea	
SLS	(SLS) Leptospermum scoparium heathland and scrub	
SLW	(SLW) Leptospermum scrub	
WGL	(WGL) Eucalyptus globulus wet forest	
WOB	(WOB) Eucalyptus obliqua forest with broad-leaf shrubs	
WOU	(WOU) Eucalyptus obliqua wet forest (undifferentiated)	

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

Telephone: (03) 6165 4320

Email: TVMMPsupport@dipwe.tas.gov.au

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



502340, 5220917

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

Threatened Communities (TNVC 2014) within 1000 metres

Legend: Threatened Communities

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

Legend: Cadastral Parcels



Threatened Communities (TNVC 2014) within 1000 metres

Scheduled Community Id	Scheduled Community Name
17	Eucalyptus globulus dry forest and woodland

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

Telephone: (03) 6165 4320

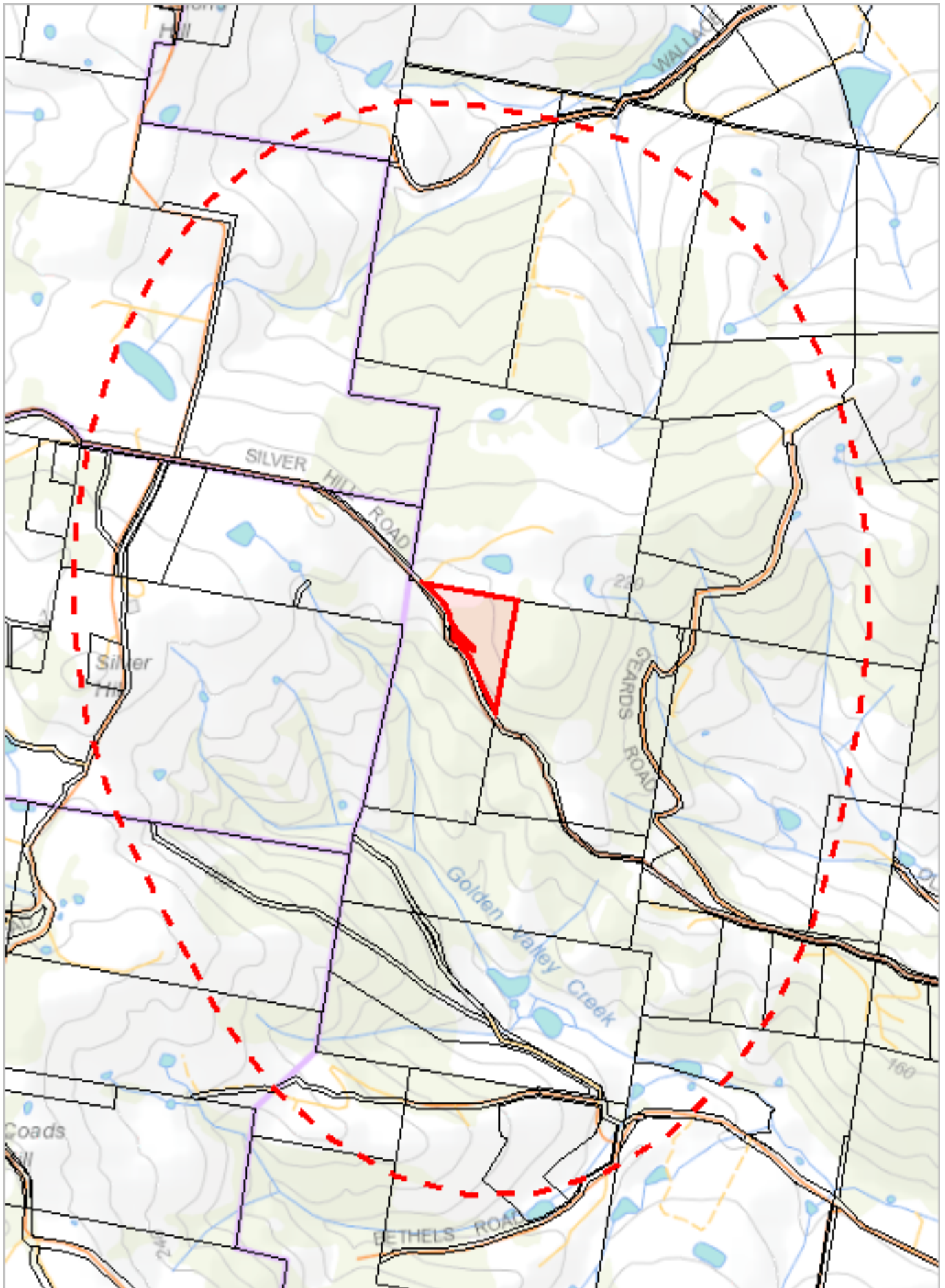
Email: TVMMPsupport@dPIPWE.tas.gov.au

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 ***

*** No reserves found within 1000 metres ***



502340, 5220917

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
- Point Unverified
- Polygon Verified
- Polygon Unverified
- Line Verified
- Line Unverified

Legend: Hygiene infrastructure

- Location Point Verified
- Location Point Unverified
- Location Line Unverified
- Location Line Verified
- Location Polygon 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 <http://dpiwwe.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 <http://dpiwwe.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 <http://dpiwwe.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 through 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



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 [Environment Assessments](#) and the EPBC Act including significance guidelines, forms and application process details.

Report created: 27/03/19 14:23:44

[Summary](#)

[Details](#)

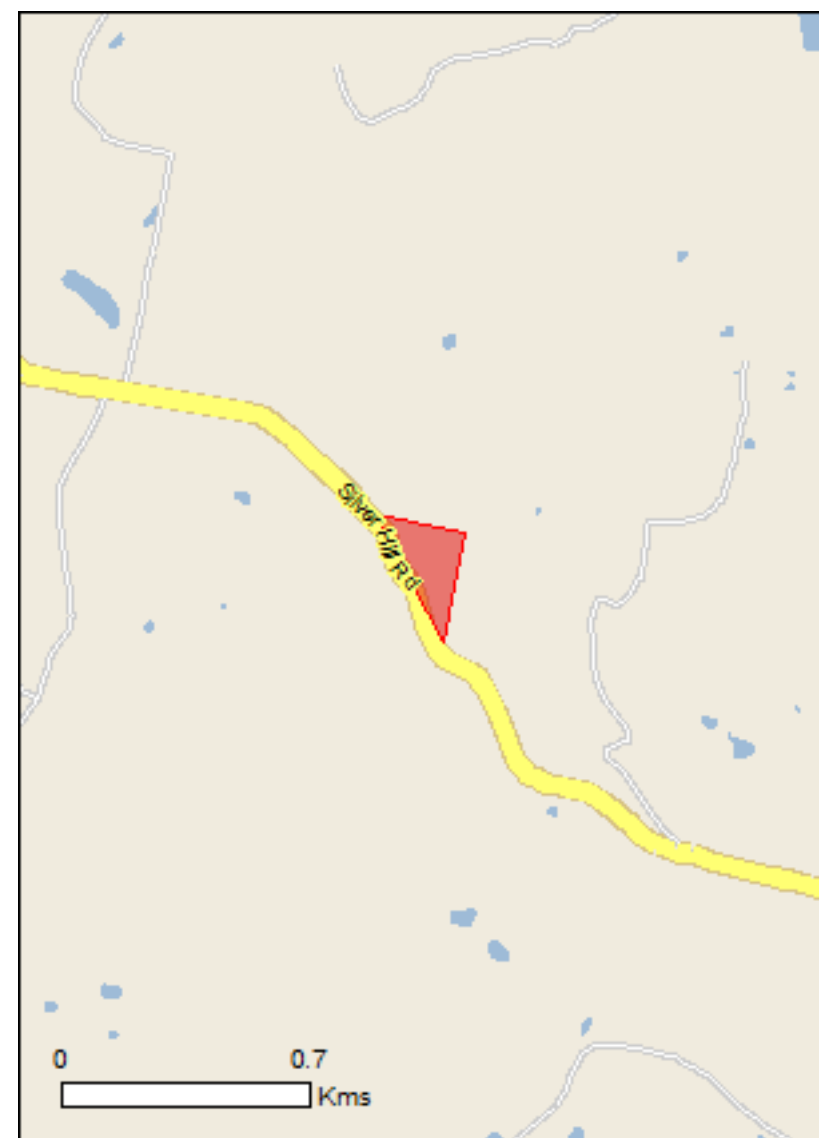
[Matters of NES](#)

[Other Matters Protected by the EPBC Act](#)

[Extra Information](#)

[Caveat](#)

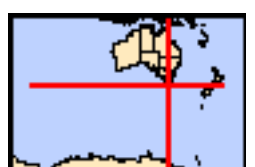
[Acknowledgements](#)



This map may contain data which are ©Commonwealth of Australia (Geoscience Australia), ©PSMA 2010

[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 [Administrative Guidelines on Significance](#).

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:	1
Listed Threatened Species:	51
Listed Migratory Species:	33

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 [permit](#) 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:	50
Whales and Other Cetaceans:	9
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

[[Resource Information](#)]

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.

Name	Status	Type of Presence
Subtropical and Temperate Coastal Saltmarsh	Vulnerable	Community likely to occur within area

Listed Threatened Species

[[Resource Information](#)]

Name	Status	Type of Presence
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Birds

[Aquila audax fleayi](#)

Tasmanian Wedge-tailed Eagle, Wedge-tailed Eagle (Tasmanian) [64435]	Endangered	Breeding likely to occur within area
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[Botaurus poiciloptilus](#)

Australasian Bittern [1001]	Endangered	Species or species habitat likely to occur within area
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[Calidris canutus](#)

Red Knot, Knot [855]	Endangered	Species or species habitat may occur within area
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[Calidris ferruginea](#)

Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
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[Ceyx azureus diemenensis](#)

Tasmanian Azure Kingfisher [25977]	Endangered	Species or species habitat likely to occur within area
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[Diomedea antipodensis](#)

Antipodean Albatross [64458]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
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[Diomedea antipodensis gibsoni](#)

Gibson's Albatross [82270]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
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[Diomedea epomophora](#)

Southern Royal Albatross [89221]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
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[Diomedea exulans](#)

Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
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[Diomedea sanfordi](#)

Northern Royal Albatross [64456]	Endangered	Foraging, feeding or related behaviour likely to occur within area
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[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
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Name	Status	Type of Presence
Lathamus discolor Swift Parrot [744]	Critically Endangered	Breeding known to occur within area
Limosa lapponica baueri Bar-tailed Godwit (baueri), Western Alaskan Bar-tailed Godwit [86380]	Vulnerable	Species or species habitat may occur within area
Limosa lapponica menzbieri Northern Siberian Bar-tailed Godwit, Bar-tailed Godwit (menzbieri) [86432]	Critically Endangered	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	Breeding 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 cauta Shy Albatross, Tasmanian Shy Albatross [82345]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Thalassarche cauta steadi White-capped Albatross [82344]	Vulnerable	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
Thalassarche salvini Salvin's Albatross [64463]	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
Tyto novaehollandiae castanops (Tasmanian population) Masked Owl (Tasmanian) [67051]	Vulnerable	Species or species habitat known to occur

Name	Status	Type of Presence within area
Fish		
Brachionichthys hirsutus Spotted Handfish [64418]	Critically Endangered	Species or species habitat may occur within area
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 may occur within area
Insects		
Antipodia chaostola leucophaea Tasmanian Chaostola Skipper, Heath-sand Skipper [77672]	Endangered	Species or species habitat likely to occur within area
Mammals		
Balaenoptera musculus Blue Whale [36]	Endangered	Species or species habitat likely to occur within area
Dasyurus maculatus maculatus (Tasmanian population) Spotted-tail Quoll, Spot-tailed Quoll, Tiger Quoll (Tasmanian population) [75183]	Vulnerable	Species or species habitat 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 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 known to occur within area
Sarcophilus harrisii Tasmanian Devil [299]	Endangered	Species or species habitat likely 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
Dianella amoena Matted Flax-lily [64886]	Endangered	Species or species habitat may occur within area
Epacris exserta South Esk Heath [19879]	Endangered	Species or species habitat may occur within area
Epacris virgata Pretty Heath, Dan Hill Heath [20375]	Endangered	Species or species habitat may occur within area
Lepidium hyssopifolium Basalt Pepper-cress, Peppercress, Rubble Pepper-cress, Pepperweed [16542]	Endangered	Species or species habitat known to occur

Name	Status	Type of Presence within area
Prasophyllum apoxychilum Tapered Leek-orchid [64947]	Endangered	Species or species habitat may occur within area
Thelymitra jonesii Sky-blue Sun-orchid [76352]	Endangered	Species or species habitat may occur within area
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
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Listed Migratory Species

[[Resource Information](#)]

* Species is listed under a different scientific name on the EPBC Act - Threatened Species list.

Name	Threatened	Type of Presence
Migratory Marine Birds		
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
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 Tasmanian Shy Albatross [89224]	Vulnerable*	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

Name	Threatened	Type of Presence
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
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
Caperea marginata Pygmy Right Whale [39]		Foraging, feeding or related behaviour may occur within area
Carcharodon carcharias White Shark, Great White Shark [64470]	Vulnerable	Species or species habitat known to occur within area
Lagenorhynchus obscurus Dusky Dolphin [43]		Species or species habitat may occur within area
Lamna nasus 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]		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 may occur within

Name	Threatened	Type of Presence area
Limosa lapponica Bar-tailed Godwit [844]		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
Tringa nebularia Common Greenshank, Greenshank [832]		Species or species habitat may occur within area

Other Matters Protected by the EPBC Act

Listed Marine Species [\[Resource Information \]](#)

* Species is listed under a different scientific name on the EPBC Act - Threatened Species list.

Name	Threatened	Type of Presence
Birds		
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 alba Great Egret, White Egret [59541]		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

Name	Threatened	Type of Presence
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Diomedea gibsoni Gibson's Albatross [64466]	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
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]		Species or species habitat may occur within area
Haliaeetus leucogaster White-bellied Sea-Eagle [943]		Species or species habitat known to occur within area
Hirundapus caudacutus White-throated Needletail [682]		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
Thalassarche bulleri Buller's Albatross, Pacific Albatross [64460]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Thalassarche cauta Tasmanian Shy Albatross [89224]	Vulnerable*	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

Name	Threatened	Type of Presence
Thalassarche salvini Salvin's Albatross [64463]	Vulnerable	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 White-capped Albatross [64462]	Vulnerable*	Foraging, feeding or related behaviour likely to occur within area
Thinornis rubricollis Hooded Plover [59510]		Species or species habitat 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

Name	Threatened	Type of Presence
Vanacampus phillipi Port Phillip Pipefish [66284]		habitat may occur within area Species or species habitat may occur within 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		
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
Caperea marginata Pygmy Right Whale [39]		Foraging, feeding or related behaviour may 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
Lagenorhynchus obscurus Dusky Dolphin [43]		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

Extra Information

State and Territory Reserves

[[Resource Information](#)]

Name	State
Huon Estuary Marine	TAS
Port Cygnet	TAS
Tunapi	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 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 Resources Audit, 2001.

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

Name	Status	Type of Presence
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 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 [20126]		Species or species habitat likely to occur within area
Nassella trichotoma Serrated Tussock, Yass River Tussock, Yass Tussock, Nassella Tussock (NZ) [18884]		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 & S.x reichardtii Willows except Weeping Willow, Pussy Willow and Sterile Pussy Willow [68497]		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 qualifications 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

-43.151657 147.041863,-43.153684 147.041327,-43.151328 147.039535,-43.151649 147.041874,-43.151657 147.041863

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- [-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.