



25 August 2015

George Walker
Planning Services
City of Launceston
PO Box 396
LAUNCESTON TAS 7250

Our ref: 32/17480
22075
Your ref:

Dear George

123 Westbury Rd Tree Removal Development Application

The purpose of this letter is to provide supporting information and an assessment against the relevant Planning Scheme provisions for the removal of 95 trees at the Mt Pleasant property, 124 Westbury Road.

1 Background

The poor condition of the trees on this property has been of concern to the property owner for some time. It was originally planned to seek their removal at the time of subdivision but given this is now some time away, it is considered imperative that the trees be removed in a safe manner before they fail during high wind events and cause damage or harm to any persons.

This application is accompanied by three supporting assessments:

- Arborimage Arboricultural Report
- GHD Flora and Fauna Assessment
- North Barker Flora and Fauna Assessment Review

2 Applicant

The applicant is GHD Pty Ltd obo Kreglinger Australia Pty Ltd.

The appropriate contacts are:

Chloe Lyne, Senior Planner – GHD	Rob Harrison – Kreglinger Australia
T: 03 6332 5525 E: chloe.lyne@ghd.com Level 2, 102 Cameron Street, Launceston, TAS 7250 PO Box 1269, Launceston, TAS 7250	T: 03 632 6400 E: Robert@harrisonhumphreys.com.au 48 Brisbane Street, Launceston, TAS 7250

3 Subject Site

The subject land is situated at 123 Westbury Rd, adjacent to the title containing the historic Mt Pleasant homestead. This site comprises a 3.8 ha lot with 140 metre frontage to Westbury Road (refer Figure 1). The site has a north to northeast aspect and is moderately sloping towards Westbury Road. There are views from the site to the north over the City and Tamar River and to the east to Mt Barrow and surrounding ranges.

The site contains a single dwelling on the south west corner of the site, with the balance of land comprising cleared pasture, eucalypts and pines (see Flora Fauna Assessment attached to this correspondence).

The site essentially comprises a large undeveloped lot located in between two residential areas and the Mount Pleasant historic site. Specifically the following properties adjoin the site:

- South: 4 residential properties (4, 6 and 7 Treviso Court and 28 Eureka Street) and Mount Pleasant historic homestead and vineyard (9 Luxmore Place).
- West: 11 residential properties (1-21 Caroline Street and 125 Westbury Road).
- East: 4 residential properties (105 and 99 Normanstone Road, 20 and 24 Eureka Street).

The adjoining Mount Pleasant property is a heritage listed site under Schedule 2 of the Launceston Planning Scheme 1996. The listing includes house, outbuildings, entrance gates and lodge – Victorian.



Figure 1 Aerial Location Plan (Source The LIST)

4 Proposed Tree Removal

It is proposed to remove a total of 95 trees from the property. This is due to the fact that these trees are in poor condition and pose a significant risk to property users. It is the property owner's intention to remove these trees and therefore mitigate the risk prior to any major injury or death occurring.

The majority (76) of the trees to be removed are Radiata Pine trees, a non-native, weed species.

All the trees on the site have been reviewed by a qualified arboriculturalist and assessed for their condition. All trees recommended for removal are being sought to be removed. A full copy of the report is attached to this letter. A summary of the tree to be removed is provided in the table below.

Table 1 Summary of Arboricultural Assessment

Number (refer to Arborists Report)	Species	Condition	Recommendation
1 x 76 trees	<i>Pinus Radiata</i>	Known weed species, saplings spreading uncontrollably, most trees have numerous hazards present and are generally considered senescent and immediately dangerous to persons or property coming close to their vicinity	Remove all trees of this species for site.
3	<i>Allocasuarina</i> (She oak)	Failed branches throughout, weak branch unions	Remove tree.
6	<i>Eucalyptus amygdalina</i> (Black Peppermint Gum)	Tree in significant decline, numerous past failed branches. Evident decay in base. Crown dieback	Remove tree.
10	<i>Eucalyptus viminalis</i> (White Gum)	High impact zone with residential property nearby. Decline in upper canopy, evident borer damage. Swelling/decay in major branches	Significant habitat tree. Crown reduction to remove major hazards and improve stability. Removal of dead/decayed branches or remove tree.
14 x 5 trees	<i>Eucalyptus amygdalina</i> (Black Peppermint Gum)	5 trees in a row from north to south, 3 x larger trees more significant in health and structure, major deadwood mainly in the lower canopies, some evidence of borer	Possible to retain trees with hazard reduction works although long term hazards envisioned if site becomes residential.
15 x 3 trees	<i>Eucalyptus amygdalina</i> (Black Peppermint Gum)	Major failed branches and trunks, heavy lateral branches. Imminent future failure.	Remove trees.
18	<i>Eucalyptus amygdalina</i> (Black Peppermint Gum)	Bifurcated trunk at ground has failed, half tree is dead. Other half is leaning into canopy of neighbouring tree.	Remove tree.
21	<i>Eucalyptus amygdalina</i> (Black Peppermint Gum)	Heavy lean to north, some decay in lower trunk	Remove tree.
23	<i>Quercus Palustris</i> (Pin Oak)	Crowded growing position for eventual size. Mishapen canopy spread	Remove tree.
24	<i>Eucalyptus amygdalina</i> (Black Peppermint Gum)	Crowded growing conditions	Remove tree.
25	<i>Cupressus species</i> (Cypress)	Crowded growing conditions for eventual size	Remove tree.
27	<i>Eucalyptus amygdalina</i> (Black Peppermint Gum)	Bifurcated trunk with one side completely dead, extensive decay in main trunk.	Remove tree.
28	<i>Eucalyptus amygdalina</i> (Black Peppermint Gum)	Decay at base and at 1.5m of trunk	Remove tree.
55	<i>Liquidamber styraciflua</i> (Liquidamber)	Crowded growing conditions for eventual size.	Possible removal to allow other trees to benefit.

5 Planning Scheme Assessment

5.1 Planning Instrument

The application relates to Launceston Interim Planning Scheme 2015 ('Interim Planning Scheme'). The Planning Authority is the Launceston City Council. The sections below provide an assessment against the relevant planning scheme provisions.

5.2 Low Density Residential Zone Controls

The subject site is zoned Low Density Residential under the Interim Planning Scheme. It is also impacted by the Scenic Management Code and the Biodiversity Code with Overlay Areas identified as per Figure 2 below.

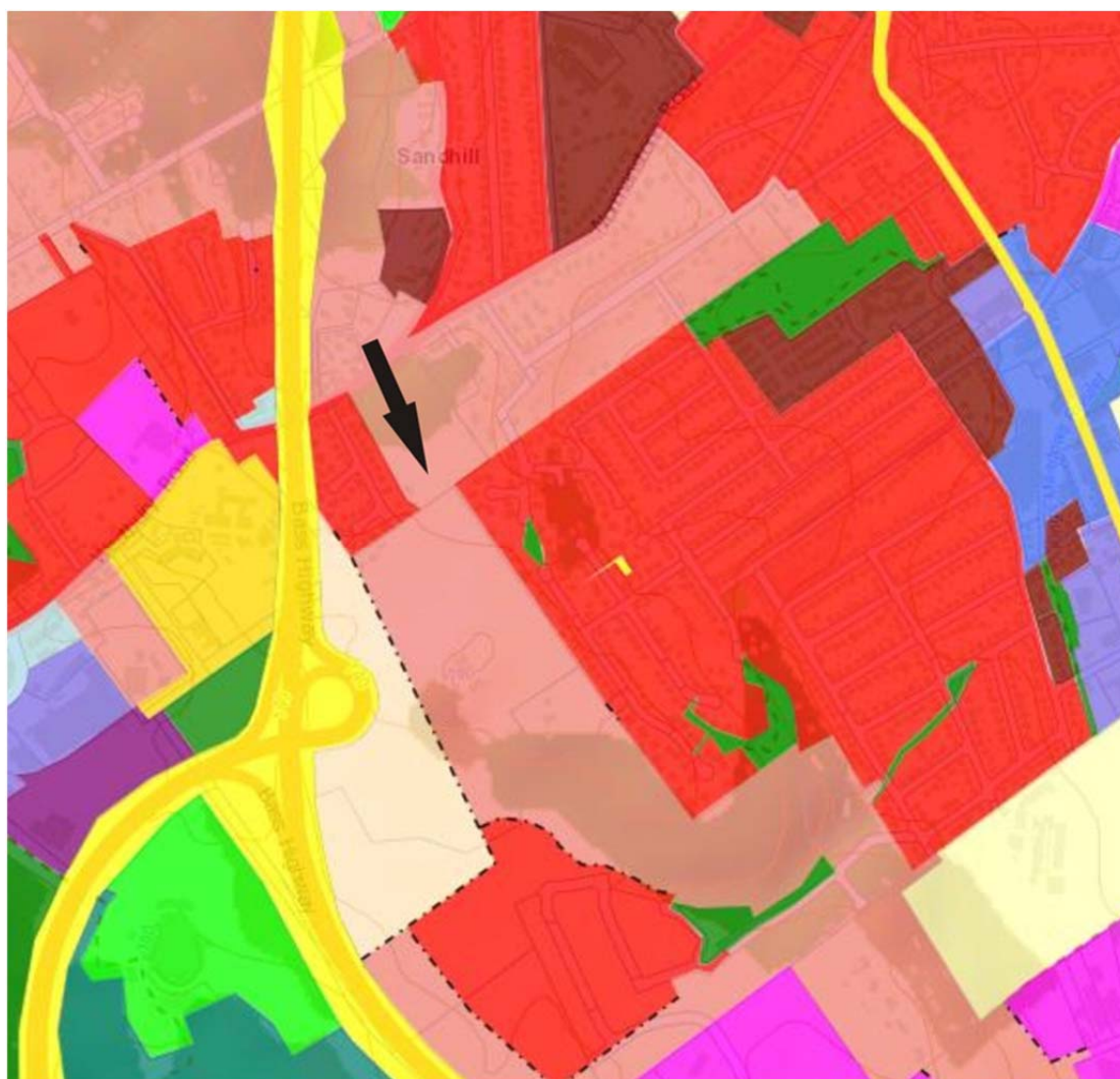


Figure 2 Interim Planning Scheme Zoning Map



Figure 3 Interim Planning Scheme Overlay Map

5.3 Permit Status

Discretion is evoked in relation to the removal of the vegetation due to the fact the site is identified in the Scenic Management Overlay and is identified as having Priority Habitat. The specific discretions relate to the following clauses:

- Clause 7.6.2 Local Scenic Management Areas, P3
- Clause 8.6.1 Habitat Vegetation Management Areas, P1

5.4 Planning Assessment

5.4.1 Scenic Management Code

E7.1 Purpose of the Code

E7.1.1 *The purpose of this provision is to:*

- ensure that siting and design of development protects and complements the visual amenity of defined tourist road corridors;*
- ensure that siting and design of development in designated scenic management areas is unobtrusive and complements the visual amenity of the locality and landscape; and*
- ensure that vegetation is managed for its contribution to the scenic landscape.*

E7.6.2 Scenic Management Areas

Objective	
<i>The siting and design of development is to be unobtrusive in the landscape and complement the character of the scenic management areas</i>	
Acceptable Solutions	Performance Criteria
A2 <i>No vegetation is to be removed</i>	P2 <i>Development that only involves the clearance or removal of vegetation must have regard to:</i> <ol style="list-style-type: none"> <i>the scenic management precinct existing character statement and management objectives in Clause 7.6.3;</i> <i>the physical characteristics of the site;</i> <i>the location of existing buildings;</i> <i>the type and condition of the existing vegetation;</i> <i>any proposed revegetation; and</i> <i>the options for management of the vegetation.</i>

Assessment:

The proposed tree removal is not to facilitate any building works, it is simply to remove trees that have been deemed unsafe and are a hazard. An arboriculturalist has undertaken an assessment of the condition of all of the trees on the property and has recommended removal of the 94 subject to this proposal. Of those 76 are radiata pines a weed species that are largely at the end of their life and in very poor condition. Therefore the removal of the exotic and four native trees is unavoidable and required for public safety. Management of the trees through pruning is not a viable option.

Assessment against each of the criteria under P2 is provided below:

- (a) An assessment of the proposed tree removal against the character and precinct objectives is provided in the table below.
- (b) The removal of the pine trees in particular will alter the physical characteristics of the site. However, all trees proposed for removal are in poor condition and have been recommended for removal by a qualified arboriculturalist. The skyline will be altered following the removal of the trees but it is submitted that the view will actually be enhanced. The pine trees particularly are in poor condition with falling limbs and are not visually appealing. The removal of these trees will open up the view to the well-established native trees at the rear of the site, the line of which along the ridge will largely remain with only the removal of trees numbered 14 having any real impact on the native tree skyline. Further the trees will open up the vista to the established vineyards and historic Mount Pleasant homestead which is considered to be a more aesthetically pleasing vista than of degraded pine species.
- (c) There are no buildings located within proximity of the trees to be removed with the exception of buildings on the lots adjacent to trees 6 and 10.
- (d) The attached arboricultural report clearly demonstrates that all trees subject to this application are in poor condition and their retention is not viable. Please refer to Table 1 for details of the assessment of the condition of each tree proposed to be removed. The arboricultural report in discussing the Radiata Pine trees states:

'The Northern end of the site closest to Westbury Road consists mainly of large Radiata Pine trees, of which there are approximately 76 trees considered to be semi mature to mature of age; there are numerous saplings of this species in the understory as well.

This species of tree is a known weed and is a very invasive tree for the ability to spread seed and grow in almost any site condition, while also raising acidity levels in soils and preventing the growth of natural endemic species.

The majority of the large Radiata pines on this site are considered to be of a mature age for an urban situation and almost all of this species of tree on the Mount Peasant site are considered to be in poor overall condition. They also present numerous hazards to persons and property coming close to their vicinity. Long term management of hazards in these trees is not recommended unless necessary and there should be no argument to having all of this species of tree removed from the site to prevent further spread into the surrounding areas of urban environment and allow for site rejuvenation for future development of the landscape.'

- (e) Given it is the property owner's intention to subdivide this property in the near future (recognising that subdivision can already occur at a low density) it would be unwise to undertake replacement plantings at this stage until an overall subdivision layout is known and replacement plantings can occur strategically in locations that will not be impacted by subdivision or future building works.
- (f) It is clear from the arboriculturalist report that those trees that are proposed to be removed do not have viable options for management. In the instance of tree 10, its proximity to a common boundary and neighbouring buildings means it is more cost effective to remove it. The property owner is not seeking approval to remove any trees that have been identified as viable to retain in the report.

Complies with P2

7.5.3 Schedule 1 - Local Scenic Management Areas

3. Western Hillside Precinct
Existing character statement – description and significance
<p><i>The Western Hillside Precinct includes the dominant hill face that forms the principal western backdrop from the southern approach along the Midlands Highway to the central Launceston area</i></p> <p><i>Its northern section is characterized by residential development of mixed character amongst a vegetated setting and interspersed with bands of vegetation and a treed skyline</i></p> <p><i>The southern section of the Precinct consists of a band of native vegetation on the western side, incorporating the Kate Reed Reserve, and cleared agricultural land to the east allowing views to be seen of the mountain regions to the east of this city. This part of the Precinct also incorporates the newly developing residential area around Southgate Drive.</i></p> <p><i>The Precinct generally contributes to the middle ground and skyline views within the city.</i></p> <p><i>It is significant for its key scenic contribution to providing primarily the treed and rural vistas character to the southern approach into Launceston and the central Launceston area.</i></p>
Management Objectives
<ul style="list-style-type: none"> a) <i>Development within the Precinct must minimise visual intrusion on the hillside by its location, form, scale, exterior materials, colours, and landscaping, particularly when viewed from major public vantage points. Visually dominating or obtrusive development, particularly along the skyline, should be avoided. Middle ground sites must be respectful of the pattern of development in the immediate area.</i> b) <i>Maintain and improve vegetation, particularly trees, within the skyline area of the Precinct. Species selected must be consistent with the dominant character of the immediate setting.</i> c) <i>Trees are to be encouraged throughout the Precinct. Species selected should have a height and form that will contribute to the canopy cover within the area, whilst also being consistent with the dominant character of trees, where there is an established character. Where the area is located within or near a reserve, local native species should prevail.</i> d) <i>Increased residential density is encouraged, but only where development does not adversely interrupt the existing or historic pattern of development, and ability of the site to maintain significant vegetation. The favoured form of this type of development is one building, with shared driveways and gardens to maximise open space available for vegetation.</i> e) <i>Subdivisions are to address bushfire safety and vegetation management requirements to achieve visually unobtrusive development with sufficient vegetation coverage to retain the Precinct's character, or allow for the replacement vegetation to meet the character of the Precinct.</i> f) <i>In the southern part of the Precinct, encourage only sympathetic development that will retain the rural character of the precinct.</i>

Assessment: The proposal is to remove trees that have been deemed unsafe by an arborist. It is reiterated that the majority of the trees to be removed are Pinus Radiata, an exotic weed species.

Assessment in relation to each of the management objectives is as follows:

- a) Not applicable – no development proposed.
- b) Whilst the proposal is for tree removal, all trees have been deemed unsafe. It is submitted that removal of the pine trees, whilst it will alter the skyline, it will actually improve it by allowing the well-established eucalypts to form the skyline with glimpses through to the vineyard and historic Mount Pleasant homestead. The appearance of Eucalypts on the skyline is more consistent with the surrounding character than that of pine trees.
- c) Replacement planting is not proposed at this stage given the treed skyline vista will remain and the owners plans for future subdivision mean that tree planting at the time of subdivision would be more prudent.
- d) Not applicable
- e) Not applicable
- f) Not applicable

On the basis of the above assessment it is submitted that the proposed tree removal will accords with the management objectives.

5.4.2 E 8.0 Biodiversity Code

E8.1 Purpose of the Code

- E8.1 a) support the conservation of biodiversity in the planning scheme area and the northern region, including the extent, condition and connectivity of important habitats and priority vegetation communities, and the number and status of threatened species; and
- b) consider and manage the impact of use or development on biodiversity through:
- (i) minimisation of vegetation and habitat loss or degradation; and
 - (ii) appropriate location of development

E8.6 Development Standards

8.6.1 Habitat and Vegetation Management

Objective:	
To ensure that:	
<ul style="list-style-type: none"> a) vegetation identified as having conservation value as habitat has priority for protection and is appropriately managed to protect those values; and b) the representation and connectivity of vegetation communities is given appropriate protection when considering the impacts of use and development. 	
Acceptable Solutions	Performance Criteria
<p>A1</p> <p>Clearance or disturbance of priority habitat is in accordance with a certified Forest Practices Plan or;</p>	<p>P1</p> <p>Clearance or disturbance of native vegetation within priority habitat or areas identified as priority vegetation communities does not compromise the adequacy of representation of species or vegetation communities, having regard to:</p> <ul style="list-style-type: none"> a) the quality of the site to provide habitat of significance to the maintenance or protection of biodiversity in the planning scheme area; b) the need for the clearance or disturbance of the vegetation; c) the method of clearance or disturbance of the vegetation; d) the extent and quality of the vegetation or habitats affected by the proposal; e) the value of the vegetation as a wildlife corridor; f) the value of riparian vegetation to the protection of habitats and wildlife corridors; g) any rehabilitation and maintenance measures; h) .the impacts of development and vegetation clearance, in proximity to the priority habitat or priority vegetation communities; i) any conservation outcomes achieved and the long term security of any offset for the loss of vegetation, provided in accordance with the Department of Primary Industries, Parks, Water and Environment General Offset Principles;

<i>Acceptable Solutions</i>	<i>Performance Criteria</i>
	<p>j) any agreement under section 71 of the Act relating to vegetation management;</p> <p>k) any conservation covenant made under the Nature Conservation Act 2002, that exists on or adjacent to the site of the proposed development; and</p> <p>l) any recommendations or advice contained in a flora and fauna report.</p>

Assessment:

As this clause only applies to the removal of native trees, the following trees proposed to be removed shall NOT be included in the assessment against this clause:

- 1 x 76 (radiata pines)
- 23 (pin oak)
- 25 (cypress)
- 55 (liquid amber)

This application is accompanied by a Flora and Fauna report prepared by GHD's qualified botanists and a review of that report undertaken by North Barker (refer to letter attachments). Both those reports recognise that of the area identified as priority habitat on the planning scheme overlay maps, more than half constitutes either the FPL or FAG vegetation communities. It is therefore considered that the application of the priority habitat overlay across the site is rather arbitrary and hasn't been undertaken on the basis of a detailed site review.

Given two flora and fauna assessments of the actual conditions on the site have clearly identified the areas which constitute a native vegetation community (DAZ), the focus of this assessment will be on the trees to be removed in those areas.

Therefore of the trees proposed to be removed, it is considered that the following actually fall within an identified native vegetation community:

- 3, 6, 10, 18

Of these trees it is clear from the Arboriculturalist report that numbers 3,6 and 18 are in poor condition and should be removed. Retention of tree 10 is possible according to the report but given its close proximity to a shared residential boundary, the cost of the remedial works required will be high and given the risk it poses to a neighbouring property (located approximately 10 metres from a shed), approval is sought for its removal.

An assessment of the removal of the 4 trees that form part of the DAZ community against the criteria in P1 is as follows:

- (a) Trees 3, 6 and 10 are quite spread out within the section of DAZ community in the north-eastern portion of the lot. It is submitted that careful removal of these trees will have limited impact on the understorey. Neither of the trees proposed to be removed are individually listed and the one hollow bearing tree identified in the flora and fauna report is proposed to be retained. Tree 18 is within an area of DAZ community considered to be low quality.
- (b) The attached arboricultural report clearly demonstrates there is a safety risk posed by each of the trees proposed for removal.
- (c) The tree removal will be undertaken by a qualified arborist to ensure damage to neighbouring trees is avoided.

- (d) Each of the DAZ communities is only very small and tree 18 is in a community that is of low quality. The removal of a small number of trees is not considered to have a significant impact on the community.
- (e) The removal of the individual trees will not impede use of the site as a wildlife corridor.
- (f) Not applicable
- (g) Rehabilitation and maintenance to remaining trees may occur.
- (h) The vegetation is required to be removed for safety reasons.
- (i) It is understood that DPIPWE typically will not require offset where the whole community is not being cleared.
- (j) Not applicable
- (k) Not applicable
- (l) The proposal to remove 4 single trees within the DAZ community that have been assessed as unsafe by an arboriculturalist does not prejudice the attainment of the recommendations in both flora and fauna reports.

Complies with P1

6 Conclusion

The proposal to remove 95 trees that are of poor quality and considered a safety risk on the property is accompanied by a range of reports that clearly demonstrate that the tree removal will not impact on threatened species or wildlife habitat and will not have a significant impact on the skyline vistas.

The North Barker Flora survey has noted that the viability of the identified native vegetation communities is at risk if there is no weed management in terms of the pine trees. The removal of the pine trees on the site is expected to improve the viability of the native vegetation communities.

The proposed tree removal invokes two discretions and it is considered that it meets the relevant performance criteria. Trees are a living organism and have a natural lifespan. It is important within an urban setting such as the subject site that when trees reach the end of their lifespan, and become a hazard to users of the property, they should be removed in an appropriate manner. It is therefore submitted that the proposed tree removal is entirely appropriate and should be approved.

Should you have any queries regarding this application, please do not hesitate to contact the undersigned.

Sincerely



Chloe Lyne

Senior Planner
03 6332 5525



Arborimage

PROFESSIONAL TREE SERVICES

To: Kreglinger Australia Pty Ltd
Att: Rob Harrison, Chloe Lynn

From: Mr Ryan James
Arborimage Professional Tree Services
169 Calder Road, Wynyard, 7325
ABN: 23 169 798 289

**Re: Arboricultural Report on health & safety of trees located at
123 Westbury Road, South Launceston.**





Contents

<u>Page Content</u>	<u>Page Number</u>
Cover Page	1
Contents	2
Introduction & Procedure	3
Method	4
Priority	5
Discussion	6
Map of Tree Locations	7
Tree Survey Results	8 - 20
Photo's 1 – 5	21 – 23
Conclusion	24
Arboricultural consultancy assumptions etc.	25

Introduction:

Arborimage Tree Services has been approached by Chloe Lynn on behalf of Kleglinger Australia Pty Ltd to provide a tree inspection and report on the health and overall safety of specified trees located within the grounds of 123 Westbury Rd, Launceston.

The aim of this survey is to:

1. Assess the trees for overall Health and Stability as well as identifying trees that pose any immediate risk or potential hazards to persons or property within their vicinity.
2. Recommend any tree works that are necessary to reduce the risk and hazards associated with these trees.

These trees have been identified and assessed individually, where there were multiple trees of the same variety and recommendations, these trees were assessed as a group. There is evidence to suggest that some trees may be dangerous and pose a risk to persons and property.

The trees were surveyed from ground level only and no aerial or underground inspections were undertaken. This report only refers to the condition of the trees on the survey date (11/05/15). It must always be remembered that trees are dynamic organisms, being subject to continuous change, and should therefore be re-evaluated on a regular basis.

Procedure:

- Digital Photographs were taken to validate and confirm various tree data issues and other site inconsistencies for future reference.
- All trees on the site were inspected from the ground using Visual Tree Assessment (VTA) Techniques – (Steps 1 & 2, The Body Language of trees: Mathick & Breloer), Quantified Tree Risk Management techniques and the assessor's experience as a working Arborist.
- Data was collected using visual assessment, note taking, tape measure, binoculars and digital photographs.

Method:

The following information has been included in the survey:

- i) *Species*: The Botanical name of each tree (and/or the common name if appropriate) was recorded.
- ii) *Tree Number*: Each tree was given a number which correlates with the map of the site.
- iii) *Height and Canopy Spread*: The Height and Canopy Spread of each tree was estimated and recorded.
- iv) *Age*: The current age category of each tree was estimated using the surveyor's experience, and trees were classed as follows;
 - Young (Y) – established trees up to one third of their expected ultimate height.
 - Semi-mature (SM) – trees between one third and two thirds their expected ultimate height.
 - Mature (M) – trees of more or less full height but still increasing in girth.
- v) *DBH*: (Diameter at Breast Height in cm).The trees were looked at either individually or as a group and the diameter was measured at breast height to give an idea on the significance of the tree to the local area. Generally trees with a DBH greater than 50cm are recognized as being of some significance.
- vi) *Condition*: Condition is the combination of health and structure and provides a final rating for each tree. When there is a variance between the health rating and structure rating, the lowest rating will be recorded as the overall condition rating e.g. any tree with a fair health rating and a poor structure would be given a condition rating of poor.

Priority Rating:

The condition of each tree was assessed using Visual Tree Assessment (VTA) and Quantified Tree Risk Assessment techniques. Trees were classed using the following numbered categories.

- 1: Life threatening - Tree condition is life threatening
- 2: Potentially life threatening – Trees that are not currently life threatening but have the potential to become life threatening in the near or not too distant future.
- 3: Some danger but not life threatening – Trees that are not life threatening but do present some safety or health hazard.
- 4: No apparent danger – Trees that present no apparent danger but may require maintenance for the health of the tree.
- 5: Trees that are or have the potential to cause damage to infrastructure.

Discussion:

The site under discussion is located at 123 Westbury Road, South Launceston. Adjacent to the Historical Homestead of Mount Pleasant. The site is approximately 3.8 hectares in size and currently consists of numerous tree species of mixed variety covering the majority of the site and an under developed driveway leading to an existing residence on the South West corner.

The mature trees on the site mainly consist of three species of tree as follows:

1. Radiata Pine (*Pinus Radiata*)
2. Black Peppermint Gum (*Eucalyptus amygdalina*)
3. White Gum (*Eucalyptus viminalis*)

The remainder of the trees mainly consist of introduced species of European varieties with the exception of some undergrowth Australian Native species of tree and shrubs.

There is a group of mixed European tree species planted in an ornamental fashion on the South West corner of the site. These trees have a lot of aesthetic appeal and are planted in an orderly fashion, with Arboricultural works this area could be quite a feature garden/park in the future plans for the site.

The Northern end of the site closest to Westbury Road consists mainly of large Radiata Pine trees, of which there are approximately 76 trees considered to be semi mature to mature of age; there are numerous saplings of this species in the understory as well.

This species of tree is a known weed and is a very invasive tree for the ability to spread seed and grow in almost any site condition, while also raising acidity levels in soils and preventing the growth of natural endemic species.

The majority of the large Radiata pines on this site are considered to be of a mature age for an urban situation and almost all of this species of tree on the Mount Pleasant site are considered to be in poor overall condition. They also present numerous hazards to persons and property coming close to their vicinity. Long term management of hazards in these trees is not recommended unless necessary and there should be no argument to having all of this species of tree removed from the site to prevent further spread into the surrounding areas of urban environment and allow for site rejuvenation for future development of the landscape.

The second most predominant species of tree throughout the site is the *Eucalyptus amygdalina* (Black Peppermint Gum) This species of tree is endemic to the area and considered of some importance in the overall ecology of the site. There are 27 trees of this species with only 5 of these considered to be of significance to the site due to their mature age, generally good health and structure and habitat values for nesting wildlife. The rest of the trees of this species still hold some significance due to them being endemic to the local area but are generally in poor condition or competing for growing space as the table below will state.

The third most predominant species of tree throughout the site is the *Eucalyptus viminalis* (White Gum) of which there are 13 trees in total with only 1 of these considered ultimately significant to the site due to the mature age, generally good health and structure and habitat values for nesting wildlife.

The table below will list the results of the individual tree assessments and give a better understanding to the health, structure, and significance of individual trees.



Figure 1: Mapped location of trees numbered 2 to 58 assessed in this report. (Trees not numbered are Radiata Pines discussed as no. 1)





Mt. Pleasant Arboriculture Report 2015

Tree Health and Condition Survey

Location: Mt Pleasant, Launceston

Date: 26/05/2015

<i>Tree Number</i>	<i>Species</i>	<i>DBH (Diameter at Breast Height)</i>	<i>H (Height)</i>	<i>C S (Canopy Spread)</i>	<i>Condition (Health & Structure)</i>	<i>Age</i>	<i>Priority</i>	<i>Comments</i>	<i>Recommendations</i>
1 X 76 trees	Pinus radiata (Radiata Pine) X 76	30cm to 120 cm	3m to 25m	2m to 15m	Poor	Young to Mature	1	Known weed species, saplings spreading uncontrollably, Most trees have numerous hazards present and are generally considered senescent and immediately dangerous to persons or property coming close to their vicinity.	Remove all trees of this species from site.
2	Eucalyptus amygdalina (Black Peppermint Gum)	150cm	30m	16m	Fair to Good	M	2	Fairly significant tree for endemic value. Multi trunked at 2 and 5 meters, 4 minor decay pockets in lower trunk, active hollows for habitat. Evident callousing of decay.	Removal of immediate hazards is possible, long term decay issues are foreseeable. Remove major deadwood, weight reduce heavy lateral branches.
3	Allocasuarina species (She oak)	50cm	8m	5m	Poor	SM	3	Failed branches throughout, weak branch unions.	Remove tree.

Mt. Pleasant Arboriculture Report 2015

<i>Tree Number</i>	<i>Species</i>	<i>DBH (Diameter at Breast Height)</i>	<i>H (Height)</i>	<i>C S (Canopy Spread)</i>	<i>Condition (Health & Structure)</i>	<i>Age</i>	<i>Priority</i>	<i>Comments</i>	<i>Recommendations</i>
4	<i>Eucalyptus amygdalina (Black Peppermint Gum)</i>	60cm	22m	10m	Fair to Good	SM	2	Crowded growing conditions, Recently failed branches.	Retention is possible although not seen as overly significant tree.
5 X 2 trees	<i>Eucalyptus amygdalina (Black Peppermint Gum) x 2</i>	40cm	7m	5m	Fair	SM	2	Crowded growing conditions for eventual size, Failed branches and some decay.	Retention is possible although not seen as overly significant tree
6	<i>Eucalyptus amygdalina (Black Peppermint Gum)</i>	120cm	23m	12m	Poor	M	1	Tree in significant decline, numerous past failed branches. Evident decay in base. Crown dieback.	Remove tree
7 X 6 trees	<i>Pinus sylvestris (Scots Pine)</i>	15 to 60cm	10 to 15m	3 to 5m	Fair to Good	SM	3	Crowded growing conditions for eventual size. 2 x larger Scots Pines have good health and structure.	Retention is possible although not seen as overly significant tree
8 x 9 trees	<i>Eucalyptus viminalis (White Gum) X 9</i>	10 to 40cm	5 to 16m	3 to 8m	Fair	Y to SM	2	Crowded growing conditions, 2 x dead trees, 1 tree with crown dieback.	Retention is possible although not seen as overly significant tree



Mt. Pleasant Arboriculture Report 2015

<i>Tree Number</i>	<i>Species</i>	<i>DBH (Diameter at Breast Height)</i>	<i>H (Height)</i>	<i>C S (Canopy Spread)</i>	<i>Condition (Health & Structure)</i>	<i>Age</i>	<i>Priority</i>	<i>Comments</i>	<i>Recommendations</i>
9	<i>Eucalyptus amygdalina (Black Peppermint Gum)</i>	50cm	17m	5m	Good	SM	4	No immediate hazards present	Not overly significant. No immediate works required.
10	<i>Eucalyptus viminalis (White Gum)</i>	140cm	25m	12m	Fair	SM	1	High impact zone with residential property nearby, Decline in upper canopy, evident borer damage. Swelling/decay in major branches.	Significant habitat tree. Crown reduction to remove major hazards and improve stability. Removal of dead/decayed branches. Or remove tree.
11	<i>Pinus sylvestris (Scots Pine)</i>	80cm	22m	8m	Fair to Good	SM	2	3 x failed/hanging branches. Good structure	Removal of dead/hanging branches
12	<i>Eucalyptus amygdalina (Black Peppermint Gum)</i>	120 cm	25m	15m	Good	M	2	Considered significant to local area for endemic and habitat value. Bifurcated trunk at 3 meters fair union. Natural deadwood throughout.	Significant tree worth retaining if possible. Remove major dead/decayed branches, weight reduce heavy lateral branches.
13	<i>Sequoia species Redwood</i>	15cm	6m	3m	Good	Y	3	Healthy tree with good structure, Very crowded by large surrounding trees, Will be very large tree	Not considered significant at this stage. Retention is possible.

Mt. Pleasant Arboriculture Report 2015

Tree Number	Species	DBH (Diameter at Breast Height)	H (Height)	C S (Canopy Spread)	Condition (Health & Structure)	Age	Priority	Comments	Recommendations
14 x 5 trees	<i>Eucalyptus amygdalina</i> (Black peppermint Gum) x 5	50 to 140cm	15 to 25m	5 to 10m	Fair to Good	SM to M	1 - 2	5 trees in row from North to South, 3 x larger trees more significant in Health & Structure, major deadwood mainly in lower canopies, some evidence of borer.	Possible to retain trees with hazard reduction works although long term hazards envisioned if site becomes residential.
15 X 3 trees	<i>Eucalyptus amygdalina</i> (Black Peppermint Gum)x 3	30 to 60cm	12 to 20m	7m	Poor	SM	1	Major failed branches and trunks, heavy lateral branches. Eminent future failure.	Remove trees
16 X 4	<i>Eucalyptus amygdalina</i> (Black Peppermint Gum)x 4	30 to 110cm	20 to 25m	5 to 10m	Fair to Good	SM	2	Crowded growing conditions, Overhanging driveway, Major deadwood throughout, some internal branch decline, 3 x recent branch failures close to drive. Some decay present and weak branch unions.	Retention is possible by removal of hazards and weight reducing heavy lateral branches. Not considered overly significant to site.

Mt. Pleasant Arboriculture Report 2015

Tree Number	Species	DBH (Diameter at Breast Height)	H (Height)	C S (Canopy Spread)	Condition (Health & Structure)	Age	Priority	Comments	Recommendations
17	<i>Eucalyptus amygdalina</i> (Black Peppermint Gum)	240cm	30m	15m	Good	M	2	Very significant tree for age and endemic values. Bifurcated trunk at 1m with good union, some deadwood and heavy lateral branches.	Removal of deadwood and decayed branches, weight reduction of heavy lateral branches.
18	<i>Eucalyptus amygdalina</i> (Black Peppermint Gum)	100cm	18m	10m	Poor	SM	2 + 5	Bifurcated trunk at ground has failed, Half tree is dead, Other half is leaning into canopy of neighbouring tree.	Remove tree
19	<i>Eucalyptus amygdalina</i> (Black Peppermint Gum)	140cm	25m	15m	Good	SM	2	Very significant tree for age and endemic values. Bifurcated trunk at 3m with good union, some deadwood and heavy lateral branches.	Removal of deadwood and decayed branches, weight reduction of heavy lateral branches.
20	<i>Eucalyptus amygdalina</i> (Black Peppermint Gum)	80cm	12m	8m	Fair to good	M	2	Very significant tree for age and endemic values. Multi trunked at base x 4 with fair to good unions, Some swelling in trunks suggest insect activity, Deadwood throughout	Removal of deadwood and decayed branches, weight reduction of heavy lateral branches. If retained would benefit from cable bracing.



Tree Number	Species	DBH (Diameter at Breast Height)	H (Height)	CS (Canopy Spread)	Condition (Health & Structure)	Age	Priority	Comments	Recommendations
21	<i>Eucalyptus amygdalina</i> (Black Peppermint Gum)	80cm	20m	10m	Poor to Fair	SM	2	Heavy lean to north, some decay in lower trunk.	Remove tree.
22	Quercus Palustris (Pin Oak)	70cm	16m	10m	Good	SM	3	Significant amenity tree with good health, structure and overall habit of tree, would benefit from formal prune.	Retain if possible, uplift canopy and formal prune.
23	Quercus Palustris (Pin Oak)	40cm	15m	8m	Fair to Good	SM	3	Crowded growing position for eventual size, Misshapen canopy spread.	Remove tree

Mt. Pleasant Arboriculture Report 2015

<i>Tree Number</i>	<i>Species</i>	<i>DBH (Diameter at Breast Height)</i>	<i>H (Height)</i>	<i>C S (Canopy Spread)</i>	<i>Condition (Health & Structure)</i>	<i>Age</i>	<i>Priority</i>	<i>Comments</i>	<i>Recommendations</i>
24	<i>Eucalyptus amygdalina (Black Peppermint Gum)</i>	70cm	15m	10m	Fair	SM	2	Crowded growing conditions	Remove tree
25	Cuppressus species (Cypress)	60cm	18m	5m	Fair	SM	4	Crowded growing conditions for eventual size.	Remove tree
26	<i>Quercus coccinea (Scarlet Oak)</i>	110cm	16m	18m	Good	SM	3	Significant amenity value, very good example of this species. Would benefit from formal prune.	Significant tree worth retaining if possible, formal prune and uplift canopy.
27	<i>Eucalyptus amygdalina (Black Peppermint Gum)</i>	85cm	15m	10m	Poor	SM	2	Bifurcated trunk with one side completely dead, extensive decay in main trunk.	Remove tree.

Mt. Pleasant Arboriculture Report 2015

<i>Tree Number</i>	<i>Species</i>	<i>DBH (Diameter at Breast Height)</i>	<i>H (Height)</i>	<i>C S (Canopy Spread)</i>	<i>Condition (Health & Structure)</i>	<i>Age</i>	<i>Priority</i>	<i>Comments</i>	<i>Recommendations</i>
28	<i>Eucalyptus amygdalina</i> (Black Peppermint Gum)	40cm	14m	5m	Poor	SM	2	Decay at base and at 1.5 m of trunk.	Remove Tree.
29	<i>Arbutus unedo</i> (Irish Strawberry)	40cm	4m	4m	Fair	SM	3	Some crown decline and deadwood throughout, Multi trunked at base.	Not considered overly significant to site but can be retained if necessary by formal prune.
30	<i>Eucalyptus nicholii</i> (Narrow leaved peppermint Gum)	100cm	16m	13m	Fair to Good	M	3	Significant example of species, Small hollow at base with active bee hive, 2 x large branch failures on NE of tree.	Tree can be retained by weight reduction of heavy lateral branches and formal prune.
31	<i>Quercus palustris</i> (Pin Oak)	20cm	8m	4m	Good	Y	4	Crowded by large peppermint gum, leaning to west, Good habit and form.	Not considered overly significant to site, No hazards present.

Mt. Pleasant Arboriculture Report 2015

<i>Tree Number</i>	<i>Species</i>	<i>DBH (Diameter at Breast Height)</i>	<i>H (Height)</i>	<i>C S (Canopy Spread)</i>	<i>Condition (Health & Structure)</i>	<i>Age</i>	<i>Priority</i>	<i>Comments</i>	<i>Recommendations</i>
32	<i>Castanea dentata (Chestnut sp)</i>	30cm	5m	5m	Good	SM	4	Good habit and form for species, Not overly significant at this size.	Retain if possible No hazards present
33	<i>Eucalyptus viminalis (White Gum)</i>	70cm	16m	8m	Good	Sm	4	Good health and structure, no immediate hazards present	No immediate works required, not considered overly significant to site at this stage.
34	<i>Eucalyptus viminalis (White Gum)</i>	120cm	20m	15m	Fair to Good	M	2	Major deadwood and borer damage at top of main trunk plus 3 branches.	Tree can be retained if required by removal of dead/decayed branches and weight reduction of heavy lateral branches. Or remove.
35	<i>Eucalyptus viminalis (White Gum)</i>	320cm	35m	20m	Fair to Good	M	1	Very large endemic tree considered significant to local area and for habitat reasons, 6 x past failed branches, dead branches throughout. Within 40m of existing residential. Possibly largest White Gum in local area.	Tree should be retained if possible, Remove major dead/decayed branches, Weight reduce crown and heavy lateral branches.



<i>Tree Number</i>	<i>Species</i>	<i>DBH (Diameter at Breast Height)</i>	<i>H (Height)</i>	<i>C S (Canopy Spread)</i>	<i>Condition (Health & Structure)</i>	<i>Age</i>	<i>Priority</i>	<i>Comments</i>	<i>Recommendations</i>
36	<i>Sequoia species (Redwood)</i>	70cm	16m	9m	Good	SM	4	Good health and structure, very large tree at maturity, Estimated 1/10 of eventual size.	No immediate hazards present. Not considered overly significant to site at this stage.
37	<i>Picea pungens (Blue Spruce)</i>	25cm	8m	5m	Good	Sm	3	Good health and structure, English Ivy growing on trunk will cause problems if not removed.	Remove English ivy and cotoneaster tree under.
38	<i>Betula pendula (Silver Birch)</i>	30cm	11m	5m	Good	SM	3	Major sucker growth at base, generally good form for species.	Formal prune would improve long term health and structure.
39	<i>Betula pendula (Silver Birch)</i>	30cm	11m	5m	Good	SM	4	Generally good form for species.	No immediate works required.
40	<i>Pyrus species (Ornamental pear)</i>	50cm	14m	10m	Good	M	3	Good form, health and structure, some dead/decayed branches.	Formative prune.



Mt. Pleasant Arboriculture Report 2015

<i>Tree Number</i>	<i>Species</i>	<i>DBH (Diameter at Breast Height)</i>	<i>H (Height)</i>	<i>C S (Canopy Spread)</i>	<i>Condition (Health & Structure)</i>	<i>Age</i>	<i>Priority</i>	<i>Comments</i>	<i>Recommendations</i>
41	Pyrus species (Ornamental pear)	25cm	10m	5m	Good	SM	4	Good form, health and structure, some dead/decayed branches.	Formative prune.
42	Picea species (Spruce)	35cm	10m	6m	Good	Sm	3	Good health and structure, English Ivy growing on trunk will cause problems if not removed. Low branches.	Remove English ivy and cotoneaster tree under.
43	Quercus palustris (Pin Oak)	70cm	17m	12m	Good	SM	3+5	Significant amenity value to site, minimal overall hazards, very busy internal branches, Low branches to ground.	Formative prune would improve long term health and structure. Uplift to 4m.
44	Liquidamber styraciflua	45cm	16m	12m	Good	SM	4	Crowded on southern side by Oak, Limited growing space for eventual size.	Can be retained but may suit removal to allow surrounding trees to benefit.
45	Cedrus atlantica (Atlantic Cedar)	50cm	16m	10m	Good	M	3	Good form, health and structure.	No immediate works required.



Mt. Pleasant Arboriculture Report 2015

Tree Number	Species	DBH (Diameter at Breast Height)	H (Height)	C S (Canopy Spread)	Condition (Health & Structure)	Age	Priority	Comments	Recommendations
46	<i>Betula pendula</i> (Silver Birch)	25	14m	6m	Good	SM	4	Good habit, health and structure.	No immediate works required.
47	<i>Acer species</i> (Maple)	100cm	17m	12m	Fair to Good	SM	3	Multi trunked at 2m with tight trunk unions, crossing/rubbing branches throughout.	Formative pruning by removing crossing/rubbing branches to improve future health and structure. Not significant to site
48	Sorbus species (Rowan)	80cm	5m	5m	Fair to Good	Sm	3	Multi trunked at base with busy internal branch habit.	Formative prune to improve future health and structure.
49	<i>Picea species</i> (Spruce)	30cm	7m	5m	Good	Y	4	Good habit, health and structure.	No immediate works required.
50	<i>Cedrus atlantica</i> (Atlantic Cedar)	50cm	17m	10m	Good	SM	4	Considered significant for this species with good habit, health and structure.	Formative prune and possible uplift of low branches.

Mt. Pleasant Arboriculture Report 2015

<i>Tree Number</i>	<i>Species</i>	<i>DBH (Diameter at Breast Height)</i>	<i>H (Height)</i>	<i>CS (Canopy Spread)</i>	<i>Condition (Health & Structure)</i>	<i>Age</i>	<i>Priority</i>	<i>Comments</i>	<i>Recommendations</i>
51	<i>Cupressus species (Cypress)</i>	40cm	15m	8m	Good	SM	4	Good health and structure	No immediate works required
52 X 2 trees	<i>Cupressus species (Cypress)</i>	35cm	14m	6m	Good	Sm	4	Good health and structure	No immediate works required.
53 X 3 trees	<i>Betula pendula (Silver Birch) x 3</i>	30cm	9m	5m	Good	SM	4	Good health and structure	No immediate works required
54	<i>Acacia melonoxylon (Blackwood wattle)</i>	40cm	11m	8m	Good	SM	4	Minor deadwood, good health and structure	No immediate works required
55	<i>Liquidamber styraciflua (Liquidamber)</i>	40cm	12m	7m	Good	SM	3	Crowded growing conditions for eventual size	Possible removal to allow other trees to benefit.

Photo 1: Showing large branch failures and poor Health and Structure of the large Radiata Pine trees on the Northern most end of the site.



Photo 2: Tree number 2, Eucalyptus amygdalina (Black Peppermint Gum) This species is considered endemic to this site. Unfortunately most of these trees are overcrowded by surrounding trees and do present long term hazards with overweighted branches, dead/decayed sections and some poor health and structure. There are 4 to 6 very large trees of this species on site that may be worth retaining,



Photo 3: Tree number 35, *Eucalyptus viminalis* (White Gum), this tree is considered quite significant to the site, being that it is endemic and looks to be the largest tree of its species in the local area. It presents numerous hazards in its current state but should be retained if possible using Arboricultural pruning methods.



Conclusion:

It is proposed that at some stage in the near future the site discussed in this report at 123 Westbury Road, South Launceston, will be developed for residential purposes, subject to approval with the local Council.

With the numerous weed species rapidly covering the site and many other trees in decline for various reasons, it should be considered that by developing the site and retaining some of the trees for aesthetic and amenity value, the long term management of this site would be greatly improved.

I would suggest that some of the larger trees of endemic value, that show exceptional health and structure be retained by Arboricultural pruning methods and also quite a few of the introduced European varieties can add huge amenity value to the long term planning and development of this site. There are large areas that contain trees seen as being senescent, that is 'of a mature age with irreversible decline issues', and numerous trees young and semi-mature in age that are competing for good growing conditions and therefore have become hazardous and unmanageable if the site were to be developed for residential purposes. By developing and eventually landscaping the site with trees and plants suitable to the site conditions, I consider the site can be greatly improved from its current state.

If there are any further questions in relation to this report please feel free to contact me.

Regards,

Ryan James

Arboricultural Consultancy Assumptions and Limiting Conditions

1. Any legal description provided to the consultant is assumed to be correct. Any titles and ownerships to any property are assumed to be good. No responsibility is assumed for matters legal in character.
2. It is assumed that any property/project is not in violation of any applicable codes, ordinances, statutes or other government regulations.
3. Care has been taken to obtain all information from reliable sources. All data has been verified in so far as possible; however the consultant can neither guarantee nor be responsible for the accuracy of the information provided by others.
4. The consultant shall not be required to give testimony or to attend court by reason of this report unless subsequent contractual arrangements are made, including payment of an additional fee for such services.
5. Loss or alteration of any part of this report invalidates the entire report.
6. Possession of this report or a copy thereof does not imply right of publication or use for any purpose by anyone but the person to whom it is addressed, without the prior written consent of the consultant.
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9. Sketches diagrams, graphs and photographs in this report, being intended as visual aids, are not necessarily to scale and should not be construed as engineering or architectural reports or surveys.
10. Unless expressed otherwise: 1) Information contained in this report covers only those items that were examined and reflect the condition of those items at the time of inspection; and 2) the inspection is limited to visual examination accessible components without dissection, excavation or probing. There is no warranty or guarantee, expressed or implied that the problems or deficiencies of the plants property in question may not arise in the future.

MT PLEASANT, 123 WESTBURY ROAD, LAUNCESTON

AUDIT OF GHD REPORT

VEGETATION ASSESSMENT

This report has been prepared to assess the native vegetation at the Mt Pleasant Heritage Property at 123 Westbury Road, Launceston. The purpose of this assessment is to review the findings and conclusions made in a separate investigation undertaken by GHD earlier in the year.¹

The survey was undertaken on the 11th December 2012 by Karen Ziegler from North Barker Ecosystem Services. This was a time limited survey of 4 hours that concentrated on native species and native vegetation communities. The horticultural specimens in the cleared urban area were not identified unless they appeared in amongst the native vegetation as environmental weeds.

The area closest to the Westbury Road supports old plantings of *Pinus* species and remnants of dry sclerophyll eucalypt forest. Both the native and planted forest supports a range of introduced and native understorey vegetation.

There is evidence that some native vegetation understorey has been removed in the recent past; shrubs have been cut off at ground level and some areas of grassy vegetation slashed.

The following description is of land shown in the attached figure. The vegetation is subdivided into the equivalent TASVEG classification.²

- Approximately 0.4 ha of *Eucalyptus amygdalina* inland forest on Cainozoic deposits is present in two patches (DAZ). A third area of DAZ mapped by GHD was considered too small to be considered a community – there was only one eucalypt present and a very small area of native vegetation amongst planted pines.

This community is in poor to moderate condition due to the number of introduced species, particularly in the more southerly patch, however a moderate diversity of native species still persists and threatened flora species are present in both patches. The abundance of pine seedlings and the presence of the 'declared weed'³, boneseed, suggest that without pro-active management for the natural values, the native species diversity may decline in the face of increasing weed competition. The structural integrity has been significantly simplified with the removal of moderate sized trees. The shape and size of the patches also increases the pressure from invasive species.

¹ Report titled: Kreglinger Australia Pty Ltd. Report for Mount Pleasant. Flora and Fauna Assessment. April 2012

² TASVEG is the Tasmanian state vegetation map maintained by the Tasmanian State Government which attributes all land to a series of mapping units. The mapping units are described in Harris & Kitchener (2005).

³ *Weed Management Act 2001*

The canopy is dominated by black peppermint (*Eucalyptus amygdalina*) with white gum (*Eucalyptus viminalis*) also present. The sparse tall shrub, low tree layer contains bull oak (*Allocasuarina littoralis*), drooping sheoak (*Allocasuarina verticillata*), native cherry (*Exocarpos cupressiformis*), silver wattle (*Acacia dealbata*), black wattle (*Acacia mearnsii*), blackwood (*Acacia melanoxylon*) and regrowth *E. amygdalina*. The ground cover is dominated by grasses with wallabygrass (*Austrodanthonia* sp.) and speargrass (*Austrostipa* sp.). Common native species present include the threatened chocolate lily (*Arthropodium strictum*), flax lily (*Dianella revoluta*), grass lily (*Caesia parviflora*), narrowleaf swordgrass (*Lepidosperma gunnii*), golden heath (*Styphelia adscendens*) and arrow flatpea (*Platylobium triangulare*). The patch of DAZ to the south has an understorey dominated by introduced grasses although there is a substantial patch of the vulnerable *Scleranthus fasciculatus* amongst the quaking grass. A list of species recorded is in Appendix A.

- DAZ is listed as threatened under the *Tasmanian Nature Conservation Act 2002*.



Recently cleared understorey in DAZ



DAZ with abundant pine wildlings

- There is 1.3 ha of land broadly identified as plantation for silviculture (FPL) which is a historical planting that supports a range of native flora.
- There is 2.1 ha of land that has been mapped as urban area (FUR) which is not agricultural land although it has been in the past. It is dominated by introduced grasses with occasional mature eucalypts and planted horticultural specimen trees.
- 98 species were recorded of which 62 are native including 2 threatened plant species listed under the *Tasmanian Threatened Species Protection Act 1995* (TSPA) - *Arthropodium strictum* - chocolate lily (rare) and *Scleranthus fasciculatus* - spreading knawel (vulnerable) and 5 'declared' weeds listed under the *Weed Management Act 1999*. No species listed under the *Commonwealth Environment Protection and Biodiversity Conservation Act 1999* (EPBCA) were recorded.
- The population of *Arthropodium strictum* – chocolate lily listed as rare under the *Tasmanian Threatened Species Protection Act 1995* (TSPA) from the survey is in excess of 250 plants. This species occurs in both the plantation and remnant DAZ. There would be highly likely to be more

plants particularly in the understorey to the pine plantings but time did not allow the thorough assessment of the population.

- The population of *Scleranthus fasciculatus* – spreading knawel listed as vulnerable under the Tasmanian *Threatened Species Protection Act 1995* (TSPA) covers an area of 4 square metres. It is not possible to distinguish individual plants.



Chocolate lily (r/-)



Spreading knawel (v/-)

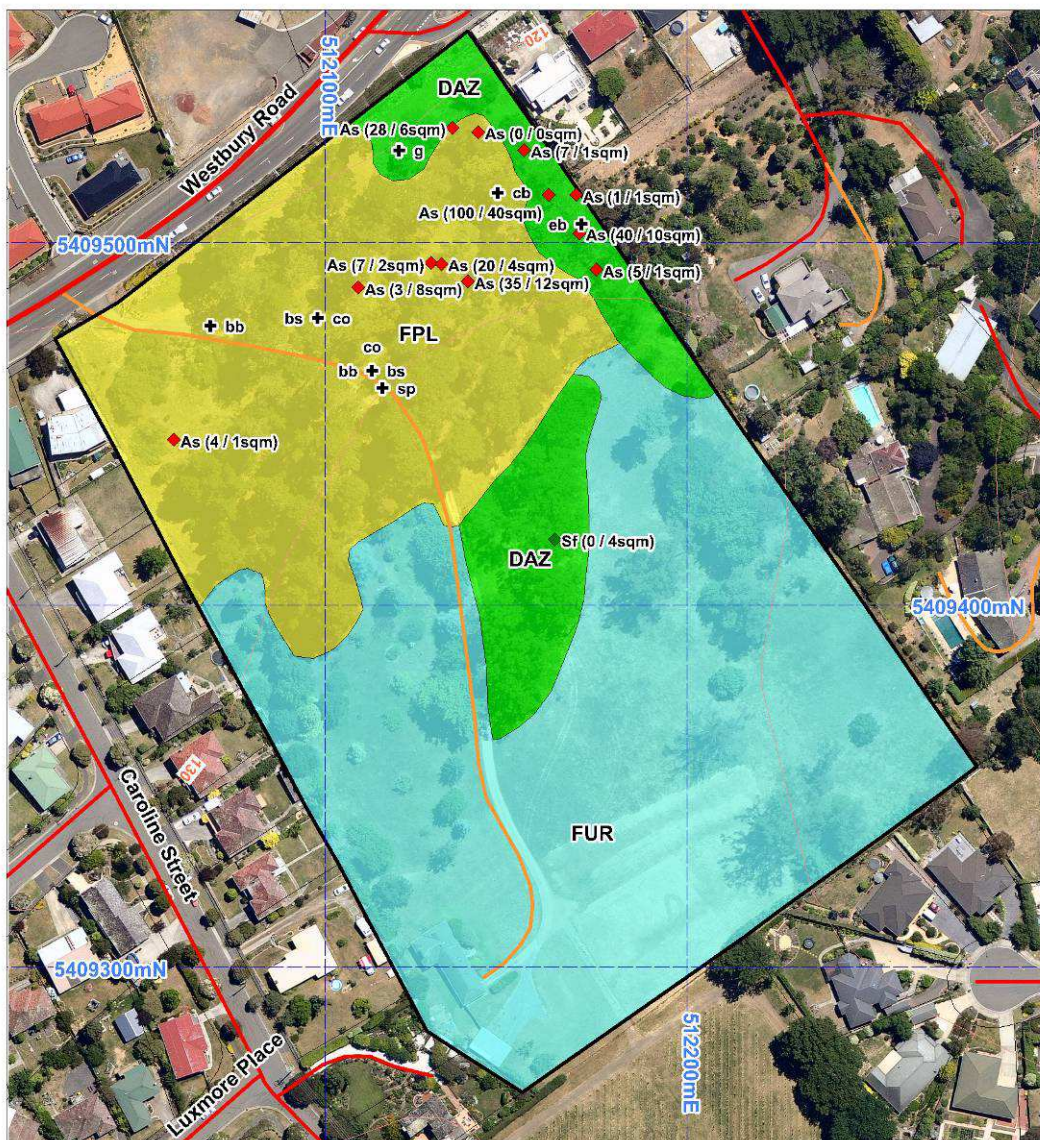
- Destruction or disturbance of either or both species of plant listed under the Tasmanian *Threatened Species Protection Act 1995* (TSPA) will require a permit.
- Two native orchids were recorded being *Thelymitra sp* and *Microtis parviflora*. The *Thelymitra sp* were going to seed and could not be identified to species level. There are no listed *Thelymitra* species recorded within 5 km of the study area.
- There were some differences in the species list between the two surveys that are attributable to season. For example two species absent from the GHD survey are *Caesia parviflora* which would have died down by autumn and *Wahlenbergia stricta* which is much more visible when flowering. This justifies the recommendation by GHD that “follow up surveys may be required”.
- There were minor differences in the shrubs recorded. The North Barker survey did not identify either of the *Epacris* species. These may have been cleared recently. There were also trees and shrubs identified not recorded by GHD including *Styphelia adscendens* and *Allocasuarina verticillata*. The reports also disagreed on the species of *Lepidosperma*. The implications of these differences are insignificant.
- Figure 1 shows the vegetation and threatened species and some of the locations of weed species.
- The extent of *Eucalyptus amygdalina* forest (DAZ) approximates in location but is less in area than that shown on the GHD report.
- It is acknowledged that the long term viability of these small and degraded remnants is poor. In the absence of committed weed

control (pine and boneseed removal) it can be anticipated that the habitat for threatened species may decline.

- The suburban environment does not provide the most suitable location for reserving chocolate lily (*Arthropodium strictum*) which is well represented in larger well known reserves in the greater Launceston area.
- Further research may be needed to provide context to any proposal to remove plants of spreading knawel (*Scleranthus fasciculatus*). There are 13 records for this species from the North Midlands bioregion of which only two are located within private reserves – none in dedicated or other formal reserves.⁴

⁴ Lawrence et al (2008)

Figure 1 – Vegetation Community, Threatened Flora and Weeds



Vegetation Communities

(Using Tasveg 2.0 mapping units)

- DAZ Eucalyptus amygdalina inland forest and woodland on Cainozoic deposits
- FPL Plantations for silviculture
- FUR Urban areas

Threatened Flora (Status - TSPA/EPBCA)

See map for number of plants and area occupied (sqm)

- ◆ As - *Arthropodium strictum* (r)
- ◆ Sf - *Scleranthus fascicularis* (v)

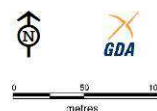
Weeds

(Declared and major environmental weeds only)

- + bb - blackberry
- + bs - boneseed
- + cb - canary broom
- + co - cotoneaster
- + eb - english broom
- + g - gorse
- + sp - sweet pittosporum

The mapping has been undertaken using a non-differential GPS and interpretation of aerial photography. Average accuracy of data is +/- 10m.

Base data from theLIST, © State of Tasmania
Datum: GDA94, AHD Grid: MGA Zone 55



REFERENCES

Harris , S & Kitchener, A. (2005). From Forest to Fjaeldmark: Descriptions of Tasmania's Vegetation. Department of Primary Industries, Water and Environment, Printing Authority of Tasmania, Hobart.

Lawrence, N., Storey, D., Whinam, J. (2008). *Reservation Status of Tasmanian Native Higher Plants, Biodiversity Conservation report 07/1*. Department of Primary Industries & Water

APPENDIX A – PLANT SPECIES RECORDED

Status codes:

ORIGIN

i - introduced

d - declared weed WM Act

en - endemic to Tasmania

t - within Australia, occurs only in Tas.

NATIONAL SCHEDULE

EPBC Act 1999

CR - critically endangered

EN - endangered

VU - vulnerable

STATE SCHEDULE

TSP Act 1995

e - endangered

v - vulnerable

r - rare

Sites:

1 DAZ remnant - E512150, N5409500

11/12/2012 Karen Ziegler

2 FPL with some native understorey (historical planting) - E512150, N5409450 11/12/2012 Karen Ziegler

Site Status	Name	Common name	
DICOTYLEDONAE			
AQUIFOLIACEAE			
1	<i>Ilex aquifolium</i>	holly	i
ARALIACEAE			
1	<i>Hedera helix</i>	ivy	i
ASTERACEAE			
2	<i>Brachyscome aculeata</i>	hill daisy	
1 2	<i>Chrysanthemoides monilifera subsp. monilife</i>	boneseed	d
1	<i>Cirsium vulgare</i>	spear thistle	i
2	<i>Euchiton collinus</i>	common cottonleaf	
1	<i>Gazania linearis</i>	tufted gazania	i
1 2	<i>Hypochaeris radicata</i>	rough catsear	i
1 2	<i>Leontodon saxatilis</i>	hairy hawkbit	i
1	<i>Osteospermum fruticosum</i>	trailing daisy	i
1	<i>Senecio quadridentatus</i>	cotton fireweed	
2	<i>Senecio sp.</i>	groundsel	
2	<i>Sonchus oleraceus</i>	common sowthistle	i
CAMPANULACEAE			
1	<i>Wahlenbergia stricta subsp. stricta</i>	tall bluebell	
CARYOPHYLLACEAE			
1	<i>Scleranthus fasciculatus</i>	spreading knawel	v
CASUARINACEAE			
1	<i>Allocasuarina littoralis</i>	black sheoak	
1	<i>Allocasuarina verticillata</i>	drooping sheoak	
DILLENACEAE			
1 2	<i>Hibbertia hirsuta</i>	hairy guineaflower	en
EPACRIDACEAE			
2	<i>Acrotriche serrulata</i>	ants delight	
2	<i>Astroloma humifusum</i>	native cranberry	
1 2	<i>Styphelia adscendens</i>	golden heath	
EUPHORBIACEAE			
2	<i>Beyeria viscosa</i>	pinkwood	
1	<i>Poranthera microphylla</i>	small poranthera	
FABACEAE			
1	<i>Cytisus scoparius</i>	english broom	d
1	<i>Genista monspessulana</i>	canary broom	d
1	<i>Lathyrus tingitanus</i>	tangier pea	i

1	<i>Medicago polymorpha</i>	burr medick	i
1	<i>Platylobium triangulare</i>	arrow flatpea	
1	<i>Ulex europaeus</i>	gorse	d
1	<i>Vicia sp.</i>	vetch, tare	i
GENTIANACEAE			
1	<i>Centaurium erythraea</i>	common centaury	i
GOODENIACEAE			
1	<i>Goodenia lanata</i>	trailing native-primrose	
HALORAGACEAE			
1 2	<i>Gonocarpus tetragynus</i>	common raspwort	
MIMOSACEAE			
1 2	<i>Acacia dealbata subsp. dealbata</i>	silver wattle	
1	<i>Acacia genistifolia</i>	spreading wattle	
2	<i>Acacia longifolia</i>	coast wattle	
2	<i>Acacia longifolia subsp. sophorae</i>	coast wattle	
1	<i>Acacia mearnsii</i>	black wattle	
1	<i>Acacia melanoxylon</i>	blackwood	
MYRTACEAE			
1 2	<i>Eucalyptus amygdalina</i>	black peppermint	en
1	<i>Eucalyptus viminalis subsp. viminalis</i>	white gum	
OXALIDACEAE			
1 2	<i>Oxalis perennans</i>	grassland woodsorrel	
PITTOSPORACEAE			
1 2	<i>Billardiera mutabilis</i>	green appleberry	
1 2	<i>Bursaria spinosa subsp. spinosa</i>	prickly box	
2	<i>Pittosporum undulatum</i>	sweet pittosporum	i
PLANTAGINACEAE			
1	<i>Plantago lanceolata</i>	ribwort plantain	i
POLYGONACEAE			
1	<i>Acetosella vulgaris</i>	sheep sorrel	i
PROTEACEAE			
1 2	<i>Banksia marginata</i>	silver banksia	
ROSACEAE			
1	<i>Acaena echinata</i>	spiny sheeps burr	
1	<i>Acaena novae-zelandiae</i>	common buzzy	
1 2	<i>Cotoneaster sp.</i>	cotoneaster	i
1	<i>Crataegus monogyna</i>	hawthorn	i
1	<i>Prunus sp.</i>		i
2	<i>Rubus fruticosus</i>	blackberry	d
RUBIACEAE			
1	<i>Coprosma repens</i>	mirrorbush	i
SANTALACEAE			
1	<i>Exocarpos cupressiformis</i>	common native-cherry	
STACKHOUSIACEAE			
2	<i>Stackhousia monogyna</i>	forest candles	
THYMELAEACEAE			
1 2	<i>Pimelea humilis</i>	dwarf riceflower	
GYMNOSPERMAE			
PINACEAE			
2	<i>Pinus pinaster</i>	maritime pine	i
2	<i>Pinus radiata</i>	radiata pine	i
MONOCOTYLEDONAE			

	AMARYLLIDACEAE		
1 2	<i>Agapanthus sp.</i>	agapanthus	i
	CYPERACEAE		
1	<i>Carex breviculmis</i>	shortstem sedge	
1	<i>Carex sp.</i>	sedge	
2	<i>Gahnia radula</i>	thatch sawsedge	
1 2	<i>Lepidosperma gunnii</i>	narrow sword-sedge	
1	<i>Schoenus apogon</i>	common bogsedge	
	IRIDACEAE		
2	<i>Freesia hybrid</i>	freesia	i
	JUNCACEAE		
1	<i>Luzula sp.</i>	luzula	
	LILIACEAE		
1 2	<i>Arthropodium strictum</i>	chocolate lily	r
1	<i>Burchardia umbellata</i>	milkmaids	
1	<i>Caesia parviflora var. parviflora</i>	pale grasslily	
2	<i>Caesia parviflora var. vittata</i>	dark-blue grasslily	
1 2	<i>Dianella revoluta</i>	spreading flaxlily	
1	<i>Dianella tasmanica</i>	forest flaxlily	
	ORCHIDACEAE		
1	<i>Microtis parviflora</i>	slender onion-orchid	
1 2	<i>Thelymitra sp.</i>	sun-orchid	
	POACEAE		
1 2	<i>Aira caryophyllea</i>	silvery hairgrass	i
1	<i>Anthoxanthum odoratum</i>	sweet vernalgrass	i
1	<i>Arrhenatherum elatius var. bulbosum</i>	bulbous oatgrass	i
1 2	<i>Austrodanthonia caespitosa</i>	common wallabygrass	
1	<i>Austrodanthonia tenuior</i>	purplish wallabygrass	
2	<i>Austrostipa sp.</i>	speargrass	
2	<i>Austrostipa stiposa</i>	corkscrew speargrass	
2	<i>Briza maxima</i>	greater quaking-grass	i
1	<i>Briza minor</i>	lesser quaking-grass	i
2	<i>Bromus catharticus</i>	prairie grass	i
1	<i>Bromus diandrus</i>	great brome	i
1	<i>Cynosurus echinatus</i>	rough dogstail	i
1 2	<i>Dactylis glomerata</i>	cocksfoot	i
1 2	<i>Ehrharta sp.</i>	ricegrass	
1 2	<i>Elymus scaber</i>	rough wheatgrass	
2	<i>Hordeum sp.</i>	barley, barley grass	i
1	<i>Lolium sp.</i>	ryegrass	i
1	<i>Phalaris sp.</i>	canarygrass	i
1	<i>Themeda triandra</i>	kangaroo grass	
2	<i>Vulpia sp.</i>	fescue	i
	XANTHORRHOEACEAE		
2	<i>Lomandra longifolia</i>	sagg	
1 2	<i>Lomandra nana</i>	dwarf mat-rush	



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Kreglinger Australia Pty Ltd

Report for Mount Pleasant Flora and Fauna Assessment

April 2012



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The services undertaken by GHD in connection with preparing this Report:

- Were limited to those specifically detailed in the "Methodology" section of this Report;*
- The study area was surveyed in March which is a suboptimal time of year to survey for threatened annual species such as orchids or lilies. As such, it is possible that some annual species may occur on site but were not recorded during the survey due to seasonality issues; and*
- The site was surveyed for botanical species and fauna habitat values. As such targeted searches for threatened fauna were excluded from the scope of work and assessments are based on identified habitat values.*

The opinions, conclusions and any recommendations in this Report are based on assumptions made by GHD when undertaking services and preparing the Report ("Assumptions"), including (but not limited to):

- Information from database searches is assumed to be correct; and*
- Information on the proposed development was provided by the client and is assumed to be correct.*

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Contents

1.	Introduction	1
2.	Methodology	3
2.1	Background Research	3
2.2	Field Assessment	3
2.3	Statement of Compliance	3
3.	Botanical Values	5
3.1	Desktop Review of Threatened Flora	5
3.2	Flora Species Recorded within the Study Area	12
3.3	Introduced Plants	15
3.4	Vegetation Communities	15
4.	Zoological Values	19
4.1	Desktop Review of Threatened Fauna	19
4.2	Fauna Habitat within the Study Area	22
5.	Conclusions and Recommendations	24

Table Index

Table 1	Threatened flora previously recorded in, or within 5 km, of the study area	5
Table 2	Threatened fauna known to occur or predicted to occur within 5 km of the study area	19

Figure Index

Figure 1	Vegetation and Ecological Values Map	2
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Plate Index

Plate 1	Cleared agricultural land dominated by introduced grasses (FAG). View of southern site boundary fence with adjoining vineyard	16
Plate 2	Planted <i>Pinus radiata</i> and <i>Pinus ponderosa</i> with sparse understorey and colonising seedlings	17



Plate 3	a) A narrow strip of the threatened vegetation community, <i>Eucalyptus amygdalina</i> inland forest and woodland on Cainozoic deposits in north east corner of the study area. b) Remnant <i>E. amygdalina</i> and <i>E. viminalis</i> trees with a highly degraded understorey of introduced pasture species.	18
Plate 4	Large Hollow bearing <i>E. viminalis</i> tree within the study area	22

Appendices

- A Natural Values Report
- B EPBCA Protected Matters Report



1. Introduction

This report outlines the results of a botanical survey and fauna habitat assessment undertaken by GHD for Kreglinger Australia Pty Ltd (Kreglinger) on 1 March 2012.

The survey was conducted as part of a development proposal for a new entrance to the Mount Pleasant heritage property and residential sub-division of adjoining land. The site is located at 123 Westbury Road, Launceston, as shown in Figure 1.

The purpose of this assessment was to identify any threatened ecological values across the site, and to make recommendations to minimise potential impacts on identified ecological values.



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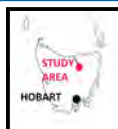
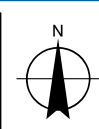
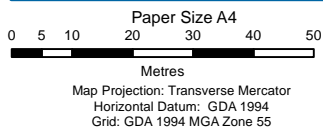
- Hollow Bearing Tree
- Study Area

Vegetation Communities

- FPL - plantations for silviculture
- FAG - agricultural land
- FUM - extra-urban miscellaneous

- FWU - weed infestation

- DAZ - Eucalyptus amygdalina inland forest and woodland
- DAZ + *Arthropodium strictum* (threatened species) habitat



Kreglinger Australia Pty Ltd
Investigation work for 123 Westbury Rd.,
Launceston

Job Number 32-16281-02
Revision A
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Vegetation and Ecological Values Map

Figure 1



2. Methodology

2.1 Background Research

A desktop assessment of the study area was undertaken to identify threatened ecological values that have been previously recorded. The desktop assessment also identifies threatened species that are predicted to occur on the site, based on their estimated geographic range.

The primary data sources accessed during the background research include:

- ▶ Natural Values Atlas¹ (BCB 2011) - which provides a natural values report that identifies threatened fauna and flora records within 500 m and 5000 m of the centre of the study area;
- ▶ *Tasmania's Threatened Fauna Handbook*² (Bryant & Jackson 1999) - which was consulted for threatened species recorded from the Prospect sheet (Tasmap 5040, Tasmania 1:25,000 series);
- ▶ The *Environment Protection and Biodiversity Conservation Act 1999* (EPBCA) 'Protected Matters Search Tool'³ (Commonwealth Government 2011) – which provides a report that identifies any matters listed under the EPBCA within a 5 km buffer around the study area; and
- ▶ The LIST information database⁴ (Service Tasmania 2011) - which provides information on the location of vegetation communities according to the TASVEG 2005 and NRM Coastal Values Project 2006 mapping data, including the location of threatened vegetation.

2.2 Field Assessment

A GHD Senior Botanist conducted a botanical survey and fauna habitat assessment of the site on 1 March 2012, accompanied by a GHD Environmental Scientist. The study area is shown in Figure 1.

The study area was surveyed on foot, noting and collecting plant species as needed; plant species, fauna habitat values and native vegetation communities and weed infestations were recorded.

2.3 Statement of Compliance

Plant species were collected in accordance with the Department of Primary Industries, Parks, Water and Environment's Plant Collection Permit Number TFL 11119 (expiry: 30/06/2012).

All plants were identified in accordance with the *Census of Vascular Plants of Tasmania*⁵ (Baker and Duretto 2011). Flora and fauna conservation significance was determined in accordance with the Tasmanian *Threatened Species Protection Act 1995* (TSPA) and the Commonwealth *Environment*

¹ Biodiversity Conservation Branch (cited as BCB), 2011: Natural Values Atlas. Department of Primary Industries, Parks, Water and Environment (DPIPWE). Available online at: <https://www.naturalvaluesatlas.tas.gov.au> (accessed 5th March 2012).

² Bryant, S. & Jackson, J., 1999: Tasmania's Threatened Fauna Handbook: what, where and how to protect. Threatened Species Unit, Parks & Wildlife, Hobart.

³ Commonwealth Government, 2011: Protected Matters Search Tool. Department of the Environment, Water, Heritage and the Arts. Available online at: <http://www.environment.gov.au> (accessed 3rd February 2012).

⁴ Service Tasmania, 2011: The Land Information System Tasmania (LIST). DPIPWE. Available online at: <http://www.thelist.tas.gov.au/> (accessed 3rd February 2012).

⁵ Baker, M.L. and Duretto, M.F., (Eds.), 2011: A Census of the Vascular Plants of Tasmania. Tasmanian Herbarium, Tasmanian Museum & Art Gallery, Hobart. Available online at: <http://tmag.tas.gov.au/file.aspx?id=4439> (accessed 3rd February 2012).



Protection and Biodiversity Conservation Act 1999 (EPBCA). Weeds of significance were identified using the weeds index (DPIPWE) and *Weeds of the South East: An Identification Guide for Australia* (Richardson *et al.* 2007)⁶.

Conservation significance of vegetation communities was assessed in accordance with the TASVEG 2005 and Regional Forestry Agreement (RFA) classification and associated criteria.

⁶ Richardson, F. J., Richardson, R. G. and Shepherd R.C.H., 2007: *Weeds of the South East: An Identification Guide for Australia*, R.G and F.J Richardson, Victoria, Australia



3. Botanical Values

3.1 Desktop Review of Threatened Flora

The Natural Values Report identified three threatened plant species listed under the TSPA and EPBC that have been previously been recorded within 500 metres of the study area. A large number of additional plant species previously recorded within 5 km of the study area were also identified.

Many of the threatened plants identified within 5 km of the study site were previously found within the aquatic and wet habitats provided by the Cataract Gorge and, given their habitat requirements are considered highly unlikely to occur within the study area.

These species and their likelihood of occurrence at the site are listed in Table 1.

Table 1 Threatened flora previously recorded in, or within 5 km, of the study area

Species	Tasmanian TSPA Status	Commonwealth EPBCA Status	Brief habitat description & Likelihood of occurrence within study area
<i>Alternanthera denticulata</i> Lesser joyweed	Endangered	Not Listed	Mainly occurs in heathland, sometimes found in open forest. Highly Unlikely, not observed during site visit which coincided with the known flowering time for this species.
<i>Anogramma leptophylla</i> annual fern	Vulnerable	Not listed	Occurs in shallow soil layers over rock, on exposed or semi-exposed outcrops in dry or damp sclerophyll forest. Highly Unlikely, not observed during site visit with last recorded sighting within 5 km of the site in 1876.
<i>Aphelia gracilis</i> slender fanwort	Rare	Not listed	Occurs in damp, sandy ground and wet places including tea-tree heath and swamp scrub. Highly unlikely, no suitable habitat observed within the study area.
<i>Arthropodium strictum</i> chocolate lily	Rare	Not listed	Found in open forest, dry hillsides and grasslands. This species occurs predominantly in the eastern half of the State. Present.
<i>Asperula subsimplex</i> water woodruff	Rare	Not listed	In Tasmania, <i>Asperula subsimplex</i> inhabits damp areas, marshy places and riverbanks (Curtis 1963). Highly unlikely, no suitable habitat observed within the study area.
<i>Austrodanthonia induta</i> tall wallaby grass	Rare	Not listed	Occurs on mudstone and dolerite in open, dry sclerophyll woodlands the Midlands, Southeast and East Coast of the State. Possible, suitable habitat exists within the study area; however not recorded during the survey despite overlapping with known flowering time.
<i>Bolboschoenus caldwellii</i> sea clubsedge	Rare	Not listed	Occurs in shallow, standing and sometimes brackish water, rooted heavily in black mud (Curtis and Morris 1994). Highly unlikely, no suitable habitat observed within the study area.



Species	Tasmanian TSPA Status	Commonwealth EPBCA Status	Brief habitat description & Likelihood of occurrence within study area
<i>Boronia gunnii</i> river boronia	Vulnerable	Vulnerable	The species is strictly riparian in habitat, occurring in the flood zone of the rivers, in rock crevices or in the shelter of dolerite boulders. Highly unlikely, no suitable habitat observed within the study area.
<i>Brunonia australis</i> blue pincushion	Rare	Not listed	Occurs in dry sclerophyll forests dominated by <i>Eucalyptus amygdalina</i> , or less commonly <i>E. viminalis</i> or <i>E. obliqua</i> and persistent in disturbed sites such as roadside cuttings. Unlikely, none observed on site despite overlap with known flowering time.
<i>Caesia calliantha</i> blue grasslily	Rare	Not listed	Found predominantly throughout the Midlands in grassland or grassy woodland habitat and has also been recorded from grassy roadsides. Unlikely, none observed on site despite overlap with known flowering time.
<i>Caladenia patersonii</i> patersons spider-orchid	Vulnerable	Not listed	Occurs in low shrubby and sedgy heath in moist to well-drained sand and clay loams (Jones <i>et al.</i> 1999). Usually associated with recent fire events. Possible, suitable habitat exists within the study area. The survey was conducted outside of the known flowering time (Sept-Nov).
<i>Callitris oblonga</i> subs. <i>oblonga</i> south esk pine	Vulnerable	Endangered	Restricted to riparian scrub and woodland in areas with low precipitation and usually sandy soil. Highly unlikely, no suitable habitat found within the study area.
<i>Calocephalus lacteus</i> milky beautyheads	Rare	Not listed	Occurs in open grassland situations. Unlikely, none observed on site despite overlap with known flowering time.
<i>Calystegia sepium</i> swamp bindweed	Rare	Not listed	Found on riverbanks and the margins of forests in the north of the State around the Tamar region. Highly unlikely, as no suitable habitat identified within the study area.
<i>Carex longibrachiata</i> drooping sedge	Rare	Not listed	Occurs along river banks, in rough grassland and pastures. Unlikely, suitable habitat exists within the study area. However, none observed during survey.
<i>Carex tasmanica</i> curly sedge	Not listed	Vulnerable	Occurs in soaks and seepage lines in a range of grassy woodland communities. Highly unlikely, no suitable habitat observed within study area.
<i>Centipeda cunninghamii</i> erect sneezeweed	Rare	Not listed	Occurs in low soaks adjacent to rivers. Found in a wide variety of soil types usually in areas subject to flooding or where water is stagnant. Highly unlikely, no suitable habitat observed within the study area.



Species	Tasmanian TSPA Status	Commonwealth EPBCA Status	Brief habitat description & Likelihood of occurrence within study area
<i>Corunastylis nuda</i> tiny midge-orchid	Rare	Not listed	Found in scrub, alpine scrub, and heathy, open eucalypt forest. Possible, suitable habitat exists within the study area. However none observed during survey despite overlap with known flowering times.
<i>Cryptandra amara</i> pretty pearflower	Endangered	Not listed	Rocky habitats, including riverine rock plates, native grasslands dominated by <i>Themeda triandra</i> , <i>Bursaria spinosa</i> , grassy <i>Eucalyptus rubida</i> woodland, and heathy <i>Eucalyptus amygdalina</i> forests. Usually found on dolerite or basalt, though occurrences on mudstone and laterite. Highly unlikely, suitable habitat exists within the study area. None observed during survey despite overlap with known flowering times.
<i>Cynoglossum australe</i> coast houndstongue	Rare	Not listed	Occurs in grasslands, open forests and landward margins of coastal sand dunes. Unlikely, suitable habitat exists within the study area. None observed during survey despite overlap with known flowering times.
<i>Damasonium minus</i> Star fruit	Rare	Not listed	Occurs in swampy habitat and farm dams and prefers slow flowing or stationary water. Highly unlikely, no suitable habitat observed within the study area.
<i>Discaria pubescens</i> Spiky anchorplant	Endangered	Not listed	Occurs on grassy banks/roadsides, sandy or gravelly soil in basalt talus slopes and clefts amongst fractured dolerite rocks and flood channels. Highly unlikely, no suitable habitat observed within the study area.
<i>Diuris palustris</i> Swamp doubletail	Endangered	Not listed	Found in grassy open eucalypt forest, sedgy grassland and heathland with tea-tree and paperbark on poorly to moderately drained sandy peat and loams, usually in sites that are wet in winter. Unlikely, last recorded sighting within 5 km of the study site was 1946.
<i>Doodia caudata</i> small raspfern	Endangered	Not listed	A riparian species that grows in rich moist soil amongst boulders and along the shaded banks of streams, or in the crevices of rock outcrops. Highly unlikely, no suitable habitat within the study area.
<i>Epacris exserta</i> south esk heath	Endangered	Pending endangered	Occurs on lower slopes and swamp edges in dry scrub/dry sclerophyll forest between 10-575 m above sea level and on the banks of several rivers. Highly unlikely, no suitable habitat within the study area.
<i>Epilobium pallidiflorum</i> showy willowherb	Rare	Not listed	Occurs in wet habitats such as riparian areas and wet herb fields. Highly unlikely, no suitable habitat within the study area.



Species	Tasmanian TSPA Status	Commonwealth EPBCA Status	Brief habitat description & Likelihood of occurrence within study area
<i>Euphrasia scabra</i> yellow eyebright	Endangered	Not listed	Occurs in moist herb/sedge communities, grassy areas of marshes, or open grassy areas at the headwaters of creeks. Highly unlikely, no suitable habitat within the study area.
<i>Gratiola pubescens</i> hairy brooklime	Vulnerable	Not listed	Most commonly located in permanently or seasonally damp, swampy ground. Highly unlikely, no suitable habitat within the study area.
<i>Gyrostemon</i> <i>Thesioides</i> broom wheelfruit	Rare	Not listed	Occurs predominately in <i>Allocasuarina</i> forest in the north and east of the State. Highly unlikely, no suitable habitat within the study area.
<i>Haloragis heterophylla</i> variable raspwort	Rare	Not listed	Occurs within <i>Themeda</i> grassland, roadsides. Unlikely, none observed on site despite overlap with known flowering time.
<i>Hovea tasmanica</i> rockfield purplepea	Rare	Not listed	Found on dry, rocky ridges or slopes (mostly dolerite) in forest and riverine scrub. Unlikely, no suitable habitat on site, and not identified during survey.
<i>Hypolepis muelleri</i> harsh groundfern	Rare	Not listed	This species inhabits sites along watercourses or deep, rich, alluvial soils below 120 m altitude. Highly unlikely as no suitable habitat within the study area.
<i>Hypoxis vaginata</i> Sheathing yellowstar	Rare	Not listed	Occurs in unimproved pasture and swamp/poorly drained areas. Unlikely, no suitable habitat within the study area.
<i>Hypoxis vaginata</i> var. <i>brevistigmata</i> Sheathing yellowstar	Pending rare	Not listed	Occurs in unimproved pasture and swamp/poorly drained areas (Lazarus <i>et al.</i> 2003). Unlikely, no suitable habitat within the study area.
<i>Isoetes elatior</i> tall quillwort	Rare	Not listed	Occurs at low altitude with its roots in gravel or silt substrate in moderate to swiftly flowing waters. Highly unlikely, no suitable habitat within the study area.
<i>Juncus amabilis</i> gentle rush	Rare	Not listed	Occurs in moist situations, generally areas of seepage confined to roadsides. Unlikely, no suitable habitat within the study area.
<i>Lepidium</i> <i>pseudotasmanicum</i> shade peppercress	Rare	Not listed	Found on bare ground in grassland and grassy woodland in the south with scattered populations extending up the midlands to Punchbowl in the north. Unlikely, none observed on site despite overlap with known flowering time.



Species	Tasmanian TSPA Status	Commonwealth EPBCA Status	Brief habitat description & Likelihood of occurrence within study area
<i>Lycopus australis</i> australian gypsywort	Endangered	Not listed	Occurs in lacustrine herbland, disturbed areas within <i>Melaleuca ericifolia</i> swamp forest, <i>Phragmites australis</i> reed beds, and rocky (dolerite) riverbeds fringed by riparian scrub. Highly unlikely, no suitable habitat within the study area.
<i>Lythrum salicaria</i> purple loosestrife	Vulnerable	Not listed	Occurs in swamps, stream banks and canopy gaps within <i>Melaleuca ericifolia</i> swamp forest. Highly unlikely, no suitable habitat within the study area.
<i>Mentha australis</i> river mint	Endangered	Not listed	In Tasmania, <i>Mentha australis</i> has been observed growing along the rocky (dolerite) margins of rivers and lakes. Highly unlikely, no suitable habitat within the study area.
<i>Myriophyllum integrifolium</i> tiny watermilfoil	Vulnerable	Not listed	Found in muddy soil, saline swamps and on the edge of wetlands in the Midlands and in the north, north-east and south of the State. Highly unlikely, no suitable habitat within the study area.
<i>Parietaria debilis</i> shade pellitory	Rare	Not listed	Occurs around mutton bird rookeries, on cliffs/rocks in salt spray zone and on grazed pasture/grassland. Possible, suitable habitat exists within the study site. Survey was undertaken outside of known flowering time (Aug-Nov).
<i>Persicaria decipiens</i> slender waterpepper	Vulnerable	Not listed	Occurs on the banks of rivers and streams, most frequent in the north of the State. Highly unlikely, no suitable habitat within the study area.
<i>Persicaria subsessilis</i> bristly waterpepper	Endangered	Not listed	Occurs on rocky river margins, forest and lagoon margins and within openings in riparian scrub on alluvium. Highly unlikely, no suitable habitat within the study area.
<i>Poa mollis</i> soft tussockgrass	Rare	Not listed	Occurs on dry open hillsides and cliffs, predominantly in the east of the State. Unlikely, none observed on site despite overlap with known flowering time.
<i>Prostanthera cuneata</i> alpine mintbush	Presumed extinct	Not listed	In Victoria occurs on well drained, moist conditions. Presumed extinct in Tasmania. Highly Unlikely, none observed on site despite overlap with known flowering time.
<i>Prostanthera rotundifolia</i> roundleaf mintbush	Vulnerable	Not listed	Woody shrub occurs in the north and east of the State, along riverbanks and on rocky hillsides. Highly Unlikely, none observed on site despite overlap with known flowering time.



Species	Tasmanian TSPA Status	Commonwealth EPBCA Status	Brief habitat description & Likelihood of occurrence within study area
<i>Pterostylis grandiflora</i> Superb greenhood	Rare	Not listed	Occurs in heathy and shrubby open eucalypt forests and in grassy coastal she-oak woodland on moderately to well drained sandy and loamy soils. Possible, survey undertaken outside of known flowering times (Apr-Aug).
<i>Pterostylis ziegeleri</i> grassland greenhood	Vulnerable	Vulnerable	Occurs in coastal areas on the slopes of low stabilised sand dunes and in grassy dune swales In the Midlands it grows in native grassland or grassy woodland on well-drained clay loams derived from basalt. Possible, survey undertaken outside of known flowering time (Sept-Dec).
<i>Pultenaea prostrata</i> Silky bushpea	Vulnerable	Not listed	Occurs in sandy, inland soil in grassy woodland and grassland. Unlikely, as not observed during survey and survey conducted near known flowering time.
<i>Ranunculus sessiliflorus</i> var. <i>sessiliflorus</i> Rockplate buttercup	Rare	Not listed	Occurs in grassland and grassy woodland. Possible, suitable habitat exists within the study area, survey undertaken outside of flowering time (Sept-Dec).
<i>Schenkia australis</i> spike centaury	Rare	Not listed	Occurs in cleared forest pasture, rainforest/wet sclerophyll forest and heathland in the east and north of the State. Unlikely, as not observed during survey and survey conducted near known flowering time.
<i>Schoenoplectus tabernaemontani</i> river clubsedge	Rare	Not listed	Occurs on margins of lagoons on King Island, Flinders Island and on some riverbanks in the Midlands. Highly unlikely, no suitable habitat within the study area.
<i>Scutellaria humilis</i> dwarf skullcap	Rare	Not listed	Occurs in moist, shady areas. Unlikely, none observed on site despite overlap with known flowering time.
<i>Senecio macrocarpus</i> largefruit fireweed	Presumed extinct	Vulnerable	The only Tasmanian locality Information for <i>Senecio macrocarpus</i> available is 'northern Tasmania'. Unlikely, not observed during site visit and presumed extinct in Tasmania. Last sited around 1800.
<i>Senecio squarrosus</i> leafy fireweed	Rare	Not listed	Found in dry sclerophyll forest. Possible, suitable habitat onsite and has been found within 5 km. Survey conducted outside of known flowering time (Oct-Dec).
<i>Siloxerus multiflorus</i> small wrinklewort	Rare	Not listed	Predominantly found in the north and north-east of the State, on rocks at river mouths, in coastal areas and inland dry forests. Possible, suitable habitat onsite and has been found within 5 km. Survey conducted outside of known flowering time (Sept-Oct).



Species	Tasmanian TSPA Status	Commonwealth EPBCA Status	Brief habitat description & Likelihood of occurrence within study area
<i>Spyridium eriocephalum</i> var. <i>eriocephalum</i> heath dustymiller	Endangered	Not listed	Occurs in dry shrublands and eucalypt woodlands. Known from a single extant population near Hobart with other populations in the north of the state considered locally extinct. Highly Unlikely, not observed near the study area since 1880.
<i>Spyridium vexilliferum</i> var. <i>vexilliferum</i> helicopter bush	Rare	Not listed	Found in sandy heaths and on rocky outcrops in the east, north and west of Tasmania. Highly Unlikely, no suitable habitat observed within the study area and species not observed onsite.
<i>Tetradlea ciliata</i> northern pinkbells	Rare	Not listed	Occurs in coastal heath and heathy woodland. Unlikely, suitable habitat within the study area however none observed during survey.
<i>Teucrium Corymbosum</i> forest germander	Rare	Not listed	Predominantly found in <i>Allocasuarina verticillata</i> coastal and inland woodland, <i>Eucalyptus viminalis</i> woodland and native grasslands in the east of the state. Highly Unlikely, not observed onsite with survey overlapping known flowering times.
<i>Triptilodiscus pygmaeus</i> dwarf sunray	Vulnerable	Not listed	Occurs within grasslands, grassy woodlands or rockplates, the underlying substrate being mostly Tertiary basalt or Jurassic dolerite. The species occurs within native grassland dominated by <i>Themeda triandra</i> Possible, suitable habitat onsite and has been found within 5 km. Survey conducted outside of known flowering time (Sept-Nov).
<i>Utricularia australis</i> yellow bladderwort	Rare	Not listed	Occurs in marshy habitat in stationary or slow flowing water up to several meters deep. Highly unlikely, no suitable habitat observed onsite.
<i>Velleia paradoxa</i> spur velleia	Vulnerable	Not listed	Occurs in grassland and grassy woodland. Unlikely, not observed onsite with survey near known flowering times.
<i>Veronica plebeia</i> trailing speedwell	Rare	Not listed	Occurs in wet sclerophyll forest. Highly unlikely, no suitable habitat within the study area.
<i>Viola caleyana</i> swamp violet	Rare	Not listed	Occurs in dry sclerophyll forest in the north and north-east of the State. Possible, suitable habitat within the study area and has been found within 5 km. Survey conducted outside of known flowering time (Nov-Jan).
<i>Viola cunninghamii</i> alpine violet	Rare	Not listed	This species has a wide range and is usually confined to moist sites below alpine areas. Unlikely, as not observed during survey and survey conducted near known flowering time.
<i>Vittadinia gracilis</i> woolly new-holland-daisy	Rare	Not listed	Occurs on dry sites on dolerite and basalt. It is predominantly found in dry sclerophyll forest. Unlikely, as not observed during survey and survey conducted near known flowering time.



Species	Tasmanian TSPA Status	Commonwealth EPBCA Status	Brief habitat description & Likelihood of occurrence within study area
<i>Westringia angustifolia</i> narrowleaf westringia	Rare	Not listed	Found predominantly in dry, shrubby understorey, often on dolerite and associated with other endemic species from 300 to 900 metres, and riverbanks. Unlikely, suitable habitat within the study area however none observed during survey.
<i>Xerochrysum bicolor</i> eastcoast everlasting	Rare	Not listed	In Tasmania, this species is recorded from heathland near the coast in the north-east, and in alpine situations. Unlikely, as not observed during survey and survey conducted during known flowering time.

Note: Likelihood of occurrence of threatened flora is assessed on a 4-tier scale:

Present - individuals recorded within the study area during the field assessment or any previous assessment within the boundaries of study area;

Possible - suitable habitat occurs within the study area;

Unlikely - suitable habitat unlikely to occur within the study area, or suitable habitat substantially modified, or suitable habitat present but species not recorded for over 50 years within 5 km of the site;

Highly unlikely - no suitable habitat present within the study area, and individuals not recorded within the study area during current or any previous assessment.

3.2 Flora Species Recorded within the Study Area

While suitable habitat for a number of threatened plant species listed within Table 1 exists within the site, only one threatened flora species was recorded during the field survey. This species was *Arthropodium strictum* (chocolate lily) which is listed as rare in Tasmania.

Up to 5 individuals of *A. strictum* were recorded within the high quality area of native vegetation (marked as 'DAZ' in Figure 1) in the northeast corner of the site.

Habitat suitable for a number of additional threatened species identified within Table 1 exists within the study area. This survey was conducted during early March, overlapping with flowering times for a number of these species; however, some species have known flowering times which do not coincide with the timing of this survey. Without conducting a site visit during their known flowering time (generally spring), it cannot be determined whether they are present or absent within the study area.

If additional threatened flora species were to occur, they would most likely be restricted to areas mapped as DAZ.

Species lists (native and introduced species) for the study area are provided below.

Native species

- ▶ *Acacia dealbata* subsp. *dealbata* (silver wattle)
- ▶ *Acacia mearnsii* (black wattle)
- ▶ *Acacia melanoxylon* (blackwood)
- ▶ *Acacia mucronata* subs. *longifolia* (longleaf caterpillar wattle)
- ▶ *Acaena novae-zelandiae* (common buzzy)
- ▶ *Allocasuarina littoralis* (black sheoak)

- ▶ *Arthropodium strictum* (chocolate lily) **(threatened)**
- ▶ *Astroloma humifusum* (native cranberry)
- ▶ *Austrodanthonia tenuior* (purplish wallabygrass)
- ▶ *Rytidosperma dimidiatum* (variable wallaby grass)
- ▶ *Austrodanthonia caespitosa* (common wallabygrass)
- ▶ *Austrostipa* sp.
- ▶ *Banksia marginata* (silver banksia)
- ▶ *Beyeria viscosa* (pinkwood)
- ▶ *Billardiera mutabilis* (green appleberry)
- ▶ *Bursaria spinosa* (prickly box)
- ▶ *Carex breviculmis* (shortstem sedge)
- ▶ *Dianella revoluta* (spreading flaxlily)
- ▶ *Dodonaea viscosa* subsp. *spatulata* (broadleaf hopbush)
- ▶ *Epacris impressa* (common heath)
- ▶ *Epacris obtusifolia* (bluntleaf heath)
- ▶ *Eucalyptus amygdalina* (black peppermint)
- ▶ *Eucalyptus viminalis* subsp. *viminalis* (white gum)
- ▶ *Exocarpos cupressiformis* (common native-cherry)
- ▶ *Gahnia radula* (thatch sawsedge)
- ▶ *Gonocarpus tetragynus* (common raspwort)
- ▶ *Hibbertia hirsuta* (hairy guineaflower)
- ▶ *Lepidosperma laterale* (variable swordsedge)
- ▶ *Lomandra longifolia* (sagg)
- ▶ *Luzula meridionalis*
- ▶ *Kennedia prostrata* (running postman)
- ▶ *Microlaena stipoides*
- ▶ *Microtis* sp.
- ▶ *Oxalis* sp.
- ▶ *Pimelea humilis* (dwarf riceflower)
- ▶ *Platylobium triangulare* (arrow flatpea)
- ▶ *Thelymitra* sp.
- ▶ *Themeda triandra* (kangaroo grass)

Introduced species

- ▶ *Aesculus hippocastanum* (horse chestnut)
- ▶ *Agapanthus praecox* (agapanthus)
- ▶ *Agrostis capillaris* (browntop bent)
- ▶ *Aira* sp.
- ▶ *Amaryllis belladonna* (belladonna lily)
- ▶ *Anagallis arvensis* (scarlet pimpernel)
- ▶ *Anthoxanthum odoratum* (sweet vernal grass)
- ▶ *Arctotheca calendula* (capeweed)
- ▶ *Arrhenatherum elatius* var. *bulbosum* (bulbous wheatgrass)
- ▶ *Betula pendula* (silver birch)
- ▶ *Briza maxima* (greater quaking grass)
- ▶ *Bromus diandrus* (great brome)
- ▶ *Bromus willdenowii* (prairie grass)
- ▶ *Cerastium fontanum* (mouse ear)
- ▶ *Chrysanthemoides monilifera* subs. *Monilifera* (boneseed)
- ▶ *Cirsium vulgare* (spear thistle)
- ▶ *Coprosma repens* (mirrorbush)
- ▶ *Cotoneaster glaucophyllus* (largeleaf cotoneaster)
- ▶ *Crataegus monogyna* (hawthorn)
- ▶ *Cynosurus echinatus* (rough dogstail)



- ▶ *Fraxinus* sp. (ash)
- ▶ *Gamochaeta calviceps* (grey cudweed)
- ▶ *Gazania linearis* (tufted gazania)
- ▶ *Genista monspessulana* (canary broom)
- ▶ *Hebe elliptica* (shore hebe)
- ▶ *Holcus lanatus* (yorkshire fog)
- ▶ *Hypochoeris radicata* (rough catsear)
- ▶ *Ilex aquifolium* (holly)
- ▶ *Lactuca serriola* (prickly lettuce)
- ▶ *Leontodon taraxacoides* (hairy hawkbit)
- ▶ *Malva parviflora* (smallflower mallow)
- ▶ *Osteospermum fruticosum* (trailing daisy)
- ▶ *Paspalum dilatatum* (paspalum)
- ▶ *Pennisetum clandestinum* (kikuyu)
- ▶ *Picea albies* (norwegian Spruce)
- ▶ *Picea pungens* (blue spruce)
- ▶ *Pinus ponderosa* (ponderosa pine)
- ▶ *Pinus pinaster*
- ▶ *Pinus radiata* (radiata pine)
- ▶ *Pittosporum undulatum* (sweet pittosporum)
- ▶ *Plantago lanceolata* (ribwort plantain)
- ▶ *Polygonum arenastrum* (small wireweed)
- ▶ *Prunus* sp.
- ▶ *Quercus* sp. (oak)
- ▶ *Raphanus raphanistrum* (wild radish)
- ▶ *Rhododendron ponticum* (rhododendron)
- ▶ *Rubus fruticosus* (blackberry)
- ▶ *Rumex* sp.
- ▶ *Sequoia sempervirens* (redwood).
- ▶ *Solanum nigrum* (blackberry nightshade)
- ▶ *Sollya heterophylla* (bluebell creeper)
- ▶ *Sonchus oleraceus* (common sowthistle)
- ▶ *Taraxacum officinale* (common dandelion)
- ▶ *Tradescantia albiflora* (wandering creeper)
- ▶ *Ulex europaeus* (gorse)
- ▶ *Ulmus* sp. (Elm)
- ▶ *Vicia sativa* subs. *nigra* (narrowleaf vetch)



3.3 Introduced Plants

A number of common planted trees and garden species were identified within the study area. Any cultural heritage values such as heritage listing on large trees are beyond the scope of this report.

A number of species listed as declared weeds under the Tasmanian *Weed Management Act 1999*, have been recorded previously within 5 km of the study area/s.

Declared weed species observed during the field inspection include:

- ▶ *Rubus fruticosus* (blackberry);
- ▶ *Genista monspessulana* (canary broom);
- ▶ *Chrysanthemoides monilifera* subs. *monilifera* (boneseed); and
- ▶ *Ulex europaeus* (gorse).

3.4 Vegetation Communities

A number of vegetation communities were identified within the study area during the field survey. These communities are briefly described below as defined by the document, *From Forest to Fjaeldmark: Descriptions of Tasmania's Vegetation*⁷ (Harris & Kitchener 2005).

Agricultural land (FAG).

This vegetation community generally contains exotic temperate grass mixes and clovers.

Within the study area this community (Plate 1) was dominated by introduced grasses *Dactylis glomerata* and *Bromus willdenowii*. A variety of other exotic species were present within this community including a number of scattered planted garden tree species.

⁷ Harris, S. & Kitchener, A. (2005): *From Forest to Fjaeldmark: Descriptions of Tasmania's Vegetation*, Department of Primary Industries, Parks, Water and Environment, Printing Authority of Tasmania, Hobart.



Plate 1 Cleared agricultural land dominated by introduced grasses (FAG). View of southern site boundary fence with adjoining vineyard

Plantations for silviculture (FPL)

This community is characterised by monocultures of commercial tree species including *Pinus radiata*, *Eucalyptus globulus* and *Eucalyptus nitida*.

The area mapped as FPL within the study area does not fully match the description of FPL with regard to the non-commercial nature of the plantation and the plantation area not in a row formation. The FPL within the site comprises of large planted trees including *Pinus radiata* and *Pinus ponderosa* over a sparse understorey with prolific seedling regrowth (Plate 2).



Plate 2 Planted *Pinus radiata* and *Pinus ponderosa* with sparse understorey and colonising seedlings

***Eucalyptus amygdalina* inland forest and woodland on Cainozoic deposits (DAZ)**

DAZ is listed as a threatened vegetation community under the *Nature Conservation Act 2002*.

This vegetation comprises of dominant overstorey species *E. amygdalina*, *Eucalyptus viminalis*, *Eucalyptus pauciflora* and occasionally *Eucalyptus ovata*. The understorey of this community is comprised of dry sclerophyll shrubs, grasses and bracken (*Pteridium esculentum*).

Secondary trees and tall shrubs found within this community include *Allocasuarina littoralis*, *Acacia dealbata* and *Exocarpos cupressiformis*.

The study area contained a small area of DAZ toward the northeast corner and eastern site boundary (Figure 1) which was characterised by a canopy of *E. amygdalina* over *A. littoralis*, *E. cupressiformis*, *Themeda triandra*, *Austrodanthonia* sp. and *Lomandra longifolia* (Plate 3a).

A second area of DAZ was identified toward the centre of the study area (Figure 1). This area was identified as DAZ based on the presence of remnant *E. amygdalina* and *E. viminalis* trees, however, the understorey in this area was degraded and comprised of a mixture of exotic and native grasses (Plate 3b).

A third (very small) area was found toward the northwest corner of the study area. This small area was classified as DAZ as the patch did include a native ground cover of grasses, but did not include native eucalypts.



Plate 3 a) A narrow strip of the threatened vegetation community, *Eucalyptus amygdalina* inland forest and woodland on Cainozoic deposits in north east corner of the study area.
b) Remnant *E. amygdalina* and *E. viminalis* trees with a highly degraded understorey of introduced pasture species.

FWU – Weed Infestation

There was one area of weed infestation identified on the western boundary of the study area, comprised predominantly of gorse plants.



4. Zoological Values

4.1 Desktop Review of Threatened Fauna

According to the Natural Values Atlas Report, no threatened fauna have previously been recorded within 500 m of the study area/s; however numerous species have been recorded, or are predicted to occur, within 5 km of the site/s according to the Natural Values Atlas Report and the EPBCA Protected Matters Search Tool.

These species (except listed marine and migratory marine species) and their likelihood for occurrence within the study site/s are shown in Table 2 (also see Appendix A and Appendix B).

Table 2 Threatened fauna known to occur or predicted to occur within 5 km of the study area

Species	Tasmanian TSPA Status	Commonwealth EPBCA Status	Brief habitat description & Likelihood of occurrence within study area
Mammals			
<i>Dasyurus maculatus</i> subsp. <i>maculatus</i> spotted-tailed quoll	Rare	Vulnerable	Most commonly inhabit cool temperate rainforest, wet sclerophyll forest, and coastal scrub. Unlikely, limited suitable habitat within the study area.
<i>Parameles gunnii</i> eastern barred bandicoot	Not listed	Vulnerable	Grassland and grassy woodland, also found in modified environments like pastures and semi-urban parks and gardens. Possible, suitable habitat present within the study area.
<i>Sarcophilus harrisii</i> Tasmanian devil	Endangered	Endangered	May occur in a variety of forest types including coastal heath, open dry sclerophyll forest, and mixed sclerophyll rainforest. Unlikely, although previously recorded within 5 km of the site, this species is considered unlikely given the urban setting of the site.
<i>Thylacinus cynocephalus</i> thylacine	Extinct	Extinct	Highly unlikely. Presumed extinct.
Birds			
<i>Accipiter novaehollandiae</i> grey goshawk	Endangered	Not Listed	Occurs in closed forests, with high priority nesting habitat along watercourses with blackwoods. May otherwise nest in melaleuca, myrtle, teatree and eucalypt species, occasionally up to 100 metres from a



Species	Tasmanian TSPA Status	Commonwealth EPBCA Status	Brief habitat description & Likelihood of occurrence within study area
			watercourse. Highly unlikely, no suitable habitat. Possible fly over area.
<i>Alcedo azurea</i> subsp. <i>diemenensis</i> azure kingfisher	Endangered	Endangered	Inhabits thick vegetation surrounding freshwater rivers, lakes, billabongs and swamps. Highly unlikely, no suitable habitat.
<i>Aquila audax</i> subsp. <i>fleayi</i> wedge-tailed eagle	Endangered	Endangered	Nest in old growth trees, and common in areas with a mosaic of forest, farmland and waterways. Unlikely to nest, and no nests recorded within the site, however possible overfly area.
<i>Botaurus poiciloptilus</i> Australasian bittern	Not Listed	Endangered	Mainly occurs in densely vegetated freshwater wetlands and, rarely, in estuaries or tidal wetlands. Formerly widespread in Tasmania, now appears confined to coastal regions in the northeast and on the Bass Strait islands. Highly unlikely, no suitable habitat. Possible fly over area.
<i>Haliaeetus leucogaster</i> white-bellied sea-eagle	Vulnerable	Migratory	Generally nest and forage near the coast; however, also occur near large rivers and inland lakes. Require old growth trees for nesting. Highly unlikely, no suitable habitat. Possible fly over area.
<i>Lathamus discolor</i> swift parrot	Endangered	Endangered	Feed on the nectar of <i>Eucalyptus globulus</i> and <i>E. ovata</i> . Nest in tree hollows in eastern Tasmania, usually near the coast in dry forests. Unlikely, although recorded within 5 km of the site, no feeding trees were observed. Possible fly over area.
<i>Tyto novaehollandiae</i> subsp. <i>castanops</i> masked owl (Tasmanian)	Endangered	Vulnerable	Usually found in lowland dry sclerophyll forest; however, can occur in wet sclerophyll forest, non-eucalypt dominated forest, scrub and urban environments. Unlikely. Although some suitable habitat exists, the fragmented nature and urban surrounds limit the potential value of the site for this species. No evidence of this species found during the field



Species	Tasmanian TSPA Status	Commonwealth EPBCA Status	Brief habitat description & Likelihood of occurrence within study area survey.
Other			
<i>Migas plomleyi</i> Plomleys trapdoor spider	Rare	Not listed	Found on the slopes surrounding First Basin, Cataract Gorge. Unlikely, known from very localised area.
<i>Pasmaditta jungermanniae</i> jungermans snail (Cataract Gorge)	Vulnerable	Not listed	Previously identified in moss just above the waterline in Cataract Gorge. Highly unlikely, no suitable habitat
<i>Beddomeia launcestonensis</i> Hydrobiid snail	Endangered	Not listed	Highly unlikely, no aquatic habitat
<i>Litoria reniformis</i> green and gold frog	Vulnerable	Vulnerable	Inhabit permanent or temporary water bodies usually dominated by reed and sedge species. Highly unlikely, no suitable habitat
<i>Pseudemoia rawlinsoni</i> Glossy grass skink	Rare	Not listed	1. Lives amongst rushy grasses and low dense vegetation in moist situations along the margins of swamps and watercourses. 2. Highly unlikely, no suitable habitat
<i>Prototroctes maraena</i> Australian grayling	Vulnerable	Vulnerable	Highly unlikely, no aquatic habitat
<i>Galaxias fontanus</i> swan galaxias	Endangered	Endangered	Highly unlikely, no aquatic habitat
<i>Galaxiella pusilla</i> Eastern dwarf galaxias	Vulnerable	Vulnerable	Highly unlikely, no aquatic habitat

Note: Likelihood of occurrence of threatened flora is assessed on a 4-tier scale:

Present - individuals recorded within the study area during the field assessment or any previous assessment within the boundaries of study area;

Possible - suitable habitat occurs within the study area;

Unlikely - suitable habitat unlikely to occur within the study area, or suitable habitat substantially modified, or suitable habitat present but species not recorded for over 50 years within 5 km of the site;

Highly unlikely - no suitable habitat present within the study area, and individuals not recorded within the study area during current or any previous assessment.

4.2 Fauna Habitat within the Study Area

Very few fauna species were observed during the field assessments, with an Australian magpie (*Gymnorhina tibicen*) and superb blue-wren (*Malurus cyaneus*) observed during the field survey and a brushtail possum (*Trichosurus vulpecula*) scat noted.

Potential fauna habitat was recorded within the DAZ vegetation community. These areas are shown on Figure 1 and are located toward the centre and northeast corner of the site and included a number of large *Eucalyptus viminalis* trees, one of which was hollow bearing (Plate 4).



Plate 4 Large Hollow bearing *E. viminalis* tree within the study area

There were no potential burrows and/or den sites or animal tracks/scratchings observed during the field assessments. The habitat tree and vegetation communities within the study area provide potential habitat for some of those threatened species previously identified in Table 2, as follows:

- ▶ **Eastern barred bandicoot (*Paremeles gunnii*):** no potential burrow sites or nose cones were recorded during the field assessment and, although this species may be utilising more open areas of the site for foraging and movement across the landscape, it is considered unlikely that this site would provide critical habitat for the species.
- ▶ **Tasmanian devil (*Sarcophilus harrisi*):** Whilst the habitat types suggests that the species may occur, given the semi-urban setting it is considered unlikely to utilise the site. No evidence of this species presence was recorded during the field assessment.



- ▶ **Wedge-tailed eagle (*Aquila audax subsp. fleayi*):** No nests were recorded on the site, although one nest has previously been recorded within 5km. Given the urban semi-urban setting of the site, it is unlikely to provide critical habitat for this species.
- ▶ **Tasmanian masked owl (*Tyto novaehollandiae subsp. castanops*):** One large hollow bearing tree was present within the study area. This species nests within hollow bearing trees, however, given the semi-urban setting of the site, it is unlikely that the site provides optimal habitat for this species. Whilst there is limited potential for this species to occur within the study area, no evidence of this species presence was noted during the field survey.



5. Conclusions and Recommendations

Threatened Flora

Arthropodium strictum was found within the DAZ vegetation community, toward the NE corner of the site. This species is protected under Tasmania's *Threatened Species Protection Act 1995* and cannot be destroyed or removed without first obtaining a permit from the Department of Primary Industries, Parks, Water and the Environment (DPIPWE).

Despite *A. strictum* being the only threatened plant species identified during the field survey, it is possible that additional threatened species listed in Table 1 are present on site but were not flowering at the time the survey was conducted (particularly in the higher quality patches of DAZ). Follow up surveys may be required if impacts to the DAZ community are expected.

Weeds

Any development at the site should apply appropriate controls to limit the spread of existing weeds on site, and avoid the introduction of new species. Such weed control measures should be documented and adhere to the *Tasmanian Washdown Guidelines for Weed and Disease Control*⁸ (DPIPWE 2004) and the DPIPWE Weed Control Fact Sheets.

Vegetation Communities

The vegetation communities recorded across the majority of the site are not threatened, and are dominated by introduced planted and weed species. However, *Eucalyptus amygdalina* inland forest and woodland on Cainozoic deposits (DAZ) is considered a threatened vegetation community under the *Nature Conservation Act 2002* and is listed as 'vulnerable' under the *Regional Forest Agreement 1997*.

Two areas of higher quality DAZ (see Figure 1) were recorded in the NE and NW corners. The area toward the NW corner is very small, with no eucalypt canopy remaining. One additional area mapped as DAZ identified toward the centre of the site had a degraded understorey and has low value compared to the other two.

If possible, development on the site should avoid the threatened DAZ community, particularly the higher quality area in the north eastern corner. If clearance within these areas is expected a Forest Practices Plan issued by the Forest Practices Authority would normally be required prior to commencement. However, if a permit is issued by Council for the construction of buildings or associated developments, under the Land Use Planning and Approvals Act, the clearing would be exempt from the requirement of a FPP.

Threatened fauna habitat

While the site is not expected to be providing optimal habitat for any of the threatened species listed in Section 4.2, it is considered possible that some of these species may utilise the higher quality areas mapped as DAZ and the large hollow bearing tree shown on the maps.

⁸ Department of Primary Industries, Parks, Water and Environment (cited as DPIPWE), 2004: *Tasmanian Washdown Guidelines for Weed and Disease Control*. Edition 1. Forestry Tasmania, Agricultural Contractors, Nature Conservation Branch, Tasmania. Available online at: [http://www.dpiw.tas.gov.au/inter.nsf/Attachments/LJEM-5ZM43C/\\$FILE/Washdown%20Guidelines%20Edition%201.pdf](http://www.dpiw.tas.gov.au/inter.nsf/Attachments/LJEM-5ZM43C/$FILE/Washdown%20Guidelines%20Edition%201.pdf)



If possible, development on the site should avoid the areas mapped as DAZ (particularly in the north eastern corner) and the recorded hollow bearing tree (refer map). If impacts to these values are anticipated further investigations or approvals under the *Threatened Species Protection Act 1995* may be required.

It is not expected that approval/s under the Federal *Environment Protection and Biodiversity Conservation Act 1999* would be required for possible impacts to fauna values, as the site provides only marginal habitat for the identified species, the clearance of which is unlikely to trigger the significant impact criteria under the Act.



Appendix A

Natural Values Report

Natural Values Atlas Report

Authoritative, comprehensive information on Tasmania's natural values.

Report number: 44803

Reference: 123 Westbury Rd Mt Pleasant

Requested For: 3216281

Timestamp: 10:41:44 AM Monday 05 March 2012

Raptors: buffers 500m and 5000m

Threatened Flora: buffers 500m and 5000m

Threatened Fauna: buffers 500m and 5000m

Conservation Significance Flora: Not requested

Conservation Significance Fauna: Not requested

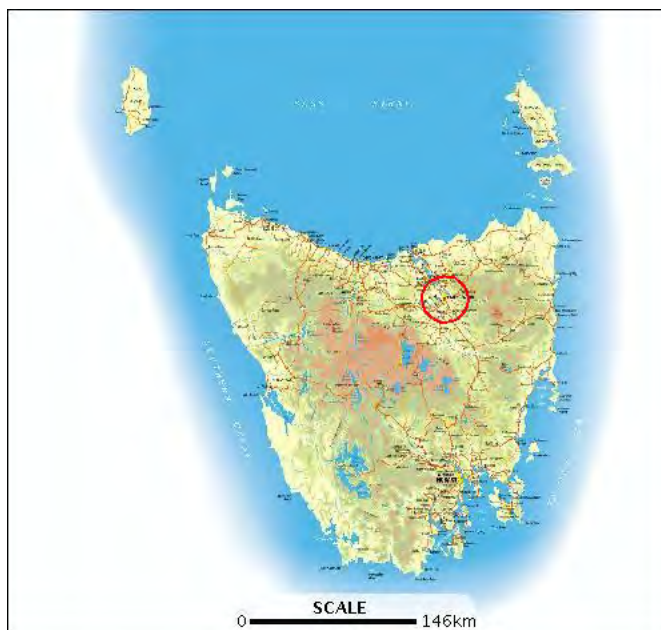
Weeds: buffers 500m and 5000m

TasVeg: buffer 1000m

Threatened Communities: buffer 1000m

Geoconservation: buffer 1000m

Tasmanian Reserve Estate: buffer 1000m



The centroid for this query GDA94 512174,5409123 falls within:

1:25000 Map: 5040 PROSPECT

Property: 2179083 "MT PLEASANT", 9 LUXMORE PLACE, PROSPECT TAS 7250

Threatened flora within 500 metres



E: 511363
N: 5410168

E: 513038
N: 5410168


























E: 511363
N: 5408139

E: 513038
N: 5408139

Threatened flora within 500 metres



-  Threatened Flora Point
-  Major Rivers
-  Other Rivers
-  Water Body
-  Estuaries
-  Sea
- Contours**
-  Index
-  Intermediate
-  Depression Index
-  Depression Intermediate
-  Land
- Road Centreline Names**
- Road Centrelines**
-  National/State Highway
-  Major Arterial Road
-  Arterial Road
-  Feeder
-  Access Road
-  Forestry
-  Vehicular Track
- Forest Groups**
-  Rainforest
-  Hardwood Plantation
-  Softwood Plantation
-  Other Native Forest
-  Tall Native Eucalypt Forest
- (cont)**
-  Low Native Eucalypt Forest
-  Non-Forest
-  No Data
-  Sea
-  Cadastral Parcels

Threatened flora within 500 metres



Verified Records

Id	Species	Common name	Ss	Ns	Observers	Date	Obs type	Position (gda94)
957098	<i>Alternanthera denticulata</i>	lesser joyweed	e		Denis IMorris (6606)	29-Nov-1978	sight	Point (511562,5409003) +/- 600m.
589471	<i>Arthropodium strictum</i>	chocolate lily	r		A North (2500)	20-Nov-2003	sight	Point (512080,5409490) +/- 10m.
227541	<i>Arthropodium strictum</i>	chocolate lily	r		Stephen Harris (2289)	16-Nov-1981	sight	Point (512112,5408483) +/- 100m.
955400	<i>Pultenaea prostrata</i>	silky bushpea	v		- Unknown (21598)	01-Jan-1800?	sight	Point (512638,5409593) +/- 1000m.

Unverified Records

For more information about threatened species, please contact the Manager, Threatened Species Section.

Telephone: (03) 6233 8759

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

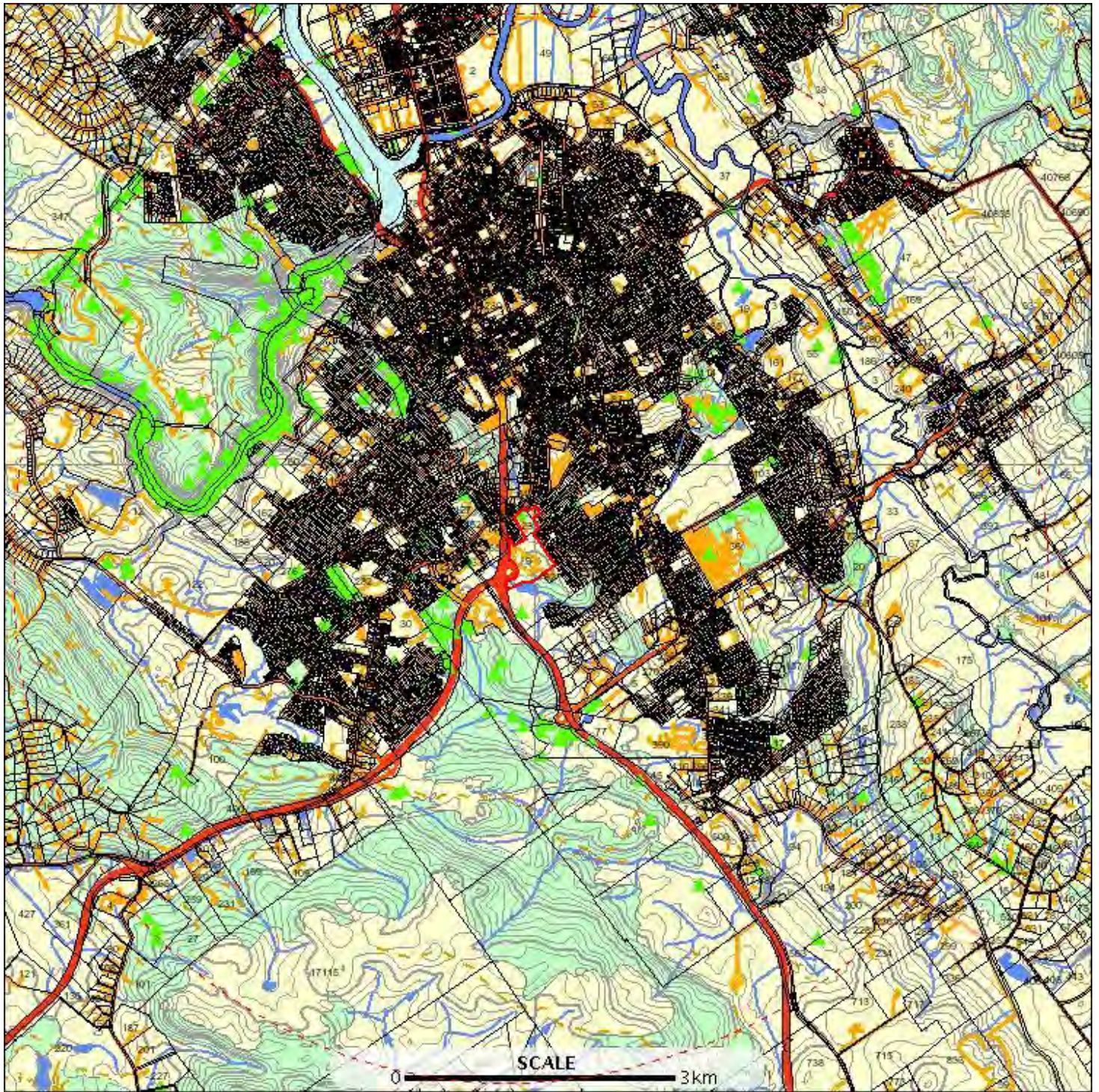
Address: GPO Box 44, Hobart, Tasmania, Australia, 7000

Threatened flora within 5000 metres



E: 506863
N: 5414669

E: 517538
N: 5414669



E: 506863
N: 5403639

E: 517538
N: 5403639

Threatened flora within 5000 metres



- | | | |
|-------------------------|----------------------------|-----------------------------|
| Threatened Flora Point | Land | Other Native Forest |
| Place Names | Road Centrelines | Tall Native Eucalypt Forest |
| Relief Names | National/State Highway | Low Native Eucalypt Forest |
| Major Rivers | Major Arterial Road | Non-Forest |
| Other Rivers | Arterial Road | No Data |
| Water Body | Feeder | Sea |
| Estuaries | Access Road | Cadastral Parcels |
| Sea | Forestry | |
| Contours | Vehicular Track | |
| Index | Forest Groups | |
| Intermediate | Rainforest | |
| Depression Index | Hardwood Plantation | |
| Depression Intermediate | Softwood Plantation (cont) | |

Threatened flora within 5000 metres



Verified Records

Id	Species	Common name	Ss	Ns	Observers	Date	Obs type	Position (gda94)
1236455	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (508498,5409676) +/- 10m.
1236454	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (508514,5409662) +/- 10m.
1236453	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (508524,5409658) +/- 10m.
1236277	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (508525,5409659) +/- 10m.
1236615	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (508527,5409626) +/- 10m.
1236541	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (508614,5409592) +/- 10m.
1236614	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (508625,5409587) +/- 10m.
1236613	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (508704,5409545) +/- 10m.
1236540	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (508707,5409538) +/- 10m.
1236710	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (508708,5409535) +/- 10m.
1236402	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (508737,5409536) +/- 10m.
1236486	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (508741,5409537) +/- 10m.
1236348	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (508745,5409535) +/- 10m.
1236485	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (508750,5409538) +/- 10m.
1236484	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (508755,5409538) +/- 10m.
1236452	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (508759,5409554) +/- 10m.
1236708	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (508760,5409547) +/- 10m.
1236612	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (508760,5409548) +/- 10m.
1236401	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (508760,5409546) +/- 10m.
1236709	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (508761,5409544) +/- 10m.
1236400	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (508769,5409544) +/- 10m.
1236276	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (508772,5409547) +/- 10m.
1236451	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (508780,5409541) +/- 10m.
1236703	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (509187,5409990) +/- 10m.
1236603	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509223,5410008) +/- 10m.
1236696	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509220,5410014) +/- 10m.
1236647	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (509206,5410022) +/- 10m.
1236702	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (509171,5410026) +/- 10m.
1236273	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (509216,5410038) +/- 10m.
1236336	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (508337,5409819) +/- 10m.
1236337	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (508338,5409816) +/- 10m.
1236379	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (508342,5409820) +/- 10m.
1090489	Alternanthera denticulata	lesser joyweed	e		Micah Visoiu (5870), R B Schahinger (19349)	10-Mar-2010	sight	Point (508352,5409809) +/- 5m.

Threatened flora within 5000 metres



Id	Species	Common name	Ss	Ns	Observers	Date	Obs type	Position (gda94)
1236525	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (508359,5409796) +/-10m.
1236431	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (508361,5409812) +/-10m.
930619	Alternanthera denticulata	lesser joyweed	e		A North (2500)	25-Jul-2001	sight	Point (508362,5409783) +/-50m.
1236280	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (508381,5409793) +/-10m.
1090487	Alternanthera denticulata	lesser joyweed	e		Micah Visoiu (5870),R B Schahinger (19349)	10-Mar-2010	sight	Point (508389,5409798) +/-5m.
1236434	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (508391,5409804) +/-10m.
1236338	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (508401,5409771) +/-10m.
1236349	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (508402,5409772) +/-10m.
1236257	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (508408,5409768) +/-10m.
1236487	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (508471,5409706) +/-10m.
1236279	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (508479,5409701) +/-10m.
1236444	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (507620,5410897) +/-10m.
1090822	Alternanthera denticulata	lesser joyweed	e		Richard Schahinger (2944)	18-Mar-2010	sight	Point (507604,5410902) +/-5m.
1236396	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (507602,5410914) +/-10m.
1090821	Alternanthera denticulata	lesser joyweed	e		Richard Schahinger (2944)	18-Mar-2010	sight	Point (507586,5410930) +/-5m.
1236270	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (507595,5410934) +/-10m.
1236445	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (507540,5410940) +/-10m.
1090820	Alternanthera denticulata	lesser joyweed	e		Richard Schahinger (2944)	18-Mar-2010	sight	Point (507549,5410943) +/-5m.
1090819	Alternanthera denticulata	lesser joyweed	e		Richard Schahinger (2944)	18-Mar-2010	sight	Point (507525,5410946) +/-5m.
1236395	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (507615,5410946) +/-10m.
1090829	Alternanthera denticulata	lesser joyweed	e		Richard Schahinger (2944)	18-Mar-2010	sight	Point (507613,5410957) +/-5m.
1236268	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (507577,5410963) +/-10m.
1090818	Alternanthera denticulata	lesser joyweed	e		Richard Schahinger (2944)	18-Mar-2010	sight	Point (507492,5410970) +/-5m.
1090816	Alternanthera denticulata	lesser joyweed	e		Richard Schahinger (2944)	18-Mar-2010	sight	Point (507448,5411006) +/-5m.
1236567	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (508795,5409551) +/-10m.
1236707	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (508820,5409563) +/-10m.
1236539	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (508825,5409565) +/-10m.
1236483	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (508826,5409565) +/-10m.
1236347	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (508838,5409563) +/-10m.
1236399	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (508846,5409570) +/-10m.
1236275	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (508847,5409568) +/-10m.

Threatened flora within 5000 metres



Id	Species	Common name	Ss	Ns	Observers	Date	Obs type	Position (gda94)
1236550	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (508849,5409572) +/- 10m.
1236513	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (508857,5409585) +/- 10m.
1236538	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (508859,5409569) +/- 10m.
1236706	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (508868,5409591) +/- 10m.
1236398	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (508868,5409574) +/- 10m.
1236482	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (508892,5409637) +/- 10m.
1236611	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (508903,5409632) +/- 10m.
1236705	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (508917,5409587) +/- 10m.
1236649	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (508918,5409665) +/- 10m.
1236274	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (508927,5409674) +/- 10m.
1236606	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (508943,5409679) +/- 10m.
1236475	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (508946,5409692) +/- 10m.
1236704	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (508953,5409751) +/- 10m.
1236698	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (508961,5409674) +/- 10m.
1236697	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (508992,5409742) +/- 10m.
1236474	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (508993,5409765) +/- 10m.
1236610	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (508997,5409784) +/- 10m.
1236648	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (509004,5409791) +/- 10m.
1236566	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (509023,5409809) +/- 10m.
1236735	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (509030,5409840) +/- 10m.
1236662	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (509042,5409818) +/- 10m.
1236440	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509043,5409789) +/- 10m.
1236278	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (508494,5409678) +/- 10m.
1236602	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509270,5410095) +/- 10m.
1236480	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (509228,5410112) +/- 10m.
1236681	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (509258,5410114) +/- 10m.
1236601	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509278,5410136) +/- 10m.
1236661	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (509246,5410142) +/- 10m.
1236533	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509278,5410150) +/- 10m.
1236549	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (509276,5410155) +/- 10m.
1236564	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (509284,5410156) +/- 10m.
1236560	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509281,5410157) +/- 10m.
1236575	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509290,5410158) +/- 10m.
1236680	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (509324,5410217) +/- 10m.
1236600	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509334,5410228) +/- 10m.

Threatened flora within 5000 metres



Id	Species	Common name	Ss	Ns	Observers	Date	Obs type	Position (gda94)
1236586	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (508291,5410015) +/-10m.
1236587	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (508276,5410046) +/-10m.
1236255	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (508243,5410049) +/-10m.
1090496	Alternanthera denticulata	lesser joyweed	e		Micah Visoiu (5870),R B Schahinger (19349)	10-Mar-2010	sight	Point (508237,5410050) +/-5m.
1236378	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (508246,5410051) +/-10m.
1236581	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (508239,5410054) +/-10m.
1236470	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (508252,5410108) +/-10m.
1236254	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (508225,5410130) +/-10m.
342312	Alternanthera denticulata	lesser joyweed	e		A North (2500)	30-Aug-2001	sight	Point (508262,5410183) +/-100m.
1236377	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (508213,5410305) +/-10m.
1090516	Alternanthera denticulata	lesser joyweed	e		Micah Visoiu (5870),R B Schahinger (19349)	10-Mar-2010	sight	Point (508299,5410306) +/-5m.
1236655	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (508220,5410312) +/-10m.
1236580	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (508218,5410317) +/-10m.
1236654	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (508228,5410342) +/-10m.
1236499	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (508335,5409827) +/-10m.
1236469	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (508327,5409844) +/-10m.
1090492	Alternanthera denticulata	lesser joyweed	e		Micah Visoiu (5870),R B Schahinger (19349)	10-Mar-2010	sight	Point (508317,5409852) +/-5m.
342313	Alternanthera denticulata	lesser joyweed	e		A North (2500)	30-Aug-2001	sight	Point (508362,5409883) +/-100m.
1236380	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (508360,5409897) +/-10m.
1090494	Alternanthera denticulata	lesser joyweed	e		Micah Visoiu (5870),R B Schahinger (19349)	10-Mar-2010	sight	Point (508298,5409902) +/-5m.
1236433	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (508302,5409903) +/-10m.
1236432	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (508302,5409904) +/-10m.
1236524	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (508303,5409905) +/-10m.
1236498	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (508300,5409921) +/-10m.
1236381	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (508334,5409932) +/-10m.
1236642	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (508292,5409942) +/-10m.
1236641	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (508289,5409946) +/-10m.
1236585	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (508281,5409955) +/-10m.
1236584	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (508281,5409962) +/-10m.
1090495	Alternanthera denticulata	lesser joyweed	e		Micah Visoiu (5870),R B Schahinger (19349)	10-Mar-2010	sight	Point (508269,5409966) +/-5m.
1236583	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (508271,5409978) +/-10m.

Threatened flora within 5000 metres



Id	Species	Common name	Ss	Ns	Observers	Date	Obs type	Position (gda94)
1236256	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (508270,5409981) +/-10m.
1236500	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (508304,5409985) +/-10m.
1236553	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (508265,5409987) +/-10m.
1236582	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (508261,5409990) +/-10m.
1236435	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (508296,5409992) +/-10m.
1236535	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509051,5409815) +/-10m.
1236394	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509065,5409835) +/-10m.
1236397	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (509048,5409841) +/-10m.
1236605	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509083,5409846) +/-10m.
1236672	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (509063,5409867) +/-10m.
1236604	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509112,5409872) +/-10m.
1236565	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (509069,5409879) +/-10m.
1236346	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (509063,5409891) +/-10m.
1236393	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509136,5409897) +/-10m.
1236671	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (509115,5409910) +/-10m.
1236537	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (509111,5409912) +/-10m.
1236561	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509151,5409914) +/-10m.
1236506	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509162,5409922) +/-10m.
1236450	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (509157,5409937) +/-10m.
1236534	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509200,5409975) +/-10m.
1236481	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (509181,5409981) +/-10m.
1236510	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (507635,5410882) +/-10m.
1236479	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (507682,5410882) +/-10m.
1090828	Alternanthera denticulata	lesser joyweed	e		Richard Schahinger (2944)	18-Mar-2010	sight	Point (507706,5410841) +/-5m.
1090825	Alternanthera denticulata	lesser joyweed	e		Richard Schahinger (2944)	18-Mar-2010	sight	Point (507714,5410869) +/-5m.
1236676	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (508237,5410356) +/-10m.
1236376	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (508237,5410361) +/-10m.
1236675	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (508240,5410364) +/-10m.
1236579	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (508247,5410375) +/-10m.
1236375	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (508257,5410399) +/-10m.
1236578	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (508276,5410408) +/-10m.
1236577	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (508339,5410425) +/-10m.
1236253	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (508356,5410421) +/-10m.
1236335	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (508370,5410412) +/-10m.

Threatened flora within 5000 metres



Id	Species	Common name	Ss	Ns	Observers	Date	Obs type	Position (gda94)
1236269	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (507629,5410891) +/-10m.
1236509	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (507655,5410891) +/-10m.
1236344	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (507656,5410890) +/-10m.
1090823	Alternanthera denticulata	lesser joyweed	e		Richard Schahinger (2944)	18-Mar-2010	sight	Point (507659,5410883) +/-5m.
1236508	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (507673,5410884) +/-10m.
1236562	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (507683,5410929) +/-10m.
1236478	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (507685,5410886) +/-10m.
1090808	Alternanthera denticulata	lesser joyweed	e		Richard Schahinger (2944)	18-Mar-2010	sight	Point (507343,5411137) +/-5m.
1236448	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (507345,5411130) +/-10m.
1236563	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (507348,5411122) +/-10m.
1090809	Alternanthera denticulata	lesser joyweed	e		Richard Schahinger (2944)	18-Mar-2010	sight	Point (507352,5411116) +/-5m.
1236266	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (507366,5411135) +/-10m.
1090810	Alternanthera denticulata	lesser joyweed	e		Richard Schahinger (2944)	18-Mar-2010	sight	Point (507370,5411095) +/-5m.
1236609	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (507370,5411108) +/-10m.
1236272	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (507373,5411093) +/-10m.
1236447	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (507380,5411100) +/-10m.
1090811	Alternanthera denticulata	lesser joyweed	e		Richard Schahinger (2944)	18-Mar-2010	sight	Point (507381,5411085) +/-5m.
1090812	Alternanthera denticulata	lesser joyweed	e		Richard Schahinger (2944)	18-Mar-2010	sight	Point (507387,5411078) +/-5m.
1090813	Alternanthera denticulata	lesser joyweed	e		Richard Schahinger (2944)	18-Mar-2010	sight	Point (507402,5411056) +/-5m.
1236446	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (507409,5411066) +/-10m.
1236271	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (507417,5411057) +/-10m.
1236701	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (507418,5411059) +/-10m.
1090814	Alternanthera denticulata	lesser joyweed	e		Richard Schahinger (2944)	18-Mar-2010	sight	Point (507423,5411041) +/-5m.
1090832	Alternanthera denticulata	lesser joyweed	e		Richard Schahinger (2944)	18-Mar-2010	sight	Point (507427,5411080) +/-5m.
1236679	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (507430,5411029) +/-10m.
1236343	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (507432,5411062) +/-10m.
1236333	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (507433,5411080) +/-10m.
1236700	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (507440,5411059) +/-10m.
1236734	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (507447,5411017) +/-10m.
1236658	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (507447,5411054) +/-10m.
1236443	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (507451,5411046) +/-10m.

Threatened flora within 5000 metres



Id	Species	Common name	Ss	Ns	Observers	Date	Obs type	Position (gda94)
1236659	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (507455,5411021) +/- 10m.
1236608	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (507456,5411022) +/- 10m.
1090831	Alternanthera denticulata	lesser joyweed	e		Richard Schahinger (2944)	18-Mar-2010	sight	Point (507459,5411048) +/- 5m.
1236511	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (507463,5411000) +/- 10m.
1236267	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (507558,5410974) +/- 10m.
1090807	Alternanthera denticulata	lesser joyweed	e		Richard Schahinger (2944)	18-Mar-2010	sight	Point (507332,5411157) +/- 5m.
1236342	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (507356,5411146) +/- 10m.
1090834	Alternanthera denticulata	lesser joyweed	e		Richard Schahinger (2944)	18-Mar-2010	sight	Point (507360,5411163) +/- 5m.
1236646	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (507339,5411201) +/- 10m.
1090835	Alternanthera denticulata	lesser joyweed	e		Richard Schahinger (2944)	18-Mar-2010	sight	Point (507337,5411203) +/- 5m.
1090502	Alternanthera denticulata	lesser joyweed	e		Micah Visoiu (5870), R B Schahinger (19349)	10-Mar-2010	sight	Point (508204,5410352) +/- 5m.
1090500	Alternanthera denticulata	lesser joyweed	e		Micah Visoiu (5870), R B Schahinger (19349)	10-Mar-2010	sight	Point (508207,5410296) +/- 5m.
930620	Alternanthera denticulata	lesser joyweed	e		A North (2500)	25-Jul-2001	sight	Point (508212,5410133) +/- 50m.
1090499	Alternanthera denticulata	lesser joyweed	e		Micah Visoiu (5870), R B Schahinger (19349)	10-Mar-2010	sight	Point (508224,5410209) +/- 5m.
1090498	Alternanthera denticulata	lesser joyweed	e		Micah Visoiu (5870), R B Schahinger (19349)	10-Mar-2010	sight	Point (508229,5410127) +/- 5m.
1236695	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509242,5410041) +/- 10m.
1236512	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (509215,5410051) +/- 10m.
1236694	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509267,5410061) +/- 10m.
1236345	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (509219,5410078) +/- 10m.
1236733	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (509217,5410088) +/- 10m.
1236590	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509716,5411399) +/- 10m.
1236644	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (509721,5411458) +/- 10m.
1236502	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509782,5411440) +/- 10m.
1236339	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509785,5411424) +/- 10m.
1236437	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509787,5411443) +/- 10m.
1236592	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509534,5411196) +/- 10m.
1236557	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509545,5411216) +/- 10m.
1236385	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509536,5411219) +/- 10m.
1236556	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509554,5411240) +/- 10m.
1236384	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509536,5411252) +/- 10m.

Threatened flora within 5000 metres



Id	Species	Common name	Ss	Ns	Observers	Date	Obs type	Position (gda94)
1236571	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509566,5411266) +/-10m.
1236591	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509567,5411270) +/-10m.
1236547	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509582,5411297) +/-10m.
1236340	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509606,5411321) +/-10m.
1236471	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509611,5411326) +/-10m.
1236260	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509615,5411339) +/-10m.
1236259	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509622,5411354) +/-10m.
1236438	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509522,5411021) +/-10m.
1236530	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509527,5411027) +/-10m.
1236598	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509522,5411030) +/-10m.
1236597	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509520,5411035) +/-10m.
1236529	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509518,5411036) +/-10m.
1236596	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509518,5411047) +/-10m.
1236390	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509521,5411063) +/-10m.
1236657	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509531,5411074) +/-10m.
1236389	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509519,5411086) +/-10m.
1236528	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509527,5411100) +/-10m.
1236595	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509520,5411101) +/-10m.
1236594	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509526,5411108) +/-10m.
1236572	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509522,5411120) +/-10m.
1236388	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509519,5411130) +/-10m.
1236558	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509526,5411131) +/-10m.
1236387	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509516,5411139) +/-10m.
1236593	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509528,5411145) +/-10m.
1236656	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509526,5411150) +/-10m.
1236504	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509523,5411153) +/-10m.
1236548	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509524,5411156) +/-10m.
1236386	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509521,5411162) +/-10m.
1236503	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509531,5411175) +/-10m.
1236261	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509522,5411178) +/-10m.
1236677	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509576,5410773) +/-10m.
1236689	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509558,5410789) +/-10m.
1236574	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509560,5410803) +/-10m.
1236391	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509562,5410813) +/-10m.
1236573	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509563,5410821) +/-10m.

Threatened flora within 5000 metres



Id	Species	Common name	Ss	Ns	Observers	Date	Obs type	Position (gda94)
1236473	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509546,5410851) +/-10m.
1236263	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509522,5410908) +/-10m.
1236688	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509520,5410943) +/-10m.
1236262	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509521,5410959) +/-10m.
1236732	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509525,5410967) +/-10m.
1236531	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509523,5410972) +/-10m.
1236559	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509523,5410983) +/-10m.
1236472	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509524,5411018) +/-10m.
1236660	Alternanthera denticulata	lesser joyweed	e		Philip Barker (1911)	15-Apr-2010	sight	Point (509343,5410282) +/-10m.
1236693	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509425,5410340) +/-10m.
1236599	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509457,5410364) +/-10m.
1236264	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509493,5410381) +/-10m.
1236439	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509505,5410387) +/-10m.
1236505	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509563,5410449) +/-10m.
1236692	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509594,5410613) +/-10m.
1236691	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509602,5410623) +/-10m.
1236532	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509583,5410749) +/-10m.
1236690	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509581,5410762) +/-10m.
1236392	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509588,5410773) +/-10m.
1091215	Alternanthera denticulata	lesser joyweed	e		R B Schahinger (19349)	31-Mar-2010	sight	Point (510075,5411949) +/-5m.
1091230	Alternanthera denticulata	lesser joyweed	e		R B Schahinger (19349)	31-Mar-2010	sight	Point (509983,5411959) +/-5m.
1091229	Alternanthera denticulata	lesser joyweed	e		R B Schahinger (19349)	31-Mar-2010	sight	Point (509987,5411959) +/-5m.
1091231	Alternanthera denticulata	lesser joyweed	e		R B Schahinger (19349)	31-Mar-2010	sight	Point (509984,5411961) +/-5m.
1091227	Alternanthera denticulata	lesser joyweed	e		R B Schahinger (19349)	31-Mar-2010	sight	Point (510007,5411963) +/-5m.
1091228	Alternanthera denticulata	lesser joyweed	e		R B Schahinger (19349)	31-Mar-2010	sight	Point (510000,5411966) +/-5m.
1091225	Alternanthera denticulata	lesser joyweed	e		R B Schahinger (19349)	31-Mar-2010	sight	Point (510013,5411967) +/-5m.
1091226	Alternanthera denticulata	lesser joyweed	e		R B Schahinger (19349)	31-Mar-2010	sight	Point (510008,5411971) +/-5m.
1091223	Alternanthera denticulata	lesser joyweed	e		R B Schahinger (19349)	31-Mar-2010	sight	Point (510044,5411975) +/-5m.
943718	Alternanthera denticulata	lesser joyweed	e		Matthew Baker (6602)	12-Feb-2003	sight	Point (509919,5411873) +/-100m.
1091210	Alternanthera denticulata	lesser joyweed	e		R B Schahinger (19349)	31-Mar-2010	sight	Point (509925,5411878) +/-5m.
1090908	Alternanthera denticulata	lesser joyweed	e		Richard Schahinger (2944)	19-Mar-2010	sight	Point (509951,5411787) +/-10m.
1091241	Alternanthera denticulata	lesser joyweed	e		R B Schahinger (19349)	31-Mar-2010	sight	Point (509891,5411812) +/-5m.
1091242	Alternanthera denticulata	lesser joyweed	e		R B Schahinger (19349)	31-Mar-2010	sight	Point (509893,5411792) +/-5m.
1091239	Alternanthera denticulata	lesser joyweed	e		R B Schahinger (19349)	31-Mar-2010	sight	Point (509896,5411859) +/-5m.
1091240	Alternanthera denticulata	lesser joyweed	e		R B Schahinger (19349)	31-Mar-2010	sight	Point (509899,5411851) +/-5m.

Threatened flora within 5000 metres



Id	Species	Common name	Ss	Ns	Observers	Date	Obs type	Position (gda94)
1090889	Alternanthera denticulata	lesser joyweed	e		Richard Schahinger (2944)	19-Mar-2010	sight	Point (509875,5411590) +/- 5m.
1090890	Alternanthera denticulata	lesser joyweed	e		Richard Schahinger (2944)	19-Mar-2010	sight	Point (509890,5411613) +/- 5m.
228065	Alternanthera denticulata	lesser joyweed	e		A.V. Ratkowsky (3779)	26-Mar-1993	sight	Point (509912,5411683) +/- 200m.
1090903	Alternanthera denticulata	lesser joyweed	e		Richard Schahinger (2944)	19-Mar-2010	sight	Point (509967,5411654) +/- 5m.
1090882	Alternanthera denticulata	lesser joyweed	e		Richard Schahinger (2944)	19-Mar-2010	sight	Point (509748,5411457) +/- 14m.
1090887	Alternanthera denticulata	lesser joyweed	e		Richard Schahinger (2944)	19-Mar-2010	sight	Point (509836,5411552) +/- 5m.
1090874	Alternanthera denticulata	lesser joyweed	e		Richard Schahinger (2944)	19-Mar-2010	sight	Point (509653,5411388) +/- 13m.
1090875	Alternanthera denticulata	lesser joyweed	e		Richard Schahinger (2944)	19-Mar-2010	sight	Point (509667,5411407) +/- 10m.
1090877	Alternanthera denticulata	lesser joyweed	e		Richard Schahinger (2944)	19-Mar-2010	sight	Point (509703,5411437) +/- 14m.
1090878	Alternanthera denticulata	lesser joyweed	e		Richard Schahinger (2944)	19-Mar-2010	sight	Point (509708,5411401) +/- 13m.
1090880	Alternanthera denticulata	lesser joyweed	e		Richard Schahinger (2944)	19-Mar-2010	sight	Point (509711,5411411) +/- 12m.
228019	Alternanthera denticulata	lesser joyweed	e		A.V. Ratkowsky (3779)	16-Feb-1993	sight	Point (509512,5411383) +/- 2000m.
1090872	Alternanthera denticulata	lesser joyweed	e		Richard Schahinger (2944)	19-Mar-2010	sight	Point (509632,5411369) +/- 10m.
957098	Alternanthera denticulata	lesser joyweed	e		Denis IMorris (6606)	29-Nov-1978	sight	Point (511562,5409003) +/- 600m.
1090474	Alternanthera denticulata	lesser joyweed	e		Micah Visoiu (5870), R B Schahinger (19349)	10-Mar-2010	sight	Point (508777,5409536) +/- 5m.
1090470	Alternanthera denticulata	lesser joyweed	e		Micah Visoiu (5870), R B Schahinger (19349)	10-Mar-2010	sight	Point (508818,5409548) +/- 5m.
1090469	Alternanthera denticulata	lesser joyweed	e		Micah Visoiu (5870), R B Schahinger (19349)	10-Mar-2010	sight	Point (508846,5409567) +/- 5m.
1090477	Alternanthera denticulata	lesser joyweed	e		Micah Visoiu (5870), R B Schahinger (19349)	10-Mar-2010	sight	Point (508625,5409575) +/- 5m.
1090468	Alternanthera denticulata	lesser joyweed	e		Micah Visoiu (5870), R B Schahinger (19349)	10-Mar-2010	sight	Point (508872,5409586) +/- 5m.
1090478	Alternanthera denticulata	lesser joyweed	e		Micah Visoiu (5870), R B Schahinger (19349)	10-Mar-2010	sight	Point (508569,5409595) +/- 5m.
1090466	Alternanthera denticulata	lesser joyweed	e		Micah Visoiu (5870), R B Schahinger (19349)	10-Mar-2010	sight	Point (508907,5409625) +/- 5m.
1090482	Alternanthera denticulata	lesser joyweed	e		Micah Visoiu (5870), R B Schahinger (19349)	10-Mar-2010	sight	Point (508489,5409670) +/- 5m.
940231	Alternanthera denticulata	lesser joyweed	e		R Schahinger (6868)	12-Feb-2002	sight	Point (510312,5413123) +/- 6m.
345044	Alternanthera denticulata	lesser joyweed	e		Richard Schahinger (2944)	12-Feb-2002	sight	Point (510315,5413125) +/- 10m.

Threatened flora within 5000 metres



Id	Species	Common name	Ss	Ns	Observers	Date	Obs type	Position (gda94)
972432	Alternanthera denticulata	lesser joyweed	e		Micah Visoiu (5870)	13-Jul-2007	sight	Point (510324,5413119) +/-100m.
1216289	Alternanthera denticulata	lesser joyweed	e		Nicky Meeson (5963)	02-Dec-2009	sight	Point (515236,5411403) +/-10m.
1236699	Alternanthera denticulata	lesser joyweed	e		Phillip Barker (1911)	15-Apr-2010	sight	Point (509971,5411662) +/-10m.
1236507	Alternanthera denticulata	lesser joyweed	e		Phillip Barker (1911)	15-Apr-2010	sight	Point (509973,5411662) +/-10m.
1236687	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509864,5411504) +/-10m.
1236643	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509871,5411542) +/-10m.
1236555	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509849,5411556) +/-10m.
1236527	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509835,5411566) +/-10m.
1236526	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509854,5411579) +/-10m.
1236331	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509871,5411590) +/-10m.
1236258	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509882,5411597) +/-10m.
1236686	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509881,5411597) +/-10m.
1236383	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509949,5411786) +/-10m.
1236382	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509957,5411788) +/-10m.
1236501	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509939,5411789) +/-10m.
1236589	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509946,5411790) +/-10m.
1236436	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509948,5411791) +/-10m.
1236588	Alternanthera denticulata	lesser joyweed	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509950,5411796) +/-10m.
1236332	Alternanthera denticulata	lesser joyweed	e		Phillip Barker (1911)	15-Apr-2010	sight	Point (509636,5411348) +/-10m.
1236341	Alternanthera denticulata	lesser joyweed	e		Phillip Barker (1911)	15-Apr-2010	sight	Point (509650,5411348) +/-10m.
1236476	Alternanthera denticulata	lesser joyweed	e		Phillip Barker (1911)	15-Apr-2010	sight	Point (509653,5411367) +/-10m.
1236645	Alternanthera denticulata	lesser joyweed	e		Phillip Barker (1911)	15-Apr-2010	sight	Point (509671,5411388) +/-10m.
1236441	Alternanthera denticulata	lesser joyweed	e		Phillip Barker (1911)	15-Apr-2010	sight	Point (509672,5411430) +/-10m.
1236674	Alternanthera denticulata	lesser joyweed	e		Phillip Barker (1911)	15-Apr-2010	sight	Point (509677,5411401) +/-10m.
1090548	Alternanthera denticulata	lesser joyweed	e		Micah Visoiu (5870), R B Schahinger (19349)	11-Mar-2010	sight	Point (509646,5410516) +/-5m.
1090543	Alternanthera denticulata	lesser joyweed	e		Micah Visoiu (5870), R B Schahinger (19349)	11-Mar-2010	sight	Point (509622,5410464) +/-5m.
1090848	Alternanthera denticulata	lesser joyweed	e		Richard Schahinger (2944)	19-Mar-2010	sight	Point (509530,5410984) +/-10m.
1090853	Alternanthera denticulata	lesser joyweed	e		Richard Schahinger (2944)	19-Mar-2010	sight	Point (509534,5411030) +/-10m.
1090855	Alternanthera denticulata	lesser joyweed	e		Richard Schahinger (2944)	19-Mar-2010	sight	Point (509536,5411037) +/-10m.
1090854	Alternanthera denticulata	lesser joyweed	e		Richard Schahinger (2944)	19-Mar-2010	sight	Point (509534,5411037) +/-10m.
1090858	Alternanthera denticulata	lesser joyweed	e		Richard Schahinger (2944)	19-Mar-2010	sight	Point (509533,5411064) +/-10m.

Threatened flora within 5000 metres



Id	Species	Common name	Ss	Ns	Observers	Date	Obs type	Position (gda94)
1090860	Alternanthera denticulata	lesser joyweed	e		Richard Schahinger (2944)	19-Mar-2010	sight	Point (509536,5411067) +/- 10m.
1090575	Alternanthera denticulata	lesser joyweed	e		Micah Visoiu (5870), R B Schahinger (19349)	11-Mar-2010	sight	Point (509482,5410375) +/- 5m.
1090573	Alternanthera denticulata	lesser joyweed	e		Micah Visoiu (5870), R B Schahinger (19349)	11-Mar-2010	sight	Point (509524,5410395) +/- 5m.
1090532	Alternanthera denticulata	lesser joyweed	e		Micah Visoiu (5870), R B Schahinger (19349)	11-Mar-2010	sight	Point (509553,5410384) +/- 5m.
1090536	Alternanthera denticulata	lesser joyweed	e		Micah Visoiu (5870), R B Schahinger (19349)	11-Mar-2010	sight	Point (509595,5410420) +/- 5m.
1090537	Alternanthera denticulata	lesser joyweed	e		Micah Visoiu (5870), R B Schahinger (19349)	11-Mar-2010	sight	Point (509602,5410429) +/- 5m.
342315	Alternanthera denticulata	lesser joyweed	e		A North (2500)	30-Aug-2001	sight	Point (509212,5410083) +/- 100m.
1090451	Alternanthera denticulata	lesser joyweed	e		Micah Visoiu (5870), R B Schahinger (19349)	10-Mar-2010	sight	Point (509229,5410056) +/- 5m.
1090579	Alternanthera denticulata	lesser joyweed	e		Micah Visoiu (5870), R B Schahinger (19349)	11-Mar-2010	sight	Point (509272,5410194) +/- 5m.
342316	Alternanthera denticulata	lesser joyweed	e		A North (2500)	30-Aug-2001	sight	Point (509412,5410333) +/- 100m.
342343	Alternanthera denticulata	lesser joyweed	e		A North (2500)	30-Aug-2001	sight	Point (509512,5410313) +/- 100m.
343409	Alternanthera denticulata	lesser joyweed	e		A North (2500)	30-Aug-2001	sight	Point (509512,5410323) +/- 100m.
1090861	Alternanthera denticulata	lesser joyweed	e		Richard Schahinger (2944)	19-Mar-2010	sight	Point (509538,5411156) +/- 10m.
1090866	Alternanthera denticulata	lesser joyweed	e		Richard Schahinger (2944)	19-Mar-2010	sight	Point (509539,5411188) +/- 10m.
1090864	Alternanthera denticulata	lesser joyweed	e		Richard Schahinger (2944)	19-Mar-2010	sight	Point (509540,5411176) +/- 10m.
1090863	Alternanthera denticulata	lesser joyweed	e		Richard Schahinger (2944)	19-Mar-2010	sight	Point (509542,5411164) +/- 10m.
1090868	Alternanthera denticulata	lesser joyweed	e		Richard Schahinger (2944)	19-Mar-2010	sight	Point (509553,5411210) +/- 10m.
1090869	Alternanthera denticulata	lesser joyweed	e		Richard Schahinger (2944)	19-Mar-2010	sight	Point (509560,5411217) +/- 10m.
1090572	Alternanthera denticulata	lesser joyweed	e		Micah Visoiu (5870), R B Schahinger (19349)	11-Mar-2010	sight	Point (509592,5410507) +/- 5m.
1090571	Alternanthera denticulata	lesser joyweed	e		Micah Visoiu (5870), R B Schahinger (19349)	11-Mar-2010	sight	Point (509559,5410605) +/- 5m.
1090569	Alternanthera denticulata	lesser joyweed	e		Micah Visoiu (5870), R B Schahinger (19349)	11-Mar-2010	sight	Point (509494,5410717) +/- 5m.
1090843	Alternanthera denticulata	lesser joyweed	e		Richard Schahinger (2944)	19-Mar-2010	sight	Point (509534,5410948) +/- 10m.
1090464	Alternanthera denticulata	lesser joyweed	e		Micah Visoiu (5870), R B Schahinger (19349)	10-Mar-2010	sight	Point (508997,5409765) +/- 5m.

Threatened flora within 5000 metres



Id	Species	Common name	Ss	Ns	Observers	Date	Obs type	Position (gda94)
342314	Alternanthera denticulata	lesser joyweed	e		A North (2500)	30-Aug-2001	sight	Point (509012,5409783) +/-100m.
1090462	Alternanthera denticulata	lesser joyweed	e		Micah Visoiu (5870), R B Schahinger (19349)	10-Mar-2010	sight	Point (509042,5409790) +/-5m.
1090461	Alternanthera denticulata	lesser joyweed	e		Micah Visoiu (5870), R B Schahinger (19349)	10-Mar-2010	sight	Point (509065,5409830) +/-5m.
1090458	Alternanthera denticulata	lesser joyweed	e		Micah Visoiu (5870), R B Schahinger (19349)	10-Mar-2010	sight	Point (509131,5409889) +/-5m.
1090456	Alternanthera denticulata	lesser joyweed	e		Micah Visoiu (5870), R B Schahinger (19349)	10-Mar-2010	sight	Point (509162,5409970) +/-5m.
1090454	Alternanthera denticulata	lesser joyweed	e		Micah Visoiu (5870), R B Schahinger (19349)	10-Mar-2010	sight	Point (509200,5409985) +/-5m.
1090483	Alternanthera denticulata	lesser joyweed	e		Micah Visoiu (5870), R B Schahinger (19349)	10-Mar-2010	sight	Point (508409,5409724) +/-5m.
1090484	Alternanthera denticulata	lesser joyweed	e		Micah Visoiu (5870), R B Schahinger (19349)	10-Mar-2010	sight	Point (508406,5409739) +/-5m.
1090503	Alternanthera denticulata	lesser joyweed	e		Micah Visoiu (5870), R B Schahinger (19349)	10-Mar-2010	sight	Point (508240,5410414) +/-5m.
1090504	Alternanthera denticulata	lesser joyweed	e		Micah Visoiu (5870), R B Schahinger (19349)	10-Mar-2010	sight	Point (508248,5410460) +/-5m.
1090506	Alternanthera denticulata	lesser joyweed	e		Micah Visoiu (5870), R B Schahinger (19349)	10-Mar-2010	sight	Point (508261,5410513) +/-5m.
1090507	Alternanthera denticulata	lesser joyweed	e		Micah Visoiu (5870), R B Schahinger (19349)	10-Mar-2010	sight	Point (508279,5410506) +/-5m.
1090838	Alternanthera denticulata	lesser joyweed	e		Richard Schahinger (2944)	18-Mar-2010	sight	Point (508332,5410440) +/-5m.
1090837	Alternanthera denticulata	lesser joyweed	e		Richard Schahinger (2944)	18-Mar-2010	sight	Point (508351,5410411) +/-5m.
1090836	Alternanthera denticulata	lesser joyweed	e		Richard Schahinger (2944)	18-Mar-2010	sight	Point (508390,5410396) +/-5m.
1091222	Alternanthera denticulata	lesser joyweed	e		R B Schahinger (19349)	31-Mar-2010	sight	Point (510083,5411977) +/-5m.
1091224	Alternanthera denticulata	lesser joyweed	e		R B Schahinger (19349)	31-Mar-2010	sight	Point (510020,5411977) +/-5m.
1091221	Alternanthera denticulata	lesser joyweed	e		R B Schahinger (19349)	31-Mar-2010	sight	Point (510108,5411982) +/-5m.
1091220	Alternanthera denticulata	lesser joyweed	e		R B Schahinger (19349)	31-Mar-2010	sight	Point (510148,5411998) +/-5m.
1091216	Alternanthera denticulata	lesser joyweed	e		R B Schahinger (19349)	31-Mar-2010	sight	Point (510205,5412028) +/-5m.
1091211	Alternanthera denticulata	lesser joyweed	e		R B Schahinger (19349)	31-Mar-2010	sight	Point (509941,5411891) +/-5m.
1091238	Alternanthera denticulata	lesser joyweed	e		R B Schahinger (19349)	31-Mar-2010	sight	Point (509889,5411918) +/-5m.
1091212	Alternanthera denticulata	lesser joyweed	e		R B Schahinger (19349)	31-Mar-2010	sight	Point (509971,5411921) +/-5m.
1091234	Alternanthera denticulata	lesser joyweed	e		R B Schahinger (19349)	31-Mar-2010	sight	Point (509949,5411926) +/-5m.
1091237	Alternanthera denticulata	lesser joyweed	e		R B Schahinger (19349)	31-Mar-2010	sight	Point (509906,5411931) +/-5m.

Threatened flora within 5000 metres



Id	Species	Common name	Ss	Ns	Observers	Date	Obs type	Position (gda94)
1091236	Alternanthera denticulata	lesser joyweed	e		R B Schahinger (19349)	31-Mar-2010	sight	Point (509925,5411938) +/- 5m.
1091235	Alternanthera denticulata	lesser joyweed	e		R B Schahinger (19349)	31-Mar-2010	sight	Point (509940,5411943) +/- 5m.
1091233	Alternanthera denticulata	lesser joyweed	e		R B Schahinger (19349)	31-Mar-2010	sight	Point (509959,5411947) +/- 5m.
1091232	Alternanthera denticulata	lesser joyweed	e		R B Schahinger (19349)	31-Mar-2010	sight	Point (509971,5411955) +/- 5m.
1091218	Alternanthera denticulata	lesser joyweed	e		R B Schahinger (19349)	31-Mar-2010	sight	Point (509977,5411918) +/- 5m.
1091217	Alternanthera denticulata	lesser joyweed	e		R B Schahinger (19349)	31-Mar-2010	sight	Point (509986,5411918) +/- 5m.
1091213	Alternanthera denticulata	lesser joyweed	e		R B Schahinger (19349)	31-Mar-2010	sight	Point (510000,5411937) +/- 5m.
1091219	Alternanthera denticulata	lesser joyweed	e		R B Schahinger (19349)	31-Mar-2010	sight	Point (509986,5411940) +/- 5m.
1091214	Alternanthera denticulata	lesser joyweed	e		R B Schahinger (19349)	31-Mar-2010	sight	Point (510053,5411944) +/- 5m.
228020	Anogramma leptophylla	annual fern	v		A Simson (2776)	Dec-1879	sight	Point (509512,5411383) +/- 2000m.
227399	Anogramma leptophylla	annual fern	v		W.W. Spicer (5754)	May-1876	sight	Point (509512,5411383) +/- 2000m.
1241227	Aphelia gracilis	slender fanwort	r		Anna Povey (3310)	08-Nov-2011	sight	Point (508850,5410632) +/- 10m.
590430	Aphelia gracilis	slender fanwort	r		A North (2500)	01-Aug-2001	sight	Point (508412,5405283) +/- 300m.
1241226	Aphelia gracilis	slender fanwort	r		Anna Povey (3310)	08-Nov-2011	sight	Point (508704,5410660) +/- 50m.
227970	Aphelia gracilis	slender fanwort	r		A.V. Ratkowsky (3779)	31-Oct-1991	sight	Point (508112,5411483) +/- 1800m.
929709	Aphelia gracilis	slender fanwort	r		Anna Povey (3310)	01-Oct-2004	sight	Point (511780,5407481) +/- 50m.
590431	Aphelia pumilio	dwarf fanwort	r		A North (2500)	01-Aug-2001	sight	Point (508412,5405283) +/- 300m.
1241225	Aphelia pumilio	dwarf fanwort	r		Anna Povey (3310)	08-Nov-2011	sight	Point (508666,5410704) +/- 10m.
1241224	Aphelia pumilio	dwarf fanwort	r		Anna Povey (3310)	08-Nov-2011	sight	Point (508733,5410586) +/- 10m.
1241420	Aphelia pumilio	dwarf fanwort	r		P. Collier (5300)	22-Oct-2011	sight	Point (511246,5408229) +/- 7m.
227367	Aphelia pumilio	dwarf fanwort	r		A.V. Ratkowsky (3779)	31-Oct-1991	sight	Point (508112,5411483) +/- 1800m.
1201869	Aphelia pumilio	dwarf fanwort	r		Anna Povey (3310)	12-Nov-2010	sight	Point (509027,5412209) +/- 10m.
1201870	Aphelia pumilio	dwarf fanwort	r		Anna Povey (3310)	29-Nov-2010	sight	Point (509027,5412209) +/- 10m.
881498	Aphelia pumilio	dwarf fanwort	r		A.V. Ratkowsky (3779)	01-Sep-1992?	sight	Point (511137,5409333) +/- 50m.
929710	Aphelia pumilio	dwarf fanwort	r		Anna Povey (3310)	01-Oct-2004	sight	Point (511780,5407481) +/- 50m.
401846	Arthropodium strictum	chocolate lily	r		J Kirkpatrick (1197)	1984	sight	Point (513912,5410583) +/- 100m.
481025	Arthropodium strictum	chocolate lily	r		L Gilfedder (3446)	01-Jan-1600?	sight	Point (513912,5410883) +/- 100m.
1163446	Arthropodium strictum	chocolate lily	r		Anna Povey (3310)	28-Sep-2010	sight	Point (515440,5412301) +/- 10m.
1163447	Arthropodium strictum	chocolate lily	r		Anna Povey (3310)	28-Sep-2010	sight	Point (515484,5412313) +/- 10m.
1163448	Arthropodium strictum	chocolate lily	r		Anna Povey (3310)	28-Sep-2010	sight	Point (515487,5412317) +/- 10m.
1046698	Arthropodium strictum	chocolate lily	r		Anna Povey (3310)	30-Nov-2008	sight	Point (514443,5413712) +/- 100m.
1163456	Arthropodium strictum	chocolate lily	r		Anna Povey (3310)	28-Sep-2010	sight	Point (515667,5411823) +/- 10m.
1163459	Arthropodium strictum	chocolate lily	r		Anna Povey (3310)	28-Sep-2010	sight	Point (515680,5411866) +/- 10m.
1163461	Arthropodium strictum	chocolate lily	r		Anna Povey (3310)	28-Sep-2010	sight	Point (515689,5411889) +/- 10m.
1163460	Arthropodium strictum	chocolate lily	r		Anna Povey (3310)	28-Sep-2010	sight	Point (515685,5411910) +/- 10m.

Threatened flora within 5000 metres



Id	Species	Common name	Ss	Ns	Observers	Date	Obs type	Position (gda94)
1163458	Arthropodium strictum	chocolate lily	r		Anna Povey (3310)	28-Sep-2010	sight	Point (515674,5411995) +/- 10m.
1163455	Arthropodium strictum	chocolate lily	r		Anna Povey (3310)	28-Sep-2010	sight	Point (515666,5412000) +/- 10m.
1163457	Arthropodium strictum	chocolate lily	r		Anna Povey (3310)	28-Sep-2010	sight	Point (515673,5412008) +/- 10m.
1163454	Arthropodium strictum	chocolate lily	r		Anna Povey (3310)	28-Sep-2010	sight	Point (515627,5412055) +/- 10m.
1163452	Arthropodium strictum	chocolate lily	r		Anna Povey (3310)	28-Sep-2010	sight	Point (515625,5412057) +/- 10m.
1163453	Arthropodium strictum	chocolate lily	r		Anna Povey (3310)	28-Sep-2010	sight	Point (515627,5412080) +/- 10m.
929374	Arthropodium strictum	chocolate lily	r		A Simson (2776)	01-Dec-1879	sight	Point (512641,5411443) +/- 3000m.
939489	Arthropodium strictum	chocolate lily	r		R.C. Gunn (5474)	29-Oct-1838	sight	Point (512641,5411443) +/- 3000m.
1163462	Arthropodium strictum	chocolate lily	r		Anna Povey (3310)	28-Sep-2010	sight	Point (515704,5411682) +/- 10m.
1163463	Arthropodium strictum	chocolate lily	r		Anna Povey (3310)	28-Sep-2010	sight	Point (515734,5411703) +/- 10m.
1163449	Arthropodium strictum	chocolate lily	r		Anna Povey (3310)	28-Sep-2010	sight	Point (515495,5412083) +/- 10m.
1163450	Arthropodium strictum	chocolate lily	r		Anna Povey (3310)	28-Sep-2010	sight	Point (515589,5412099) +/- 10m.
1163451	Arthropodium strictum	chocolate lily	r		Anna Povey (3310)	28-Sep-2010	sight	Point (515592,5412100) +/- 10m.
1163445	Arthropodium strictum	chocolate lily	r		Anna Povey (3310)	28-Sep-2010	sight	Point (515412,5412278) +/- 10m.
589471	Arthropodium strictum	chocolate lily	r		A North (2500)	20-Nov-2003	sight	Point (512080,5409490) +/- 10m.
925336	Arthropodium strictum	chocolate lily	r		A.V. Ratkowsky (3779)	01-Sep-1992	sight	Point (511137,5409333) +/- 50m.
881563	Arthropodium strictum	chocolate lily	r		A.V. Ratkowsky (3779)	01-Sep-1992?	sight	Point (511137,5409333) +/- 50m.
1201879	Arthropodium strictum	chocolate lily	r		Anna Povey (3310)	03-Dec-2010	sight	Point (510934,5410533) +/- 10m.
1201908	Arthropodium strictum	chocolate lily	r		Anna Povey (3310)	03-Dec-2010	sight	Point (510901,5410539) +/- 10m.
1201906	Arthropodium strictum	chocolate lily	r		Anna Povey (3310)	03-Dec-2010	sight	Point (510893,5410542) +/- 10m.
1201911	Arthropodium strictum	chocolate lily	r		Anna Povey (3310)	03-Dec-2010	sight	Point (510916,5410703) +/- 10m.
1201905	Arthropodium strictum	chocolate lily	r		Anna Povey (3310)	03-Dec-2010	sight	Point (510948,5410710) +/- 10m.
1201904	Arthropodium strictum	chocolate lily	r		Anna Povey (3310)	03-Dec-2010	sight	Point (510942,5410722) +/- 10m.
1201903	Arthropodium strictum	chocolate lily	r		Anna Povey (3310)	03-Dec-2010	sight	Point (510915,5410749) +/- 10m.
1201901	Arthropodium strictum	chocolate lily	r		Anna Povey (3310)	03-Dec-2010	sight	Point (510909,5410749) +/- 10m.
1201913	Arthropodium strictum	chocolate lily	r		Anna Povey (3310)	03-Dec-2010	sight	Point (510891,5410751) +/- 10m.
1201915	Arthropodium strictum	chocolate lily	r		Anna Povey (3310)	03-Dec-2010	sight	Point (510878,5410765) +/- 10m.
1201899	Arthropodium strictum	chocolate lily	r		Anna Povey (3310)	03-Dec-2010	sight	Point (510913,5410767) +/- 10m.
1201898	Arthropodium strictum	chocolate lily	r		Anna Povey (3310)	03-Dec-2010	sight	Point (510912,5410788) +/- 10m.
1201896	Arthropodium strictum	chocolate lily	r		Anna Povey (3310)	03-Dec-2010	sight	Point (510898,5410790) +/- 10m.
1201894	Arthropodium strictum	chocolate lily	r		Anna Povey (3310)	03-Dec-2010	sight	Point (510878,5410820) +/- 10m.
1201892	Arthropodium strictum	chocolate lily	r		Anna Povey (3310)	03-Dec-2010	sight	Point (510875,5410821) +/- 10m.
1201891	Arthropodium strictum	chocolate lily	r		Anna Povey (3310)	03-Dec-2010	sight	Point (510871,5410823) +/- 10m.
1201889	Arthropodium strictum	chocolate lily	r		Anna Povey (3310)	03-Dec-2010	sight	Point (510821,5410858) +/- 10m.
1201886	Arthropodium strictum	chocolate lily	r		Anna Povey (3310)	03-Dec-2010	sight	Point (510786,5410861) +/- 10m.

Threatened flora within 5000 metres



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1201888	Arthropodium strictum	chocolate lily	r		Anna Povey (3310)	03-Dec-2010	sight	Point (510827,5410868) +/-10m.
1201881	Arthropodium strictum	chocolate lily	r		Anna Povey (3310)	03-Dec-2010	sight	Point (510664,5410992) +/-10m.
1201882	Arthropodium strictum	chocolate lily	r		Anna Povey (3310)	03-Dec-2010	sight	Point (510688,5411004) +/-10m.
1201883	Arthropodium strictum	chocolate lily	r		Anna Povey (3310)	03-Dec-2010	sight	Point (510698,5411027) +/-10m.
1201884	Arthropodium strictum	chocolate lily	r		Anna Povey (3310)	03-Dec-2010	sight	Point (510719,5411029) +/-10m.
1201885	Arthropodium strictum	chocolate lily	r		Anna Povey (3310)	03-Dec-2010	sight	Point (510738,5411032) +/-10m.
953004	Arthropodium strictum	chocolate lily	r		Anna Povey (3310)	13-Nov-2006	sight	Point (509998,5410569) +/-10m.
401888	Arthropodium strictum	chocolate lily	r		J Kirkpatrick (1197)	1984	sight	Point (509812,5411283) +/-100m.
971962	Arthropodium strictum	chocolate lily	r		Roy Skabo (6388)	17-Nov-2007	sight	Point (509586,5410025) +/-10m.
1201875	Arthropodium strictum	chocolate lily	r		Anna Povey (3310)	02-Dec-2010	sight	Point (509330,5412276) +/-10m.
931175	Arthropodium strictum	chocolate lily	r		A.V. Ratkowsky (3779)	25-Oct-1992	sight	Point (510302,5412043) +/-500m.
942507	Arthropodium strictum	chocolate lily	r		J.G. Smith (4715)	26-Oct-1839	sight	Point (512162,5411963) +/-5000m.
933270	Arthropodium strictum	chocolate lily	r		A.M. Olsen (3763)	27-Nov-1938	sight	Point (509857,5411447) +/-500m.
227513	Arthropodium strictum	chocolate lily	r		A.M. Olsen (3763)	27-Nov-1938	sight	Point (511612,5412683) +/-7000m.
402643	Arthropodium strictum	chocolate lily	r		J Kirkpatrick (1197)	1984	sight	Point (513412,5406383) +/-100m.
345657	Arthropodium strictum	chocolate lily	r		- Unknown (21598)	01-Jan-1600?	sight	Point (513312,5406783) +/-1000m.
345681	Arthropodium strictum	chocolate lily	r		- Unknown (21598)	01-Jan-1600?	sight	Point (512812,5407183) +/-1000m.
228246	Arthropodium strictum	chocolate lily	r		A.V. Ratkowsky (3779)	04-Nov-1991	sight	Point (514012,5409083) +/-400m.
401741	Arthropodium strictum	chocolate lily	r		J Kirkpatrick (1197)	1984	sight	Point (514212,5409483) +/-100m.
402515	Arthropodium strictum	chocolate lily	r		J Kirkpatrick (1197)	1984	sight	Point (511312,5408583) +/-100m.
1087506	Arthropodium strictum	chocolate lily	r		Anna Povey (3310)	16-Oct-2009	sight	Point (512301,5407268) +/-10m.
345213	Arthropodium strictum	chocolate lily	r		- Unknown (21598)	01-Jan-1600?	sight	Point (511412,5408283) +/-1000m.
227541	Arthropodium strictum	chocolate lily	r		Stephen Harris (2289)	16-Nov-1981	sight	Point (512112,5408483) +/-100m.
596933	Arthropodium strictum	chocolate lily	r		A North (2500)	20-Nov-2003	sight	Point (510991,5408850) +/-10m.
928591	Arthropodium strictum	chocolate lily	r		F.E. Burbury (4270)	01-Dec-1910	sight	Point (510822,5407983) +/-1500m.
343879	Arthropodium strictum	chocolate lily	r		Stuart Brownlea (3237)	25-Nov-2002	sight	Point (510112,5408383) +/-200m.
343945	Arthropodium strictum	chocolate lily	r		Stuart Brownlea (3237)	25-Nov-2002	sight	Point (510154,5408336) +/-12m.
1087513	Arthropodium strictum	chocolate lily	r		Anna Povey (3310)	30-Oct-2009	sight	Point (510277,5408821) +/-10m.
589418	Arthropodium strictum	chocolate lily	r		A North (2500)	20-Nov-2003	sight	Point (509821,5407750) +/-10m.
402547	Arthropodium strictum	chocolate lily	r		J Kirkpatrick (1197)	1984	sight	Point (508612,5406883) +/-100m.
590433	Arthropodium strictum	chocolate lily	r		A North (2500)	01-Aug-2001	sight	Point (508412,5405283) +/-300m.
344430	Arthropodium strictum	chocolate lily	r		- Unknown (21598)	01-Jan-1600?	sight	Point (512312,5412883) +/-1000m.
1201872	Arthropodium strictum	chocolate lily	r		Anna Povey (3310)	02-Dec-2010	sight	Point (508995,5412308) +/-10m.
1241233	Arthropodium strictum	chocolate lily	r		Anna Povey (3310)	14-Nov-2011	sight	Point (512561,5407296) +/-10m.
1241230	Arthropodium strictum	chocolate lily	r		Anna Povey (3310)	14-Nov-2011	sight	Point (512341,5407354) +/-10m.

Threatened flora within 5000 metres



Id	Species	Common name	Ss	Ns	Observers	Date	Obs type	Position (gda94)
1241232	Arthropodium strictum	chocolate lily	r		Anna Povey (3310)	14-Nov-2011	sight	Point (512400,5407357) +/- 10m.
1241231	Arthropodium strictum	chocolate lily	r		Anna Povey (3310)	14-Nov-2011	sight	Point (512343,5407361) +/- 10m.
1241229	Arthropodium strictum	chocolate lily	r		Anna Povey (3310)	14-Nov-2011	sight	Point (512326,5407367) +/- 10m.
1204547	Arthropodium strictum	chocolate lily	r		Helen Morgan (3225)	30-Oct-2009	sight	Point (510265,5408807) +/- 6m.
1204549	Arthropodium strictum	chocolate lily	r		Helen Morgan (3225)	30-Oct-2009	sight	Point (510281,5408809) +/- 6m.
1204550	Arthropodium strictum	chocolate lily	r		Helen Morgan (3225)	30-Oct-2009	sight	Point (510276,5408811) +/- 6m.
1204551	Arthropodium strictum	chocolate lily	r		Helen Morgan (3225)	30-Oct-2009	sight	Point (510227,5408820) +/- 6m.
1204552	Arthropodium strictum	chocolate lily	r		Helen Morgan (3225)	30-Oct-2009	sight	Point (510268,5408851) +/- 6m.
1204554	Arthropodium strictum	chocolate lily	r		Helen Morgan (3225)	30-Oct-2009	sight	Point (510182,5408876) +/- 6m.
1204553	Arthropodium strictum	chocolate lily	r		Helen Morgan (3225)	30-Oct-2009	sight	Point (510185,5408894) +/- 6m.
1204555	Arthropodium strictum	chocolate lily	r		Helen Morgan (3225)	30-Oct-2009	sight	Point (510202,5408906) +/- 6m.
1204556	Arthropodium strictum	chocolate lily	r		Helen Morgan (3225)	30-Oct-2009	sight	Point (510208,5408921) +/- 6m.
1204864	Arthropodium strictum	chocolate lily	r		Anna Povey (3310)	Feb-2011	sight	Point (509542,5412631) +/- 10m.
596877	Arthropodium strictum	chocolate lily	r		A North (2500)	20-Nov-2003	sight	Point (507755,5406042) +/- 10m.
1204548	Arthropodium strictum	chocolate lily	r		Helen Morgan (3225)	30-Oct-2009	sight	Point (510288,5408809) +/- 6m.
1204546	Arthropodium strictum	chocolate lily	r		Helen Morgan (3225)	30-Oct-2009	sight	Point (510351,5408674) +/- 6m.
1204545	Arthropodium strictum	chocolate lily	r		Helen Morgan (3225)	30-Oct-2009	sight	Point (510409,5408696) +/- 6m.
1241432	Arthropodium strictum	chocolate lily	r		P. Collier (5300)	22-Oct-2011	sight	Line +/- 3m.
1241433	Arthropodium strictum	chocolate lily	r		P. Collier (5300)	22-Oct-2011	sight	Polygon +/- 5m.
258907	Asperula subsimplex	water woodruff	r		A North (2500)	30-Mar-2000	sight	Point (514312,5411783) +/- 100m.
955726	Austrodanthonia induta	tall wallabygrass	r		Karen Johnson (1435)	08-May-2004	sight	Point (511302,5408147) +/- 20m.
955724	Austrodanthonia induta	tall wallabygrass	r		Karen Johnson (1435)	08-May-2004	sight	Point (511365,5407929) +/- 20m.
955725	Austrodanthonia induta	tall wallabygrass	r		Karen Johnson (1435)	08-May-2004	sight	Point (511332,5408020) +/- 20m.
402512	Austrodanthonia induta	tall wallabygrass	r		J Kirkpatrick (1197)	1984	sight	Point (511312,5408583) +/- 100m.
955723	Austrodanthonia induta	tall wallabygrass	r		Karen Johnson (1435)	08-May-2004	sight	Point (511176,5407776) +/- 20m.
598477	Bolboschoenus caldwellii	sea clubsedge	r		A North (2500)	01-Aug-2001	sight	Point (508412,5405283) +/- 300m.
881500	Bolboschoenus caldwellii	sea clubsedge	r		A.V. Ratkowsky (3779)	01-Sep-1992?	sight	Point (511137,5409333) +/- 50m.
227469	Bolboschoenus caldwellii	sea clubsedge	r		W.V. Fitzgerald (5752)	Jan-1894	sight	Point (510812,5413183) +/- 200m.
228123	Bolboschoenus caldwellii	sea clubsedge	r		R.C. Gunn (5474)	24-Dec-1844	sight	Point (511612,5412683) +/- 7000m.
1241260	Bolboschoenus caldwellii	sea clubsedge	r		Anna Povey (3310)	17-Nov-2011	sight	Point (512126,5407331) +/- 10m.
1241259	Bolboschoenus caldwellii	sea clubsedge	r		Anna Povey (3310)	17-Nov-2011	sight	Point (512027,5407433) +/- 10m.
1235898	Bolboschoenus caldwellii	sea clubsedge	r		David Ziegeler (7381)	10-Feb-2011	sight	Point (512859,5407586) +/- 10m.
931155	Bolboschoenus caldwellii	sea clubsedge	r		A.V. Ratkowsky (3779)	03-Dec-1992	sight	Point (514052,5410553) +/- 600m.
228269	Bolboschoenus caldwellii	sea clubsedge	r		A North (2500)	30-Mar-2000	sight	Point (514312,5411283) +/- 100m.
1100884	Bolboschoenus caldwellii	sea clubsedge	r		Micah Visoiu (5870)	20-Jan-2010	sight	Point (510331,5413137) +/- 100m.

Threatened flora within 5000 metres



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228163	Bolboschoenus caldwellii	sea clubsedge	r		A.V. Ratkowsky (3779)	20-Jan-1993	sight	Point (511912,5407983) +/- 1000m.
931133	Bolboschoenus caldwellii	sea clubsedge	r		A.V. Ratkowsky (3779)	08-Jan-1993	sight	Point (511842,5407853) +/- 1000m.
926026	Boronia gunnii	river boronia	v	VU	T. Carr (6418)	01-Jan-1600?	sight	Point (509612,5410683) +/- 200m.
925273	Boronia gunnii	river boronia	v	VU	A.M. Olsen (3763)	14-Oct-1937	sight	Point (510112,5411983) +/- 500m.
926012	Boronia gunnii	river boronia	v	VU	S.G. Hannaford (5570)	01-Jan-1600?	sight	Point (510112,5411983) +/- 500m.
925391	Boronia gunnii	river boronia	v	VU	C Stuart (2799)	01-Jan-1600?	sight	Point (510112,5411983) +/- 500m.
925462	Boronia gunnii	river boronia	v	VU	H.J. King (4418)	24-Oct-1959	sight	Point (510112,5411983) +/- 500m.
926027	Boronia gunnii	river boronia	v	VU	T.E. Burns (5652)	25-Oct-1961	sight	Point (510112,5411983) +/- 500m.
288711	Boronia gunnii	river boronia	v	VU	H.J. King (4418)	24-Oct-1959	sight	Point (509212,5411383) +/- 2000m.
289553	Boronia gunnii	river boronia	v	VU	A.M. Olsen (3763)	14-Jan-1937	sight	Point (512612,5411383) +/- 20000m.
258689	Boronia gunnii	river boronia	v	VU	T. Carr (6418)	01-Oct-1897	sight	Point (512612,5411383) +/- 1000m.
288743	Boronia gunnii	river boronia	v	VU	T.E. Burns (5652)	25-Oct-1961	sight	Point (509212,5411383) +/- 2000m.
288709	Boronia gunnii	river boronia	v	VU	R Gunn (2130)	17-Dec-1844	sight	Point (509212,5411383) +/- 2000m.
288710	Boronia gunnii	river boronia	v	VU	C Stuart (2799)	20-Oct-1843	sight	Point (509212,5411383) +/- 2000m.
288708	Boronia gunnii	river boronia	v	VU	S.G. Hannaford (5570)	Nov-1863	sight	Point (509212,5411383) +/- 2000m.
925951	Boronia gunnii	river boronia	v	VU	R Gunn (2130)	01-Jan-1600?	sight	Point (510112,5411983) +/- 500m.
300961	Brunonia australis	blue pincushion	r		Craig Hawkins (3520)	18-Dec-2000	sight	Point (509812,5408883) +/- 100m.
300962	Brunonia australis	blue pincushion	r		Craig Hawkins (3520)	19-Dec-2000	sight	Point (509852,5408903) +/- 100m.
227445	Brunonia australis	blue pincushion	r		S. Casey (5547)	10-Dec-1996	sight	Point (509812,5408083) +/- 100m.
955246	Brunonia australis	blue pincushion	r		S. Casey (5547)	Nov-1996	sight	Point (509812,5408083) +/- 100m.
589419	Brunonia australis	blue pincushion	r		A North (2500)	20-Nov-2003	sight	Point (509821,5407750) +/- 10m.
598481	Brunonia australis	blue pincushion	r		A North (2500)	01-Aug-2001	sight	Point (508412,5405283) +/- 300m.
300959	Brunonia australis	blue pincushion	r		Craig Hawkins (3520)	01-Jan-1600?	sight	Point (508312,5405383) +/- 100m.
228124	Brunonia australis	blue pincushion	r		T.E. Burns (5652)	01-Jan-1600?	sight	Point (511612,5412683) +/- 7000m.
227495	Brunonia australis	blue pincushion	r		A. Simson (3720)	01-Jan-1600?	sight	Point (511612,5412683) +/- 7000m.
1204539	Brunonia australis	blue pincushion	r		Helen Morgan (3225)	30-Oct-2009	sight	Point (510230,5408898) +/- 8m.
1204540	Brunonia australis	blue pincushion	r		Helen Morgan (3225)	30-Oct-2009	sight	Point (510220,5408904) +/- 8m.
227993	Brunonia australis	blue pincushion	r		A.M. Olsen (3763)	15-Jan-1937	sight	Point (508612,5411683) +/- 2000m.
300010	Brunonia australis	blue pincushion	r		Craig Hawkins (3520)	18-Nov-2000	sight	Point (507782,5411593) +/- 100m.
947377	Brunonia australis	blue pincushion	r		Anna Povey (3310)	10-Nov-2005	sight	Point (507756,5411610) +/- 10m.
1204541	Brunonia australis	blue pincushion	r		Helen Morgan (3225)	30-Oct-2009	sight	Point (510283,5408700) +/- 8m.
1204536	Brunonia australis	blue pincushion	r		Helen Morgan (3225)	30-Oct-2009	sight	Point (510326,5408670) +/- 8m.
1204537	Brunonia australis	blue pincushion	r		Helen Morgan (3225)	30-Oct-2009	sight	Point (510327,5408679) +/- 8m.
1204538	Brunonia australis	blue pincushion	r		Helen Morgan (3225)	30-Oct-2009	sight	Point (510336,5408668) +/- 8m.
1204533	Brunonia australis	blue pincushion	r		Helen Morgan (3225)	30-Oct-2009	sight	Point (510338,5408660) +/- 8m.

Threatened flora within 5000 metres



Id	Species	Common name	Ss	Ns	Observers	Date	Obs type	Position (gda94)
1204535	Brunonia australis	blue pincushion	r		Helen Morgan (3225)	30-Oct-2009	sight	Point (510351,5408689) +/- 8m.
1204534	Brunonia australis	blue pincushion	r		Helen Morgan (3225)	30-Oct-2009	sight	Point (510365,5408675) +/- 8m.
1204532	Brunonia australis	blue pincushion	r		Helen Morgan (3225)	30-Oct-2009	sight	Point (510371,5408680) +/- 8m.
1241429	Brunonia australis	blue pincushion	r		P. Collier (5300)	22-Oct-2011	sight	Polygon +/- 4m.
1241427	Brunonia australis	blue pincushion	r		P. Collier (5300)	22-Oct-2011	sight	Polygon +/- 8m.
1241426	Brunonia australis	blue pincushion	r		P. Collier (5300)	22-Oct-2011	sight	Point (511172,5408343) +/- 10m.
1241428	Brunonia australis	blue pincushion	r		P. Collier (5300)	22-Oct-2011	sight	Polygon +/- 6m.
1241425	Brunonia australis	blue pincushion	r		P. Collier (5300)	22-Oct-2011	sight	Point (511229,5408405) +/- 6m.
1241423	Brunonia australis	blue pincushion	r		P. Collier (5300)	22-Oct-2011	sight	Point (511260,5408282) +/- 5m.
1241421	Brunonia australis	blue pincushion	r		P. Collier (5300)	22-Oct-2011	sight	Point (511272,5408268) +/- 11m.
1241424	Brunonia australis	blue pincushion	r		P. Collier (5300)	22-Oct-2011	sight	Point (511343,5408401) +/- 5m.
1241261	Brunonia australis	blue pincushion	r		Anna Povey (3310)	17-Nov-2011	sight	Point (511598,5408320) +/- 10m.
1241422	Brunonia australis	blue pincushion	r		P. Collier (5300)	22-Oct-2011	sight	Point (511598,5408320) +/- 5m.
300055	Brunonia australis	blue pincushion	r		Craig Hawkins (3520)	01-Dec-2001	sight	Point (516112,5407583) +/- 100m.
930757	Brunonia australis	blue pincushion	r		Craig Hawkins (3520)	06-Dec-2000	sight	Point (514412,5407683) +/- 100m.
300030	Brunonia australis	blue pincushion	r		Craig Hawkins (3520)	06-Dec-2000	sight	Point (514412,5407683) +/- 100m.
300038	Brunonia australis	blue pincushion	r		Craig Hawkins (3520)	06-Dec-2000	sight	Point (515006,5408074) +/- 100m.
930834	Brunonia australis	blue pincushion	r		Craig Hawkins (3520)	19-Apr-2000	sight	Point (515012,5408083) +/- 100m.
342834	Brunonia australis	blue pincushion	r		Kristin Jaehne (3240)	17-Apr-2000	sight	Point (515562,5406633) +/- 100m.
300034	Brunonia australis	blue pincushion	r		Craig Hawkins (3520)	06-Dec-2000	sight	Point (514682,5407153) +/- 100m.
300028	Brunonia australis	blue pincushion	r		Craig Hawkins (3520)	06-Dec-2000	sight	Point (514222,5410533) +/- 100m.
300032	Brunonia australis	blue pincushion	r		Craig Hawkins (3520)	16-Dec-2000	sight	Point (514512,5409558) +/- 100m.
228292	Brunonia australis	blue pincushion	r		R.C. Gunn (5474)	19-Nov-1842	sight	Point (514612,5410183) +/- 2000m.
227642	Brunonia australis	blue pincushion	r		R.C. Gunn (5474)	05-Dec-1842	sight	Point (514612,5410183) +/- 2000m.
227643	Brunonia australis	blue pincushion	r		R.C. Gunn (5474)	11-Nov-1844	sight	Point (514612,5410183) +/- 2000m.
300033	Brunonia australis	blue pincushion	r		Craig Hawkins (3520)	06-Dec-2000	sight	Point (514637,5410023) +/- 100m.
401735	Brunonia australis	blue pincushion	r		Jamie Kirkpatrick (1315)	1984	sight	Point (514212,5409483) +/- 100m.
402473	Brunonia australis	blue pincushion	r		Jamie Kirkpatrick (1315)	1984	sight	Point (514112,5410383) +/- 100m.
355010	Brunonia australis	blue pincushion	r		Philip Barker (1911)	21-Nov-1996?	sight	Point (514112,5410383) +/- 100m.
300014	Brunonia australis	blue pincushion	r		Craig Hawkins (3520)	06-Dec-2000	sight	Point (514112,5410503) +/- 100m.
481000	Brunonia australis	blue pincushion	r		Louise Gilfedder (1499)	01-Jan-1600?	sight	Point (513912,5410883) +/- 100m.
907772	Brunonia australis	blue pincushion	r		- Unknown (21598)	28-Feb-1957?	sight	Point (514112,5411183) +/- 18500m.
955451	Brunonia australis	blue pincushion	r		R Gunn (2130)	19-Nov-1842	sight	Point (512641,5411443) +/- 3000m.
929371	Brunonia australis	blue pincushion	r		A Simson (2776)	01-Dec-1879	sight	Point (512641,5411443) +/- 3000m.
940308	Brunonia australis	blue pincushion	r		S.G. Hannaford (5570)	01-Dec-1863	sight	Point (512641,5411443) +/- 3000m.
929377	Brunonia australis	blue pincushion	r		A Simson (2776)	01-Dec-1879	sight	Point (512641,5411443) +/- 3000m.

Threatened flora within 5000 metres



Id	Species	Common name	Ss	Ns	Observers	Date	Obs type	Position (gda94)
300984	Brunonia australis	blue pincushion	r		Craig Hawkins (3520)	06-Dec-2000	sight	Point (513612,5410688) +/- 100m.
957016	Brunonia australis	blue pincushion	r		W.M. Curtis (5737)	15-Nov-1955	sight	Point (513812,5410883) +/- 500m.
228241	Brunonia australis	blue pincushion	r		W.M. Curtis (5737)	22-Dec-1955	sight	Point (513812,5410883) +/- 500m.
881503	Brunonia australis	blue pincushion	r		A.V. Ratkowsky (3779)	01-Sep-1992?	sight	Point (511137,5409333) +/- 50m.
300981	Brunonia australis	blue pincushion	r		Craig Hawkins (3520)	12-Dec-2000	sight	Point (511112,5409283) +/- 100m.
300980	Brunonia australis	blue pincushion	r		Craig Hawkins (3520)	19-Dec-2000	sight	Point (510512,5410643) +/- 100m.
930708	Brunonia australis	blue pincushion	r		Craig Hawkins (3520)	19-Dec-2000	sight	Point (510512,5410683) +/- 100m.
1087477	Brunonia australis	blue pincushion	r		Anna Povey (3310)	18-Jun-2009	sight	Point (509877,5410732) +/- 10m.
300960	Brunonia australis	blue pincushion	r		Craig Hawkins (3520)	14-Dec-2000	sight	Point (509662,5411223) +/- 100m.
227597	Brunonia australis	blue pincushion	r		- Unknown (21598)	Oct-1893	sight	Point (514012,5409083) +/- 400m.
228245	Brunonia australis	blue pincushion	r		- Unknown (21598)	15-Oct-1943	sight	Point (514012,5409083) +/- 400m.
228244	Brunonia australis	blue pincushion	r		A.V. Ratkowsky (3779)	11-Nov-1991	sight	Point (514012,5409083) +/- 400m.
228212	Brunonia australis	blue pincushion	r		C. Lord (3955)	01-Jan-1600?	sight	Point (513112,5409183) +/- 1200m.
403189	Brunonia australis	blue pincushion	r		Jamie Kirkpatrick (1315)	1984	sight	Point (511312,5408583) +/- 100m.
300982	Brunonia australis	blue pincushion	r		Craig Hawkins (3520)	18-Nov-2000	sight	Point (511332,5408663) +/- 100m.
228113	Brunonia australis	blue pincushion	r		F.E. Burbury (4270)	01-Jan-1600?	sight	Point (511112,5409183) +/- 1500m.
930717	Brunonia australis	blue pincushion	r		Craig Hawkins (3520)	12-Dec-2000	sight	Point (511112,5409283) +/- 100m.
343878	Brunonia australis	blue pincushion	r		Stuart Brownlea (3237)	25-Nov-2002	sight	Point (510112,5408383) +/- 200m.
342858	Brunonia australis	blue pincushion	r		Brian French (6551)	17-Oct-2003	sight	Point (510154,5408336) +/- 12m.
300013	Brunonia australis	blue pincushion	r		Craig Hawkins (3520)	18-Dec-2000	sight	Point (510192,5408808) +/- 100m.
928571	Brunonia australis	blue pincushion	r		Craig Hawkins (3520)	18-Dec-2000	sight	Point (510212,5408783) +/- 100m.
300963	Brunonia australis	blue pincushion	r		Craig Hawkins (3520)	01-Dec-2001	sight	Point (509912,5407158) +/- 100m.
1241234	Caesia calliantha	blue grasslily	r		Anna Povey (3310)	14-Nov-2011	sight	Point (512641,5407243) +/- 10m.
1204559	Caesia calliantha	blue grasslily	r		Helen Morgan (3225)	30-Oct-2009	sight	Point (510268,5408694) +/- 6m.
1241430	Caesia calliantha	blue grasslily	r		P. Collier (5300)	22-Oct-2011	sight	Point (511138,5408490) +/- 3m.
1241431	Caesia calliantha	blue grasslily	r		P. Collier (5300)	22-Oct-2011	sight	Point (511319,5408323) +/- 7m.
931150	Caesia calliantha	blue grasslily	r		A.V. Ratkowsky (3779)	13-Dec-1992	sight	Point (515305,5407570) +/- 1500m.
228293	Caesia calliantha	blue grasslily	r		R.C. Gunn (5474)	11-Nov-1844	sight	Point (514612,5410183) +/- 2000m.
401736	Caesia calliantha	blue grasslily	r		Jamie Kirkpatrick (1315)	1984	sight	Point (514212,5409483) +/- 100m.
402475	Caesia calliantha	blue grasslily	r		Jamie Kirkpatrick (1315)	1984	sight	Point (514112,5410383) +/- 100m.
401939	Caesia calliantha	blue grasslily	r		Jamie Kirkpatrick (1315)	1984	sight	Point (513412,5406383) +/- 100m.
1046699	Caesia calliantha	blue grasslily	r		Anna Povey (3310)	30-Nov-2008	sight	Point (514443,5413712) +/- 100m.
1201873	Caesia calliantha	blue grasslily	r		Anna Povey (3310)	28-Nov-2010	sight	Point (515600,5412050) +/- 100m.
879903	Caesia calliantha	blue grasslily	r		A.V. Ratkowsky (3779)	01-Sep-1992?	sight	Point (511137,5409333) +/- 50m.
1201880	Caesia calliantha	blue grasslily	r		Anna Povey (3310)	03-Dec-2010	sight	Point (510934,5410533) +/- 10m.

Threatened flora within 5000 metres



Id	Species	Common name	Ss	Ns	Observers	Date	Obs type	Position (gda94)
1201909	Caesia calliantha	blue grasslily	r		Anna Povey (3310)	03-Dec-2010	sight	Point (510901,5410539) +/-10m.
1201907	Caesia calliantha	blue grasslily	r		Anna Povey (3310)	03-Dec-2010	sight	Point (510893,5410542) +/-10m.
1201910	Caesia calliantha	blue grasslily	r		Anna Povey (3310)	03-Dec-2010	sight	Point (510852,5410625) +/-10m.
1201912	Caesia calliantha	blue grasslily	r		Anna Povey (3310)	03-Dec-2010	sight	Point (510917,5410711) +/-10m.
1201902	Caesia calliantha	blue grasslily	r		Anna Povey (3310)	03-Dec-2010	sight	Point (510909,5410749) +/-10m.
1201914	Caesia calliantha	blue grasslily	r		Anna Povey (3310)	03-Dec-2010	sight	Point (510891,5410751) +/-10m.
1201916	Caesia calliantha	blue grasslily	r		Anna Povey (3310)	03-Dec-2010	sight	Point (510878,5410765) +/-10m.
1201900	Caesia calliantha	blue grasslily	r		Anna Povey (3310)	03-Dec-2010	sight	Point (510913,5410767) +/-10m.
1201917	Caesia calliantha	blue grasslily	r		Anna Povey (3310)	03-Dec-2010	sight	Point (510865,5410785) +/-10m.
1201897	Caesia calliantha	blue grasslily	r		Anna Povey (3310)	03-Dec-2010	sight	Point (510897,5410788) +/-10m.
1201895	Caesia calliantha	blue grasslily	r		Anna Povey (3310)	03-Dec-2010	sight	Point (510878,5410820) +/-10m.
1201893	Caesia calliantha	blue grasslily	r		Anna Povey (3310)	03-Dec-2010	sight	Point (510875,5410821) +/-10m.
1201890	Caesia calliantha	blue grasslily	r		Anna Povey (3310)	03-Dec-2010	sight	Point (510821,5410858) +/-10m.
1201887	Caesia calliantha	blue grasslily	r		Anna Povey (3310)	03-Dec-2010	sight	Point (510786,5410861) +/-10m.
401879	Caesia calliantha	blue grasslily	r		Jamie Kirkpatrick (1315)	1984	sight	Point (509812,5411283) +/-100m.
971963	Caesia calliantha	blue grasslily	r		Roy Skabo (6388)	17-Nov-2007	sight	Point (509586,5410025) +/-10m.
1201874	Caesia calliantha	blue grasslily	r		Anna Povey (3310)	02-Dec-2010	sight	Point (509330,5412276) +/-10m.
402509	Caesia calliantha	blue grasslily	r		Jamie Kirkpatrick (1315)	1984	sight	Point (511312,5408583) +/-100m.
931125	Caesia calliantha	blue grasslily	r		A.V. Ratkowsky (3779)	18-Dec-1993	sight	Point (511842,5407873) +/-1300m.
1087512	Caesia calliantha	blue grasslily	r		Anna Povey (3310)	30-Oct-2009	sight	Point (510273,5408697) +/-10m.
300460	Caesia calliantha	blue grasslily	r		Anna Povey (3310)	09-Dec-2003	sight	Point (510912,5406683) +/-100m.
568186	Caladenia filamentosa	daddy longlegs	r		- Unknown (21598)	29-Oct-1893?	sight	Point (515112,5405183) +/-5000m.
228137	Caladenia filamentosa	daddy longlegs	r		R Gunn (2130)	Oct-1841	sight	Point (511612,5412683) +/-7000m.
552843	Caladenia patersonii	patersons spider-orchid	v		Neil Burrows (1792)	01-Nov-1942?	sight	Point (510312,5408483) +/-100m.
552988	Caladenia patersonii	patersons spider-orchid	v		Neil Burrows (1792)	01-Oct-1938?	sight	Point (514412,5409583) +/-100m.
553014	Caladenia patersonii	patersons spider-orchid	v		R.N. Smith (5505)	11-Oct-1991?	sight	Point (514712,5409483) +/-100m.
228021	Callitris oblonga subsp. oblonga	south esk pine	v	EN	D.M. Paton (4122)	12-Sep-1953	sight	Point (509512,5411383) +/-2000m.
342344	Callitris oblonga subsp. oblonga	south esk pine	v	EN	A North (2500)	30-Aug-2001	sight	Point (509512,5410783) +/-100m.
930616	Callitris oblonga subsp. oblonga	south esk pine	v	EN	A North (2500)	26-Jul-2001	sight	Point (509512,5410783) +/-100m.
1090904	Callitris oblonga subsp. oblonga	south esk pine	v	EN	Richard Schahinger (2944)	19-Mar-2010	sight	Point (509995,5411657) +/-5m.
1087379	Callitris oblonga subsp. oblonga	south esk pine	v	EN	Philip Barker (1911)	07-Oct-2009	sight	Point (509542,5410794) +/-10m.
957011	Callitris oblonga subsp. oblonga	south esk pine	v	EN	D.M. Paton (4122)	12-Sep-1953	sight	Point (510302,5412043) +/-500m.
1087387	Callitris oblonga subsp. oblonga	south esk pine	v	EN	Katriona Lee Hopkins (2888)	08-Oct-2009	sight	Point (509938,5411619) +/-10m.
378295	Callitris oblonga subsp. oblonga	south esk pine	v	EN	Stephen Harris (2289)	1985	sight	Point (510012,5411783) +/-100m.
228067	Callitris oblonga subsp. oblonga	south esk pine	v	EN	A.M. Olsen (3763)	19-Jan-1938	sight	Point (509912,5411683) +/-200m.

Threatened flora within 5000 metres



Id	Species	Common name	Ss	Ns	Observers	Date	Obs type	Position (gda94)
1090898	Callitris oblonga subsp. oblonga	south esk pine	v	EN	Richard Schahinger (2944)	19-Mar-2010	sight	Point (509935,5411622) +/- 5m.
355038	Callitris oblonga subsp. oblonga	south esk pine	v	EN	Philip Barker (1911)	03-Sep-1996?	sight	Point (509912,5411783) +/- 100m.
1087372	Callitris oblonga subsp. oblonga	south esk pine	v	EN	Philip Barker (1911)	07-Oct-2009	sight	Point (509977,5411658) +/- 10m.
227496	Callitris oblonga subsp. oblonga	south esk pine	v	EN	R.C. Gunn (5474)	11-Nov-1844	sight	Point (511612,5412683) +/- 7000m.
227497	Calocephalus lacteus	milky beautyheads	r		R.C. Gunn (5474)	24-Dec-1844	sight	Point (511612,5412683) +/- 7000m.
925758	Calystegia sepium	swamp bindweed	r		R. Luxton (6489)	01-Jan-2001	sight	Point (508112,5408883) +/- 100m.
1204506	Calystegia sepium	swamp bindweed	r		Helen Morgan (3225)	22-Jan-2011	sight	Point (510121,5414097) +/- 8m.
1204503	Calystegia sepium	swamp bindweed	r		Helen Morgan (3225)	09-Oct-2009	sight	Point (510092,5414095) +/- 5m.
1204505	Calystegia sepium	swamp bindweed	r		Helen Morgan (3225)	21-Jan-2011	sight	Point (510106,5414090) +/- 8m.
1204504	Calystegia sepium	swamp bindweed	r		Helen Morgan (3225)	20-Jan-2011	sight	Point (510137,5414060) +/- 8m.
928701	Calystegia sepium	swamp bindweed	r		R. Luxton (6489)	01-May-2001	sight	Point (508112,5408963) +/- 100m.
227498	Calystegia sepium	swamp bindweed	r		F.E. Burbury (4270)	01-Jan-1600?	sight	Point (511612,5412683) +/- 7000m.
345074	Calystegia sepium	swamp bindweed	r		Richard Schahinger (2944)	07-Feb-2002	sight	Point (510399,5413030) +/- 5m.
928595	Calystegia sepium	swamp bindweed	r		G Houghton (9482)	11-May-2004	sight	Point (507912,5408983) +/- 100m.
345045	Calystegia sepium	swamp bindweed	r		Richard Schahinger (2944)	12-Feb-2002	sight	Point (510315,5413125) +/- 10m.
343873	Calystegia sepium	swamp bindweed	r		Richard Schahinger (2944)	07-Feb-2002	sight	Point (510344,5413074) +/- 5m.
925916	Calystegia sepium	swamp bindweed	r		Richard Schahinger (2944)	07-Feb-2002	sight	Point (509942,5413893) +/- 50m.
925759	Calystegia sepium	swamp bindweed	r		R. Luxton (6489)	01-Jan-2001	sight	Point (510292,5413183) +/- 100m.
951230	Calystegia sepium	swamp bindweed	r		M Wapstra (1613)	27-Nov-2002	sight	Point (510612,5412683) +/- 100m.
227368	Carex longibrachiata	drooping sedge	r		A.V. Ratkowsky (3779)	11-Oct-1991	sight	Point (508112,5411483) +/- 1800m.
228242	Carex longibrachiata	drooping sedge	r		F.E. Burbury (4270)	01-Jan-1600?	sight	Point (513812,5410883) +/- 500m.
881526	Carex longibrachiata	drooping sedge	r		A.V. Ratkowsky (3779)	01-Sep-1992?	sight	Point (511137,5409333) +/- 50m.
1068744	Carex tasmanica	curly sedge		VU	David Ziegeler (7381)	13-Aug-2008	sight	Point (512504,5407225) +/- 10m.
1068743	Carex tasmanica	curly sedge		VU	David Ziegeler (7381)	13-Aug-2008	sight	Point (512514,5407193) +/- 10m.
940183	Carex tasmanica	curly sedge		VU	Rodney Milner (6516)	07-Feb-2003	sight	Point (512312,5407383) +/- 100m.
1068745	Carex tasmanica	curly sedge		VU	David Ziegeler (7381)	13-Aug-2008	sight	Point (512519,5407271) +/- 10m.
288730	Centipeda cunninghamii	erect sneezeweed	r		A.M. Olsen (3763)	28-Dec-1937	sight	Point (507700,5410880) +/- 1000m.
1090505	Centipeda cunninghamii	erect sneezeweed	r		Micah Visoiu (5870), R B Schahinger (19349)	10-Mar-2010	sight	Point (508259,5410499) +/- 5m.
227971	Centipeda cunninghamii	erect sneezeweed	r		A.V. Ratkowsky (3779)	18-Dec-1991	sight	Point (508112,5411483) +/- 1800m.
552863	Corunastylis nuda	tiny midge-orchid	r		Neil Burrows (1792)	01-Mar-1945?	sight	Point (510312,5408583) +/- 100m.
228366	Cryptandra amara	pretty pearlflower	e		L. Rodway (4869)	19-Feb-1898	sight	Point (516712,5410683) +/- 1300m.
227414	Cynoglossum australe	coast houndstongue	r		A. Simson (3720)	20-Oct-1880	sight	Point (509512,5411383) +/- 2000m.

Threatened flora within 5000 metres



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343411	Cynoglossum australe	coast houndstongue	r		A North (2500)	30-Aug-2001	sight	Point (509512,5410283) +/-100m.
227644	Cynoglossum australe	coast houndstongue	r		J. Milligan (4659)	11-Nov-1843	sight	Point (514612,5410183) +/-2000m.
1163466	Cynoglossum australe	coast houndstongue	r		Anna Povey (3310)	28-Sep-2010	sight	Point (515411,5412433) +/-10m.
1163467	Cynoglossum australe	coast houndstongue	r		Anna Povey (3310)	28-Sep-2010	sight	Point (515391,5412451) +/-10m.
1163468	Cynoglossum australe	coast houndstongue	r		Anna Povey (3310)	28-Sep-2010	sight	Point (515388,5412276) +/-10m.
1241221	Cynoglossum australe	coast houndstongue	r		Anna Povey (3310)	29-Sep-2011	sight	Point (515212,5412246) +/-10m.
228266	Damasonium minus	starfruit	r		S. Bootle (6494)	10-Apr-2000	sight	Point (514212,5412583) +/-100m.
228068	Discaria pubescens	spiky anchorplant	e		F.E. Burbury (4270)	01-Jan-1600?	sight	Point (509912,5411683) +/-200m.
563774	Diuris palustris	swamp doubletail	e		- Unknown (21598)	01-Oct-1942?	sight	Point (511512,5409683) +/-100m.
1236488	Doodia caudata	small raspfern	e		Philip Barker (1911)	15-Apr-2010	sight	Point (509315,5410231) +/-10m.
1236404	Doodia caudata	small raspfern	e		Philip Barker (1911)	15-Apr-2010	sight	Point (509214,5410077) +/-10m.
1236736	Doodia caudata	small raspfern	e		Philip Barker (1911)	15-Apr-2010	sight	Point (508929,5409727) +/-10m.
1236714	Doodia caudata	small raspfern	e		Philip Barker (1911)	15-Apr-2010	sight	Point (509231,5410099) +/-10m.
1236713	Doodia caudata	small raspfern	e		Philip Barker (1911)	15-Apr-2010	sight	Point (509327,5410179) +/-10m.
1236740	Doodia caudata	small raspfern	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (508258,5410012) +/-10m.
1236711	Doodia caudata	small raspfern	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (508393,5410343) +/-10m.
1236405	Doodia caudata	small raspfern	e		Philip Barker (1911)	15-Apr-2010	sight	Point (509145,5409946) +/-10m.
1236712	Doodia caudata	small raspfern	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509229,5410027) +/-10m.
1236403	Doodia caudata	small raspfern	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (508412,5409807) +/-10m.
1236617	Doodia caudata	small raspfern	e		Philip Barker (1911)	15-Apr-2010	sight	Point (508459,5409709) +/-10m.
1091243	Doodia caudata	small raspfern	e		R B Schahinger (19349)	31-Mar-2010	sight	Point (509910,5411934) +/-5m.
947774	Doodia caudata	small raspfern	e		R.C. Gunn (5474)	17-Dec-1844	sight	Point (510112,5411983) +/-5000m.
343440	Doodia caudata	small raspfern	e		A North (2500)	30-Aug-2001	sight	Point (509212,5410083) +/-100m.
1236616	Doodia caudata	small raspfern	e		Philip Barker (1911)	15-Apr-2010	sight	Point (509219,5410078) +/-10m.
1087370	Epacris exserta	south esk heath	e	PEN	Philip Barker (1911)	07-Oct-2009	sight	Point (509849,5411759) +/-10m.
1090833	Epacris exserta	south esk heath	e	PEN	Richard Schahinger (2944)	18-Mar-2010	sight	Point (507407,5411114) +/-5m.
343441	Epacris exserta	south esk heath	e	PEN	A North (2500)	30-Aug-2001	sight	Point (507912,5410883) +/-100m.
228138	Epacris exserta	south esk heath	e	PEN	R.C. Gunn (5474)	23-Sep-1842	sight	Point (511612,5412683) +/-7000m.
342533	Epacris exserta	south esk heath	e	PEN	A North (2500)	30-Aug-2001	sight	Point (509512,5410433) +/-100m.
1087380	Epacris exserta	south esk heath	e	PEN	Philip Barker (1911)	07-Oct-2009	sight	Point (509422,5410359) +/-10m.
1087395	Epacris exserta	south esk heath	e	PEN	Katriona Lee Hopkins (2888)	08-Oct-2009	sight	Point (509226,5409993) +/-10m.
947226	Epacris exserta	south esk heath	e	PEN	Richard Schahinger (2944)	26-Nov-2003	sight	Point (509512,5411313) +/-200m.
98970	Epacris exserta	south esk heath	e	PEN	Kristen Williams (1451)	01-Jan-1990?	sight	Point (509612,5410683) +/-100m.
227392	Epacris exserta	south esk heath	e	PEN	R.C. Gunn (5474)	23-Sep-1842	sight	Point (509112,5409883) +/-3000m.

Threatened flora within 5000 metres



Id	Species	Common name	Ss	Ns	Observers	Date	Obs type	Position (gda94)
947225	Epacris exserta	south esk heath	e	PEN	Richard Schahinger (2944)	19-Aug-2005	sight	Point (509212,5410083) +/-100m.
930623	Epacris exserta	south esk heath	e	PEN	A North (2500)	24-Jul-2001	sight	Point (508212,5410683) +/-100m.
342345	Epacris exserta	south esk heath	e	PEN	A North (2500)	30-Aug-2001	sight	Point (508212,5410683) +/-100m.
929041	Epacris exserta	south esk heath	e	PEN	A Simson (2776)	06-Oct-1880	sight	Point (510302,5412043) +/-500m.
348927	Epacris exserta	south esk heath	e	PEN	Mick Iowski (1677)	27-Aug-1996?	sight	Point (509812,5411883) +/-50m.
98971	Epacris exserta	south esk heath	e	PEN	Kristen Williams (1451)	01-Jan-1990?	sight	Point (509912,5411783) +/-100m.
1087369	Epacris exserta	south esk heath	e	PEN	Philip Barker (1911)	07-Oct-2009	sight	Point (509948,5411793) +/-10m.
1087385	Epacris exserta	south esk heath	e	PEN	Katriona Lee Hopkins (2888)	08-Oct-2009	sight	Point (509830,5411708) +/-10m.
1090830	Epacris exserta	south esk heath	e	PEN	Richard Schahinger (2944)	18-Mar-2010	sight	Point (507501,5411030) +/-5m.
228069	Epacris exserta	south esk heath	e	PEN	A. Moscal (3708)	10-Jul-1981	sight	Point (509912,5411683) +/-200m.
1087371	Epacris exserta	south esk heath	e	PEN	Philip Barker (1911)	07-Oct-2009	sight	Point (509975,5411658) +/-10m.
928880	Epacris exserta	south esk heath	e	PEN	A Simson (2776)	22-Sep-1878	sight	Point (509857,5411447) +/-500m.
228072	Epacris exserta	south esk heath	e	PEN	Mick Iowski (1677)	27-Aug-1996	sight	Point (510012,5411583) +/-100m.
300012	Epacris exserta	south esk heath	e	PEN	D.A. Keith (4104)	09-Jun-1996	sight	Point (509982,5411603) +/-100m.
351554	Epacris exserta	south esk heath	e	PEN	D.A. Keith (4104)	01-Jan-1600?	sight	Point (509982,5411603) +/-100m.
228022	Epacris exserta	south esk heath	e	PEN	R.C. Gunn (5474)	26-Mar-1842	sight	Point (509512,5411383) +/-2000m.
227415	Epacris exserta	south esk heath	e	PEN	F.E. Burbury (4270)	1911	sight	Point (509512,5411383) +/-2000m.
939538	Epacris exserta	south esk heath	e	PEN	R.C. Gunn (5474)	01-Jan-1836	sight	Point (510302,5412043) +/-500m.
227514	Epacris exserta	south esk heath	e	PEN	A.M. Olsen (3763)	21-Aug-1938	sight	Point (511612,5412683) +/-7000m.
1087466	Epilobium pallidiflorum	showy willowherb	r		Anna Povey (3310)	12-Dec-2009	sight	Point (509363,5412617) +/-10m.
942628	Epilobium pallidiflorum	showy willowherb	r		L Rodway (1521)	01-Nov-1892	sight	Point (512641,5411443) +/-3000m.
1092567	Euphrasia scabra	yellow eyebright	e		unknown Oakden (21145)	21-Nov-1887	sight	Point (511612,5412683) +/-12000m.
928845	Euphrasia scabra	yellow eyebright	e		A Simson (2776)	26-Dec-1879	sight	Point (516817,5411434) +/-2000m.
1206557	Gratiola pubescens	hairy brooklime	v		Roy Skabo (6388)	11-Feb-2011	sight	Point (509002,5411301) +/-5m.
955356	Gyrostemon thesioides	broom wheelfruit	r		L Rodway (1521)	01-Jan-1800?	sight	Point (510302,5412043) +/-500m.
940287	Gyrostemon thesioides	broom wheelfruit	r		R.W. Lawrence (5511)	01-Jan-1833	sight	Point (510302,5412043) +/-500m.
946990	Gyrostemon thesioides	broom wheelfruit	r		F.E. Burbury (4270)	01-Sep-1911	sight	Point (510302,5412043) +/-500m.
933302	Gyrostemon thesioides	broom wheelfruit	r		A.M. Olsen (3763)	14-Jan-1937	sight	Point (509857,5411447) +/-500m.
228024	Gyrostemon thesioides	broom wheelfruit	r		W.M. Curtis (5737)	Oct-1943	sight	Point (509512,5411383) +/-2000m.
930615	Gyrostemon thesioides	broom wheelfruit	r		A North (2500)	26-Jul-2001	sight	Point (509512,5411383) +/-100m.
227416	Gyrostemon thesioides	broom wheelfruit	r		A. Simson (3720)	20-Oct-1880	sight	Point (509512,5411383) +/-2000m.
227417	Gyrostemon thesioides	broom wheelfruit	r		A.V. Ratkowsky (3779)	20-Sep-1991	sight	Point (509512,5411383) +/-2000m.
228064	Gyrostemon thesioides	broom wheelfruit	r		F. Duncan (4248)	19-Dec-1985	sight	Point (509812,5411583) +/-100m.
1234898	Haloragis heterophylla	variable raspwort	r		Anna Povey (3310)	17-May-2011	sight	Point (512309,5407034) +/-10m.

Threatened flora within 5000 metres



Id	Species	Common name	Ss	Ns	Observers	Date	Obs type	Position (gda94)
1096433	Haloragis heterophylla	variable raspwort	r		Anna Povey (3310)	08-May-2010	sight	Point (508704,5412493) +/- 10m.
1206558	Haloragis heterophylla	variable raspwort	r		Roy Skabo (6388)	22-Feb-2011	sight	Point (508016,5410879) +/- 5m.
288385	Hovea tasmanica	rockfield purplepea	r		S.J. Jarman (5581)	28-Sep-1972	sight	Point (508412,5410283) +/- 2000m.
928592	Hovea tasmanica	rockfield purplepea	r		F.E. Burbury (4270)	15-Sep-1911	sight	Point (510302,5412043) +/- 1000m.
1087381	Hovea tasmanica	rockfield purplepea	r		Philip Barker (1911)	07-Oct-2009	sight	Point (509349,5410296) +/- 10m.
227515	Hypolepis muelleri	harsh groundfern	r		M. Cameron (5011)	10-Mar-1981	sight	Point (511612,5412683) +/- 7000m.
1204561	Hypoxis vaginata	sheathing yellowstar	r		Helen Morgan (3225)	30-Oct-2009	sight	Point (510254,5408798) +/- 6m.
590506	Hypoxis vaginata	sheathing yellowstar	r		A North (2500)	01-Aug-2001	sight	Point (508412,5405283) +/- 300m.
925330	Hypoxis vaginata var. brevistigmata	sheathing yellowstar	pr		Anna Povey (3310)	17-Sep-2004	sight	Point (510840,5406648) +/- 20m.
939549	Hypoxis vaginata var. brevistigmata	sheathing yellowstar	pr		R.C. Gunn (5474)	12-Aug-1841	sight	Point (513921,5411273) +/- 1500m.
598558	Hypoxis vaginata var. brevistigmata	sheathing yellowstar	pr		A North (2500)	01-Aug-2001	sight	Point (508412,5405283) +/- 300m.
1163500	Hypoxis vaginata var. vaginata	sheathing yellowstar	pr		Anna Povey (3310)	28-Sep-2010	sight	Point (515604,5412070) +/- 10m.
1163495	Hypoxis vaginata var. vaginata	sheathing yellowstar	pr		Anna Povey (3310)	28-Sep-2010	sight	Point (515627,5412080) +/- 10m.
941458	Hypoxis vaginata var. vaginata	sheathing yellowstar	pr		W.M. Curtis (5737)	01-Aug-1953	sight	Point (513921,5411273) +/- 1500m.
939548	Hypoxis vaginata var. vaginata	sheathing yellowstar	pr		R.C. Gunn (5474)	27-Aug-1842	sight	Point (513921,5411273) +/- 1500m.
1163508	Hypoxis vaginata var. vaginata	sheathing yellowstar	pr		Anna Povey (3310)	28-Sep-2010	sight	Point (515734,5411703) +/- 10m.
1163493	Hypoxis vaginata var. vaginata	sheathing yellowstar	pr		Anna Povey (3310)	28-Sep-2010	sight	Point (515589,5412099) +/- 10m.
1163494	Hypoxis vaginata var. vaginata	sheathing yellowstar	pr		Anna Povey (3310)	28-Sep-2010	sight	Point (515592,5412100) +/- 10m.
227637	Hypoxis vaginata var. vaginata	sheathing yellowstar	pr		D.I. Morris (4111)	16-Sep-1991	sight	Point (514512,5405883) +/- 100m.
228243	Hypoxis vaginata var. vaginata	sheathing yellowstar	pr		L. Rodway (ex herb. Burbury) (4871)	1890	sight	Point (513812,5410883) +/- 500m.
228260	Hypoxis vaginata var. vaginata	sheathing yellowstar	pr		W.M. Curtis (5737)	Oct-1943	sight	Point (514012,5409083) +/- 400m.
227516	Hypoxis vaginata var. vaginata	sheathing yellowstar	pr		J. Somerville (4676)	Sep-1961	sight	Point (511612,5412683) +/- 7000m.
1163501	Hypoxis vaginata var. vaginata	sheathing yellowstar	pr		Anna Povey (3310)	28-Sep-2010	sight	Point (515625,5412057) +/- 10m.
1163496	Hypoxis vaginata var. vaginata	sheathing yellowstar	pr		Anna Povey (3310)	28-Sep-2010	sight	Point (515627,5412055) +/- 10m.
1163497	Hypoxis vaginata var. vaginata	sheathing yellowstar	pr		Anna Povey (3310)	28-Sep-2010	sight	Point (515629,5412051) +/- 10m.
1163499	Hypoxis vaginata var. vaginata	sheathing yellowstar	pr		Anna Povey (3310)	28-Sep-2010	sight	Point (515607,5412049) +/- 10m.
1163498	Hypoxis vaginata var. vaginata	sheathing yellowstar	pr		Anna Povey (3310)	28-Sep-2010	sight	Point (515608,5412047) +/- 10m.
1163502	Hypoxis vaginata var. vaginata	sheathing yellowstar	pr		Anna Povey (3310)	28-Sep-2010	sight	Point (515673,5412008) +/- 10m.
1163503	Hypoxis vaginata var. vaginata	sheathing yellowstar	pr		Anna Povey (3310)	28-Sep-2010	sight	Point (515666,5412000) +/- 10m.
1163504	Hypoxis vaginata var. vaginata	sheathing yellowstar	pr		Anna Povey (3310)	28-Sep-2010	sight	Point (515674,5411995) +/- 10m.
1163505	Hypoxis vaginata var. vaginata	sheathing yellowstar	pr		Anna Povey (3310)	28-Sep-2010	sight	Point (515685,5411910) +/- 10m.
1163506	Hypoxis vaginata var. vaginata	sheathing yellowstar	pr		Anna Povey (3310)	28-Sep-2010	sight	Point (515680,5411866) +/- 10m.
1163507	Hypoxis vaginata var. vaginata	sheathing yellowstar	pr		Anna Povey (3310)	28-Sep-2010	sight	Point (515667,5411823) +/- 10m.
1163492	Hypoxis vaginata var. vaginata	sheathing yellowstar	pr		Anna Povey (3310)	28-Sep-2010	sight	Point (515440,5412301) +/- 10m.
1163491	Hypoxis vaginata var. vaginata	sheathing yellowstar	pr		Anna Povey (3310)	28-Sep-2010	sight	Point (515487,5412317) +/- 10m.

Threatened flora within 5000 metres



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227999	Isoetes elatior	tall quillwort	r		R.C. Gunn (5474)	15-Mar-1842	sight	Point (509112,5409883) +/- 3000m.
1235899	Juncus amabilis	gentle rush	r		David Ziegeler (7381)	10-Feb-2011	sight	Point (512799,5407543) +/- 10m.
494431	Juncus amabilis	gentle rush	r		Mike Askey-Doran (1624)	1990	sight	Point (509332,5412683) +/- 100m.
931153	Lepidium pseudotasmanicum	shade peppercress	r		A.V. Ratkowsky (3779)	06-Dec-1992	sight	Point (514052,5410553) +/- 600m.
1090840	Lycopus australis	australian gypsywort	e		Richard Schahinger (2944)	18-Mar-2010	sight	Point (508327,5410457) +/- 5m.
343870	Lycopus australis	australian gypsywort	e		Richard Schahinger (2944)	07-Feb-2002	sight	Point (510399,5413030) +/- 5m.
951393	Lycopus australis	australian gypsywort	e		M Wapstra (1613)	12-Apr-2006	sight	Point (510344,5413022) +/- 10m.
345077	Lycopus australis	australian gypsywort	e		Richard Schahinger (2944)	07-Feb-2002	sight	Point (510344,5413074) +/- 5m.
343871	Lycopus australis	australian gypsywort	e		Richard Schahinger (2944)	07-Feb-2002	sight	Point (510381,5413040) +/- 5m.
1090455	Lycopus australis	australian gypsywort	e		Micah Visoiu (5870), R B Schahinger (19349)	10-Mar-2010	sight	Point (509162,5409970) +/- 5m.
972431	Lycopus australis	australian gypsywort	e		Micah Visoiu (5870)	13-Jul-2007	sight	Point (510324,5413119) +/- 100m.
930622	Lythrum salicaria	purple loosestrife	v		A North (2500)	25-Jul-2001	sight	Point (508262,5410133) +/- 50m.
343442	Lythrum salicaria	purple loosestrife	v		A North (2500)	30-Aug-2001	sight	Point (508262,5410183) +/- 100m.
1090514	Lythrum salicaria	purple loosestrife	v		Micah Visoiu (5870), R B Schahinger (19349)	10-Mar-2010	sight	Point (508308,5410310) +/- 5m.
1090511	Lythrum salicaria	purple loosestrife	v		Micah Visoiu (5870), R B Schahinger (19349)	10-Mar-2010	sight	Point (508340,5410371) +/- 5m.
1090493	Lythrum salicaria	purple loosestrife	v		Micah Visoiu (5870), R B Schahinger (19349)	10-Mar-2010	sight	Point (508322,5409869) +/- 5m.
1236288	Lythrum salicaria	purple loosestrife	v		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509169,5409933) +/- 10m.
1236456	Lythrum salicaria	purple loosestrife	v		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509202,5409980) +/- 10m.
1236576	Lythrum salicaria	purple loosestrife	v		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509214,5409990) +/- 10m.
1090488	Lythrum salicaria	purple loosestrife	v		Micah Visoiu (5870), R B Schahinger (19349)	10-Mar-2010	sight	Point (508370,5409795) +/- 5m.
1236458	Lythrum salicaria	purple loosestrife	v		Philip Barker (1911)	15-Apr-2010	sight	Point (508374,5409792) +/- 10m.
1236351	Lythrum salicaria	purple loosestrife	v		Philip Barker (1911)	15-Apr-2010	sight	Point (508389,5409789) +/- 10m.
1236682	Lythrum salicaria	purple loosestrife	v		Kirsty Kay (21610)	15-Apr-2010	sight	Point (508392,5409785) +/- 10m.
1236551	Lythrum salicaria	purple loosestrife	v		Philip Barker (1911)	15-Apr-2010	sight	Point (508394,5409779) +/- 10m.
1236299	Lythrum salicaria	purple loosestrife	v		Philip Barker (1911)	15-Apr-2010	sight	Point (508397,5409772) +/- 10m.
1236282	Lythrum salicaria	purple loosestrife	v		Kirsty Kay (21610)	15-Apr-2010	sight	Point (508401,5409771) +/- 10m.
1236281	Lythrum salicaria	purple loosestrife	v		Kirsty Kay (21610)	15-Apr-2010	sight	Point (508401,5409770) +/- 10m.
1236298	Lythrum salicaria	purple loosestrife	v		Philip Barker (1911)	15-Apr-2010	sight	Point (508424,5409747) +/- 10m.
1236297	Lythrum salicaria	purple loosestrife	v		Philip Barker (1911)	15-Apr-2010	sight	Point (508459,5409709) +/- 10m.

Threatened flora within 5000 metres



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1236489	Lythrum salicaria	purple loosestrife	v		Philip Barker (1911)	15-Apr-2010	sight	Point (508472,5409707) +/- 10m.
1236294	Lythrum salicaria	purple loosestrife	v		Philip Barker (1911)	15-Apr-2010	sight	Point (508813,5409558) +/- 10m.
1236408	Lythrum salicaria	purple loosestrife	v		Philip Barker (1911)	15-Apr-2010	sight	Point (509048,5409841) +/- 10m.
1236296	Lythrum salicaria	purple loosestrife	v		Philip Barker (1911)	15-Apr-2010	sight	Point (508491,5409676) +/- 10m.
1236620	Lythrum salicaria	purple loosestrife	v		Philip Barker (1911)	15-Apr-2010	sight	Point (508523,5409661) +/- 10m.
1236295	Lythrum salicaria	purple loosestrife	v		Philip Barker (1911)	15-Apr-2010	sight	Point (508524,5409663) +/- 10m.
1236717	Lythrum salicaria	purple loosestrife	v		Philip Barker (1911)	15-Apr-2010	sight	Point (508561,5409607) +/- 10m.
1236716	Lythrum salicaria	purple loosestrife	v		Philip Barker (1911)	15-Apr-2010	sight	Point (508595,5409602) +/- 10m.
1236715	Lythrum salicaria	purple loosestrife	v		Philip Barker (1911)	15-Apr-2010	sight	Point (508603,5409598) +/- 10m.
1236619	Lythrum salicaria	purple loosestrife	v		Philip Barker (1911)	15-Apr-2010	sight	Point (508617,5409593) +/- 10m.
1236457	Lythrum salicaria	purple loosestrife	v		Philip Barker (1911)	15-Apr-2010	sight	Point (508784,5409539) +/- 10m.
1090546	Lythrum salicaria	purple loosestrife	v		Micah Visoiu (5870), R B Schahinger (19349)	11-Mar-2010	sight	Point (509649,5410510) +/- 5m.
1090550	Lythrum salicaria	purple loosestrife	v		Micah Visoiu (5870), R B Schahinger (19349)	11-Mar-2010	sight	Point (509651,5410570) +/- 5m.
1090553	Lythrum salicaria	purple loosestrife	v		Micah Visoiu (5870), R B Schahinger (19349)	11-Mar-2010	sight	Point (509668,5410594) +/- 5m.
1090557	Lythrum salicaria	purple loosestrife	v		Micah Visoiu (5870), R B Schahinger (19349)	11-Mar-2010	sight	Point (509651,5410660) +/- 5m.
1090558	Lythrum salicaria	purple loosestrife	v		Micah Visoiu (5870), R B Schahinger (19349)	11-Mar-2010	sight	Point (509656,5410673) +/- 5m.
1090542	Lythrum salicaria	purple loosestrife	v		Micah Visoiu (5870), R B Schahinger (19349)	11-Mar-2010	sight	Point (509621,5410458) +/- 5m.
1090530	Lythrum salicaria	purple loosestrife	v		Micah Visoiu (5870), R B Schahinger (19349)	11-Mar-2010	sight	Point (509533,5410365) +/- 5m.
1090531	Lythrum salicaria	purple loosestrife	v		Micah Visoiu (5870), R B Schahinger (19349)	11-Mar-2010	sight	Point (509553,5410384) +/- 5m.
1090534	Lythrum salicaria	purple loosestrife	v		Micah Visoiu (5870), R B Schahinger (19349)	11-Mar-2010	sight	Point (509588,5410406) +/- 5m.
1090538	Lythrum salicaria	purple loosestrife	v		Micah Visoiu (5870), R B Schahinger (19349)	11-Mar-2010	sight	Point (509608,5410439) +/- 5m.
1090576	Lythrum salicaria	purple loosestrife	v		Micah Visoiu (5870), R B Schahinger (19349)	11-Mar-2010	sight	Point (509462,5410368) +/- 5m.
1090452	Lythrum salicaria	purple loosestrife	v		Micah Visoiu (5870), R B Schahinger (19349)	10-Mar-2010	sight	Point (509217,5409987) +/- 5m.
1090526	Lythrum salicaria	purple loosestrife	v		Micah Visoiu (5870), R B Schahinger (19349)	11-Mar-2010	sight	Point (509474,5410321) +/- 5m.

Threatened flora within 5000 metres



Id	Species	Common name	Ss	Ns	Observers	Date	Obs type	Position (gda94)
1090544	Lythrum salicaria	purple loosestrife	v		Micah Visoiu (5870), R B Schahinger (19349)	11-Mar-2010	sight	Point (509612,5410475) +/- 5m.
1090545	Lythrum salicaria	purple loosestrife	v		Micah Visoiu (5870), R B Schahinger (19349)	11-Mar-2010	sight	Point (509618,5410483) +/- 5m.
1090564	Lythrum salicaria	purple loosestrife	v		Micah Visoiu (5870), R B Schahinger (19349)	11-Mar-2010	sight	Point (509613,5410782) +/- 5m.
1090842	Lythrum salicaria	purple loosestrife	v		Richard Schahinger (2944)	19-Mar-2010	sight	Point (509534,5410948) +/- 10m.
1090845	Lythrum salicaria	purple loosestrife	v		Richard Schahinger (2944)	19-Mar-2010	sight	Point (509528,5410951) +/- 10m.
1090485	Lythrum salicaria	purple loosestrife	v		Micah Visoiu (5870), R B Schahinger (19349)	10-Mar-2010	sight	Point (508393,5409756) +/- 5m.
1090486	Lythrum salicaria	purple loosestrife	v		Micah Visoiu (5870), R B Schahinger (19349)	10-Mar-2010	sight	Point (508400,5409772) +/- 5m.
1091255	Lythrum salicaria	purple loosestrife	v		R B Schahinger (19349)	31-Mar-2010	sight	Point (510147,5411984) +/- 5m.
1091258	Lythrum salicaria	purple loosestrife	v		R B Schahinger (19349)	31-Mar-2010	sight	Point (509939,5411937) +/- 5m.
1091257	Lythrum salicaria	purple loosestrife	v		R B Schahinger (19349)	31-Mar-2010	sight	Point (509951,5411944) +/- 5m.
1091256	Lythrum salicaria	purple loosestrife	v		R B Schahinger (19349)	31-Mar-2010	sight	Point (509959,5411947) +/- 5m.
1090906	Lythrum salicaria	purple loosestrife	v		Richard Schahinger (2944)	19-Mar-2010	sight	Point (509975,5411787) +/- 10m.
1091254	Lythrum salicaria	purple loosestrife	v		R B Schahinger (19349)	31-Mar-2010	sight	Point (509994,5411927) +/- 5m.
1091259	Lythrum salicaria	purple loosestrife	v		R B Schahinger (19349)	31-Mar-2010	sight	Point (509907,5411803) +/- 5m.
1090905	Lythrum salicaria	purple loosestrife	v		Richard Schahinger (2944)	19-Mar-2010	sight	Point (510016,5411743) +/- 5m.
1090892	Lythrum salicaria	purple loosestrife	v		Richard Schahinger (2944)	19-Mar-2010	sight	Point (509906,5411621) +/- 5m.
1090894	Lythrum salicaria	purple loosestrife	v		Richard Schahinger (2944)	19-Mar-2010	sight	Point (509937,5411631) +/- 5m.
1090886	Lythrum salicaria	purple loosestrife	v		Richard Schahinger (2944)	19-Mar-2010	sight	Point (509818,5411518) +/- 5m.
1090902	Lythrum salicaria	purple loosestrife	v		Richard Schahinger (2944)	19-Mar-2010	sight	Point (509981,5411643) +/- 5m.
227418	Lythrum salicaria	purple loosestrife	v		A. Simson (3720)	Jan-1880	sight	Point (509512,5411383) +/- 2000m.
1090871	Lythrum salicaria	purple loosestrife	v		Richard Schahinger (2944)	19-Mar-2010	sight	Point (509625,5411370) +/- 10m.
1090473	Lythrum salicaria	purple loosestrife	v		Micah Visoiu (5870), R B Schahinger (19349)	10-Mar-2010	sight	Point (508777,5409536) +/- 5m.
1090471	Lythrum salicaria	purple loosestrife	v		Micah Visoiu (5870), R B Schahinger (19349)	10-Mar-2010	sight	Point (508807,5409555) +/- 5m.
1090467	Lythrum salicaria	purple loosestrife	v		Micah Visoiu (5870), R B Schahinger (19349)	10-Mar-2010	sight	Point (508872,5409586) +/- 5m.

Threatened flora within 5000 metres



Id	Species	Common name	Ss	Ns	Observers	Date	Obs type	Position (gda94)
1090479	Lythrum salicaria	purple loosestrife	v		Micah Visoiu (5870), R B Schahinger (19349)	10-Mar-2010	sight	Point (508562,5409620) +/- 5m.
1090480	Lythrum salicaria	purple loosestrife	v		Micah Visoiu (5870), R B Schahinger (19349)	10-Mar-2010	sight	Point (508519,5409649) +/- 5m.
940258	Lythrum salicaria	purple loosestrife	v		R Schahinger (6868)	07-Feb-2002	sight	Point (510427,5412993) +/- 10m.
951395	Lythrum salicaria	purple loosestrife	v		M Wapstra (1613)	12-Apr-2006	sight	Point (510443,5412995) +/- 10m.
1236291	Lythrum salicaria	purple loosestrife	v		Philip Barker (1911)	15-Apr-2010	sight	Point (509986,5411686) +/- 10m.
1236290	Lythrum salicaria	purple loosestrife	v		Philip Barker (1911)	15-Apr-2010	sight	Point (510003,5411717) +/- 10m.
1236289	Lythrum salicaria	purple loosestrife	v		Philip Barker (1911)	15-Apr-2010	sight	Point (510015,5411757) +/- 10m.
1236350	Lythrum salicaria	purple loosestrife	v		Philip Barker (1911)	15-Apr-2010	sight	Point (509999,5411775) +/- 10m.
1236284	Lythrum salicaria	purple loosestrife	v		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509970,5411790) +/- 10m.
1236283	Lythrum salicaria	purple loosestrife	v		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509979,5411790) +/- 10m.
1236287	Lythrum salicaria	purple loosestrife	v		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509878,5411770) +/- 10m.
1236286	Lythrum salicaria	purple loosestrife	v		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509925,5411777) +/- 10m.
1236292	Lythrum salicaria	purple loosestrife	v		Philip Barker (1911)	15-Apr-2010	sight	Point (509971,5411645) +/- 10m.
1236293	Lythrum salicaria	purple loosestrife	v		Philip Barker (1911)	15-Apr-2010	sight	Point (509911,5411620) +/- 10m.
1236285	Lythrum salicaria	purple loosestrife	v		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509937,5411786) +/- 10m.
1236406	Lythrum salicaria	purple loosestrife	v		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509951,5411787) +/- 10m.
1236618	Lythrum salicaria	purple loosestrife	v		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509523,5410929) +/- 10m.
1236568	Lythrum salicaria	purple loosestrife	v		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509520,5410942) +/- 10m.
1236407	Lythrum salicaria	purple loosestrife	v		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509559,5410439) +/- 10m.
1101200	Mentha australis	river mint	e		Micah Visoiu (5870)	10-Mar-2010	sight	Point (509643,5410594) +/- 100m.
1090815	Mentha australis	river mint	e		Richard Schahinger (2944)	18-Mar-2010	sight	Point (507433,5411030) +/- 5m.
1090574	Mentha australis	river mint	e		Micah Visoiu (5870), R B Schahinger (19349)	11-Mar-2010	sight	Point (509498,5410376) +/- 5m.
1090528	Mentha australis	river mint	e		Micah Visoiu (5870), R B Schahinger (19349)	11-Mar-2010	sight	Point (509513,5410348) +/- 5m.
1090577	Mentha australis	river mint	e		Micah Visoiu (5870), R B Schahinger (19349)	11-Mar-2010	sight	Point (509462,5410368) +/- 5m.
1090523	Mentha australis	river mint	e		Micah Visoiu (5870), R B Schahinger (19349)	11-Mar-2010	sight	Point (509398,5410281) +/- 5m.
1090541	Mentha australis	river mint	e		Micah Visoiu (5870), R B Schahinger (19349)	11-Mar-2010	sight	Point (509618,5410448) +/- 5m.
1090570	Mentha australis	river mint	e		Micah Visoiu (5870), R B Schahinger (19349)	11-Mar-2010	sight	Point (509532,5410633) +/- 5m.

Threatened flora within 5000 metres



Id	Species	Common name	Ss	Ns	Observers	Date	Obs type	Position (gda94)
1090566	Mentha australis	river mint	e		Micah Visoiu (5870), R B Schahinger (19349)	11-Mar-2010	sight	Point (509532,5410805) +/- 5m.
1090465	Mentha australis	river mint	e		Micah Visoiu (5870), R B Schahinger (19349)	10-Mar-2010	sight	Point (508985,5409710) +/- 5m.
1090460	Mentha australis	river mint	e		Micah Visoiu (5870), R B Schahinger (19349)	10-Mar-2010	sight	Point (509118,5409854) +/- 5m.
1090457	Mentha australis	river mint	e		Micah Visoiu (5870), R B Schahinger (19349)	10-Mar-2010	sight	Point (509158,5409964) +/- 5m.
1090839	Mentha australis	river mint	e		Richard Schahinger (2944)	18-Mar-2010	sight	Point (508233,5410419) +/- 5m.
1090510	Mentha australis	river mint	e		Micah Visoiu (5870), R B Schahinger (19349)	10-Mar-2010	sight	Point (508291,5410386) +/- 5m.
1090509	Mentha australis	river mint	e		Micah Visoiu (5870), R B Schahinger (19349)	10-Mar-2010	sight	Point (508299,5410395) +/- 5m.
1091261	Mentha australis	river mint	e		R B Schahinger (19349)	31-Mar-2010	sight	Point (510173,5411992) +/- 5m.
928766	Mentha australis	river mint	e		- Unknown (21598)	01-Dec-1886	sight	Point (510302,5412043) +/- 1000m.
1091260	Mentha australis	river mint	e		R B Schahinger (19349)	31-Mar-2010	sight	Point (509941,5411891) +/- 5m.
1090444	Mentha australis	river mint	e		R B Schahinger (19349)	24-Feb-2010	sight	Point (509965,5411805) +/- 5m.
1091262	Mentha australis	river mint	e		R B Schahinger (19349)	31-Mar-2010	sight	Point (509893,5411838) +/- 5m.
1090897	Mentha australis	river mint	e		Richard Schahinger (2944)	19-Mar-2010	sight	Point (509937,5411631) +/- 5m.
1090876	Mentha australis	river mint	e		Richard Schahinger (2944)	19-Mar-2010	sight	Point (509703,5411437) +/- 14m.
1090879	Mentha australis	river mint	e		Richard Schahinger (2944)	19-Mar-2010	sight	Point (509711,5411411) +/- 12m.
1090873	Mentha australis	river mint	e		Richard Schahinger (2944)	19-Mar-2010	sight	Point (509644,5411382) +/- 12m.
1049718	Mentha australis	river mint	e		Roy Skabo (6388)	27-Feb-2009	sight	Point (509627,5410445) +/- 10m.
1090476	Mentha australis	river mint	e		Micah Visoiu (5870), R B Schahinger (19349)	10-Mar-2010	sight	Point (508689,5409543) +/- 5m.
1236409	Mentha australis	river mint	e		Philip Barker (1911)	15-Apr-2010	sight	Point (509636,5411343) +/- 10m.
1236665	Mentha australis	river mint	e		Philip Barker (1911)	15-Apr-2010	sight	Point (509677,5411401) +/- 10m.
1236663	Mentha australis	river mint	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509716,5411399) +/- 10m.
1236621	Mentha australis	river mint	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509462,5410362) +/- 10m.
1236664	Mentha australis	river mint	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509495,5410381) +/- 10m.
1236720	Mentha australis	river mint	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509602,5410623) +/- 10m.
1236719	Mentha australis	river mint	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509602,5410632) +/- 10m.
1236718	Mentha australis	river mint	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509579,5410759) +/- 10m.
1090824	Mentha australis	river mint	e		Richard Schahinger (2944)	18-Mar-2010	sight	Point (507689,5410868) +/- 5m.

Threatened flora within 5000 metres



Id	Species	Common name	Ss	Ns	Observers	Date	Obs type	Position (gda94)
1090826	Mentha australis	river mint	e		Richard Schahinger (2944)	18-Mar-2010	sight	Point (507732,5410866) +/- 5m.
1090515	Mentha australis	river mint	e		Micah Visoiu (5870), R B Schahinger (19349)	10-Mar-2010	sight	Point (508299,5410306) +/- 5m.
1090513	Mentha australis	river mint	e		Micah Visoiu (5870), R B Schahinger (19349)	10-Mar-2010	sight	Point (508308,5410310) +/- 5m.
1090512	Mentha australis	river mint	e		Micah Visoiu (5870), R B Schahinger (19349)	10-Mar-2010	sight	Point (508311,5410322) +/- 5m.
1236739	Mentha australis	river mint	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (508258,5410005) +/- 10m.
1236624	Mentha australis	river mint	e		Philip Barker (1911)	15-Apr-2010	sight	Point (509181,5409975) +/- 10m.
1236666	Mentha australis	river mint	e		Philip Barker (1911)	15-Apr-2010	sight	Point (507598,5410913) +/- 10m.
1236459	Mentha australis	river mint	e		Philip Barker (1911)	15-Apr-2010	sight	Point (507602,5410914) +/- 10m.
1236490	Mentha australis	river mint	e		Philip Barker (1911)	15-Apr-2010	sight	Point (507497,5410970) +/- 10m.
1090817	Mentha australis	river mint	e		Richard Schahinger (2944)	18-Mar-2010	sight	Point (507484,5410978) +/- 5m.
227369	Myriophyllum integrifolium	tiny watermilfoil	v		A.V. Ratkowsky (3779)	18-Nov-1991	sight	Point (508112,5411483) +/- 1800m.
228141	Parietaria debilis	shade pellitory	r		L. Rodway (4869)	01-Jan-1600?	sight	Point (511612,5412683) +/- 7000m.
1090540	Persicaria decipiens	slenderwaterpepper	v		Micah Visoiu (5870), R B Schahinger (19349)	11-Mar-2010	sight	Point (509610,5410442) +/- 5m.
1236355	Persicaria decipiens	slenderwaterpepper	v		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509552,5411240) +/- 10m.
1236308	Persicaria decipiens	slenderwaterpepper	v		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509599,5411309) +/- 10m.
1236412	Persicaria decipiens	slenderwaterpepper	v		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509522,5411021) +/- 10m.
1236356	Persicaria decipiens	slenderwaterpepper	v		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509518,5411047) +/- 10m.
1236310	Persicaria decipiens	slenderwaterpepper	v		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509519,5411108) +/- 10m.
1236413	Persicaria decipiens	slenderwaterpepper	v		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509558,5410789) +/- 10m.
1236491	Persicaria decipiens	slenderwaterpepper	v		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509524,5410997) +/- 10m.
1236625	Persicaria decipiens	slenderwaterpepper	v		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509581,5410762) +/- 10m.
1090827	Persicaria decipiens	slenderwaterpepper	v		Richard Schahinger (2944)	18-Mar-2010	sight	Point (507714,5410841) +/- 5m.
1216291	Persicaria decipiens	slenderwaterpepper	v		Nicky Meeson (5963)	02-Dec-2009	sight	Point (515299,5411054) +/- 10m.
1216292	Persicaria decipiens	slenderwaterpepper	v		Nicky Meeson (5963)	02-Dec-2009	sight	Point (515324,5411121) +/- 10m.
1236360	Persicaria decipiens	slenderwaterpepper	v		Philip Barker (1911)	15-Apr-2010	sight	Point (510010,5411678) +/- 10m.
1236359	Persicaria decipiens	slenderwaterpepper	v		Philip Barker (1911)	15-Apr-2010	sight	Point (510012,5411697) +/- 10m.
1236358	Persicaria decipiens	slenderwaterpepper	v		Philip Barker (1911)	15-Apr-2010	sight	Point (510012,5411704) +/- 10m.
1236312	Persicaria decipiens	slenderwaterpepper	v		Philip Barker (1911)	15-Apr-2010	sight	Point (510003,5411717) +/- 10m.
1236414	Persicaria decipiens	slenderwaterpepper	v		Philip Barker (1911)	15-Apr-2010	sight	Point (510009,5411717) +/- 10m.
1236357	Persicaria decipiens	slenderwaterpepper	v		Philip Barker (1911)	15-Apr-2010	sight	Point (510007,5411737) +/- 10m.
1236311	Persicaria decipiens	slenderwaterpepper	v		Philip Barker (1911)	15-Apr-2010	sight	Point (510012,5411756) +/- 10m.

Threatened flora within 5000 metres



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1236302	Persicaria decipiens	slenderwaterpepper	v		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509970,5411790) +/-10m.
1236301	Persicaria decipiens	slenderwaterpepper	v		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509980,5411793) +/-10m.
1236306	Persicaria decipiens	slenderwaterpepper	v		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509839,5411690) +/-10m.
1236305	Persicaria decipiens	slenderwaterpepper	v		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509844,5411727) +/-10m.
1236307	Persicaria decipiens	slenderwaterpepper	v		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509858,5411654) +/-10m.
1236410	Persicaria decipiens	slenderwaterpepper	v		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509911,5411775) +/-10m.
1236303	Persicaria decipiens	slenderwaterpepper	v		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509925,5411777) +/-10m.
1236313	Persicaria decipiens	slenderwaterpepper	v		Philip Barker (1911)	15-Apr-2010	sight	Point (509971,5411645) +/-10m.
1236361	Persicaria decipiens	slenderwaterpepper	v		Philip Barker (1911)	15-Apr-2010	sight	Point (509975,5411665) +/-10m.
1236353	Persicaria decipiens	slenderwaterpepper	v		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509845,5411523) +/-10m.
1236411	Persicaria decipiens	slenderwaterpepper	v		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509849,5411556) +/-10m.
1236314	Persicaria decipiens	slenderwaterpepper	v		Philip Barker (1911)	15-Apr-2010	sight	Point (509914,5411623) +/-10m.
1236352	Persicaria decipiens	slenderwaterpepper	v		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509918,5411778) +/-10m.
1236304	Persicaria decipiens	slenderwaterpepper	v		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509892,5411786) +/-10m.
1236514	Persicaria decipiens	slenderwaterpepper	v		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509953,5411791) +/-10m.
1236354	Persicaria decipiens	slenderwaterpepper	v		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509785,5411424) +/-10m.
1091266	Persicaria decipiens	slenderwaterpepper	v		R B Schahinger (19349)	31-Mar-2010	sight	Point (510159,5412012) +/-5m.
1091270	Persicaria decipiens	slenderwaterpepper	v		R B Schahinger (19349)	31-Mar-2010	sight	Point (509896,5411918) +/-5m.
1091269	Persicaria decipiens	slenderwaterpepper	v		R B Schahinger (19349)	31-Mar-2010	sight	Point (509943,5411942) +/-5m.
1091264	Persicaria decipiens	slenderwaterpepper	v		R B Schahinger (19349)	31-Mar-2010	sight	Point (510000,5411937) +/-5m.
1091268	Persicaria decipiens	slenderwaterpepper	v		R B Schahinger (19349)	31-Mar-2010	sight	Point (509983,5411959) +/-5m.
1091265	Persicaria decipiens	slenderwaterpepper	v		R B Schahinger (19349)	31-Mar-2010	sight	Point (510130,5411972) +/-5m.
1091267	Persicaria decipiens	slenderwaterpepper	v		R B Schahinger (19349)	31-Mar-2010	sight	Point (510066,5411974) +/-5m.
1091271	Persicaria decipiens	slenderwaterpepper	v		R B Schahinger (19349)	31-Mar-2010	sight	Point (509896,5411809) +/-5m.
228071	Persicaria decipiens	slenderwaterpepper	v		A.V. Ratkowsky (3779)	26-Mar-1993	sight	Point (509912,5411683) +/-200m.
228070	Persicaria decipiens	slenderwaterpepper	v		A.V. Ratkowsky (3779)	25-Feb-1993	sight	Point (509912,5411683) +/-200m.
1090896	Persicaria decipiens	slenderwaterpepper	v		Richard Schahinger (2944)	19-Mar-2010	sight	Point (509937,5411631) +/-5m.
1090899	Persicaria decipiens	slenderwaterpepper	v		Richard Schahinger (2944)	19-Mar-2010	sight	Point (509960,5411622) +/-5m.
1090885	Persicaria decipiens	slenderwaterpepper	v		Richard Schahinger (2944)	19-Mar-2010	sight	Point (509818,5411518) +/-5m.
227419	Persicaria decipiens	slenderwaterpepper	v		A.V. Ratkowsky (3779)	18-Jan-1993	sight	Point (509512,5411383) +/-2000m.
227615	Persicaria decipiens	slenderwaterpepper	v		A North (2500)	30-Mar-2000	sight	Point (514312,5411783) +/-100m.
1090549	Persicaria decipiens	slenderwaterpepper	v		Micah Visoiu (5870), R B Schahinger (19349)	11-Mar-2010	sight	Point (509667,5410536) +/-5m.

Threatened flora within 5000 metres



Id	Species	Common name	Ss	Ns	Observers	Date	Obs type	Position (gda94)
1090552	Persicaria decipiens	slenderwaterpepper	v		Micah Visoiu (5870), R B Schahinger (19349)	11-Mar-2010	sight	Point (509653,5410579) +/- 5m.
1101199	Persicaria decipiens	slenderwaterpepper	v		Micah Visoiu (5870)	10-Mar-2010	sight	Point (509643,5410594) +/- 100m.
1090555	Persicaria decipiens	slenderwaterpepper	v		Micah Visoiu (5870), R B Schahinger (19349)	11-Mar-2010	sight	Point (509661,5410621) +/- 5m.
1090562	Persicaria decipiens	slenderwaterpepper	v		Micah Visoiu (5870), R B Schahinger (19349)	11-Mar-2010	sight	Point (509632,5410748) +/- 5m.
1090851	Persicaria decipiens	slenderwaterpepper	v		Richard Schahinger (2944)	19-Mar-2010	sight	Point (509533,5410992) +/- 10m.
1090856	Persicaria decipiens	slenderwaterpepper	v		Richard Schahinger (2944)	19-Mar-2010	sight	Point (509536,5411037) +/- 10m.
1090450	Persicaria decipiens	slenderwaterpepper	v		Micah Visoiu (5870), R B Schahinger (19349)	10-Mar-2010	sight	Point (509229,5410056) +/- 5m.
1236309	Persicaria decipiens	slenderwaterpepper	v		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509529,5411184) +/- 10m.
1236461	Persicaria decipiens	slenderwaterpepper	v		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509554,5411240) +/- 10m.
1236515	Persicaria subsessilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (508235,5410357) +/- 10m.
1090501	Persicaria subsessilis	bristly waterpepper	e		Micah Visoiu (5870), R B Schahinger (19349)	10-Mar-2010	sight	Point (508224,5410317) +/- 5m.
1236728	Persicaria subsessilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509270,5410095) +/- 10m.
1236729	Persicaria subsessilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509267,5410099) +/- 10m.
1236652	Persicaria subsessilis	bristly waterpepper	e		Philip Barker (1911)	15-Apr-2010	sight	Point (509225,5410106) +/- 10m.
1236727	Persicaria subsessilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509284,5410117) +/- 10m.
1236545	Persicaria subsessilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509278,5410136) +/- 10m.
1236634	Persicaria subsessilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509290,5410158) +/- 10m.
1236640	Persicaria subsessilis	bristly waterpepper	e		Philip Barker (1911)	15-Apr-2010	sight	Point (509286,5410182) +/- 10m.
1236467	Persicaria subsessilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509305,5410193) +/- 10m.
1236670	Persicaria subsessilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509318,5410202) +/- 10m.
1236334	Persicaria subsessilis	bristly waterpepper	e		Philip Barker (1911)	15-Apr-2010	sight	Point (509317,5410214) +/- 10m.
1236633	Persicaria subsessilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509334,5410228) +/- 10m.
1236516	Persicaria subsessilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (508280,5410029) +/- 10m.
1090497	Persicaria subsessilis	bristly waterpepper	e		Micah Visoiu (5870), R B Schahinger (19349)	10-Mar-2010	sight	Point (508238,5410053) +/- 5m.
1236639	Persicaria subsessilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (508274,5410059) +/- 10m.
1236626	Persicaria subsessilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (508259,5410128) +/- 10m.
1090490	Persicaria subsessilis	bristly waterpepper	e		Micah Visoiu (5870), R B Schahinger (19349)	10-Mar-2010	sight	Point (508339,5409820) +/- 5m.
1236416	Persicaria subsessilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (508337,5409821) +/- 10m.
1236554	Persicaria subsessilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (508334,5409834) +/- 10m.

Threatened flora within 5000 metres



Id	Species	Common name	Ss	Ns	Observers	Date	Obs type	Position (gda94)
1236492	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (508327,5409844) +/-10m.
1236721	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (508325,5409844) +/-10m.
1090491	Persicaria subsevilis	bristly waterpepper	e		Micah Visoiu (5870), R B Schahinger (19349)	10-Mar-2010	sight	Point (508317,5409852) +/-5m.
1236315	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (508303,5409913) +/-10m.
342348	Persicaria subsevilis	bristly waterpepper	e		A North (2500)	30-Aug-2001	sight	Point (508262,5409983) +/-100m.
1236635	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509083,5409846) +/-10m.
1236429	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509192,5409966) +/-10m.
1236428	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509200,5409975) +/-10m.
1236427	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509202,5409980) +/-10m.
1236368	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509205,5409982) +/-10m.
1236546	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509214,5409990) +/-10m.
1236362	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (508337,5409819) +/-10m.
1236417	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (508338,5409816) +/-10m.
1236415	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (508342,5409820) +/-10m.
1236638	Persicaria subsevilis	bristly waterpepper	e		Philip Barker (1911)	15-Apr-2010	sight	Point (508490,5409679) +/-10m.
1236637	Persicaria subsevilis	bristly waterpepper	e		Philip Barker (1911)	15-Apr-2010	sight	Point (508934,5409674) +/-10m.
1236329	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (508943,5409679) +/-10m.
1236731	Persicaria subsevilis	bristly waterpepper	e		Philip Barker (1911)	15-Apr-2010	sight	Point (508603,5409598) +/-10m.
1236730	Persicaria subsevilis	bristly waterpepper	e		Philip Barker (1911)	15-Apr-2010	sight	Point (508786,5409536) +/-10m.
1236628	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509534,5411196) +/-10m.
1236496	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509536,5411252) +/-10m.
1236366	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509560,5411255) +/-10m.
1236323	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509599,5411309) +/-10m.
1236463	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509606,5411321) +/-10m.
1236321	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509622,5411354) +/-10m.
1236543	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509527,5411027) +/-10m.
1236630	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509522,5411030) +/-10m.
1236421	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509517,5411036) +/-10m.
1236367	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509518,5411047) +/-10m.
1236420	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509521,5411063) +/-10m.
1236325	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509519,5411086) +/-10m.
1236519	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509519,5411108) +/-10m.
1236629	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509524,5411108) +/-10m.
1236542	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509522,5411113) +/-10m.

Threatened flora within 5000 metres



Id	Species	Common name	Ss	Ns	Observers	Date	Obs type	Position (gda94)
1236419	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509519,5411130) +/- 10m.
1236668	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509528,5411145) +/- 10m.
1236667	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509526,5411150) +/- 10m.
1236552	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509524,5411156) +/- 10m.
1236518	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509521,5411162) +/- 10m.
1236425	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509558,5410789) +/- 10m.
1236424	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509560,5410803) +/- 10m.
1236497	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509562,5410813) +/- 10m.
1236632	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509563,5410821) +/- 10m.
1236466	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509546,5410851) +/- 10m.
1236738	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509522,5410868) +/- 10m.
1236423	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509516,5410875) +/- 10m.
1236520	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509523,5410929) +/- 10m.
1236465	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509520,5410942) +/- 10m.
1236684	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509520,5410943) +/- 10m.
1236683	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509521,5410954) +/- 10m.
1236464	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509521,5410959) +/- 10m.
1236737	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509526,5410966) +/- 10m.
1236669	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509525,5410967) +/- 10m.
1236422	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509523,5410972) +/- 10m.
1236650	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509523,5410983) +/- 10m.
1236631	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509526,5410991) +/- 10m.
1236651	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509338,5410234) +/- 10m.
1236523	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509351,5410249) +/- 10m.
1236522	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509366,5410258) +/- 10m.
1236521	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509398,5410313) +/- 10m.
1236570	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509430,5410351) +/- 10m.
1236328	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509493,5410381) +/- 10m.
1236327	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509505,5410387) +/- 10m.
1236726	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509518,5410611) +/- 10m.
1236724	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509605,5410635) +/- 10m.
1236725	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509505,5410646) +/- 10m.
1236426	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509598,5410672) +/- 10m.
1236544	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509583,5410749) +/- 10m.
1236723	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509581,5410762) +/- 10m.

Threatened flora within 5000 metres



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1236326	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509588,5410773) +/-10m.
1236685	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509576,5410773) +/-10m.
1236324	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509529,5411184) +/-10m.
1090475	Persicaria subsevilis	bristly waterpepper	e		Micah Visoiu (5870),R B Schahinger (19349)	10-Mar-2010	sight	Point (508743,5409535) +/-5m.
1090472	Persicaria subsevilis	bristly waterpepper	e		Micah Visoiu (5870),R B Schahinger (19349)	10-Mar-2010	sight	Point (508778,5409537) +/-5m.
940216	Persicaria subsevilis	bristly waterpepper	e		R Scabo (9425)	11-Jan-2005	sight	Point (508463,5409599) +/-2500m.
1090481	Persicaria subsevilis	bristly waterpepper	e		Micah Visoiu (5870),R B Schahinger (19349)	10-Mar-2010	sight	Point (508489,5409670) +/-5m.
940259	Persicaria subsevilis	bristly waterpepper	e		R Schahinger (6868)	12-Feb-2002	sight	Point (510312,5413123) +/-10m.
343866	Persicaria subsevilis	bristly waterpepper	e		Richard Schahinger (2944)	12-Feb-2002	sight	Point (510315,5413125) +/-10m.
1100885	Persicaria subsevilis	bristly waterpepper	e		Micah Visoiu (5870)	20-Jan-2010	sight	Point (510331,5413137) +/-100m.
1236430	Persicaria subsevilis	bristly waterpepper	e		Philip Barker (1911)	15-Apr-2010	sight	Point (509986,5411686) +/-10m.
1236316	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509969,5411793) +/-10m.
1236319	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509878,5411770) +/-10m.
1236418	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509911,5411775) +/-10m.
1236370	Persicaria subsevilis	bristly waterpepper	e		Philip Barker (1911)	15-Apr-2010	sight	Point (509966,5411656) +/-10m.
1236369	Persicaria subsevilis	bristly waterpepper	e		Philip Barker (1911)	15-Apr-2010	sight	Point (509974,5411668) +/-10m.
1236330	Persicaria subsevilis	bristly waterpepper	e		Philip Barker (1911)	15-Apr-2010	sight	Point (509981,5411631) +/-10m.
1236365	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509845,5411534) +/-10m.
1236569	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509845,5411551) +/-10m.
1236494	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509849,5411556) +/-10m.
1236320	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509854,5411579) +/-10m.
1236722	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509881,5411597) +/-10m.
1236364	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509882,5411597) +/-10m.
1236372	Persicaria subsevilis	bristly waterpepper	e		Philip Barker (1911)	15-Apr-2010	sight	Point (509901,5411614) +/-10m.
1236371	Persicaria subsevilis	bristly waterpepper	e		Philip Barker (1911)	15-Apr-2010	sight	Point (509914,5411623) +/-10m.
1236318	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509925,5411777) +/-10m.
1236363	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509918,5411778) +/-10m.
1236317	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509936,5411786) +/-10m.
1236493	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509950,5411787) +/-10m.
1236517	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509941,5411787) +/-10m.
1236627	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509929,5411789) +/-10m.
1236322	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509626,5411349) +/-10m.

Threatened flora within 5000 metres



Id	Species	Common name	Ss	Ns	Observers	Date	Obs type	Position (gda94)
1236374	Persicaria subsevilis	bristly waterpepper	e		Philip Barker (1911)	15-Apr-2010	sight	Point (509692,5411415) +/-10m.
1236373	Persicaria subsevilis	bristly waterpepper	e		Philip Barker (1911)	15-Apr-2010	sight	Point (509729,5411439) +/-10m.
1236636	Persicaria subsevilis	bristly waterpepper	e		Philip Barker (1911)	15-Apr-2010	sight	Point (509736,5411430) +/-10m.
1236468	Persicaria subsevilis	bristly waterpepper	e		Philip Barker (1911)	15-Apr-2010	sight	Point (509743,5411434) +/-10m.
1236495	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509785,5411424) +/-10m.
1236462	Persicaria subsevilis	bristly waterpepper	e		Kirsty Kay (21610)	15-Apr-2010	sight	Point (509808,5411442) +/-10m.
1090567	Persicaria subsevilis	bristly waterpepper	e		Micah Visoiu (5870), R B Schahinger (19349)	11-Mar-2010	sight	Point (509532,5410805) +/-5m.
1090841	Persicaria subsevilis	bristly waterpepper	e		Richard Schahinger (2944)	19-Mar-2010	sight	Point (509534,5410948) +/-10m.
1090844	Persicaria subsevilis	bristly waterpepper	e		Richard Schahinger (2944)	19-Mar-2010	sight	Point (509521,5410949) +/-10m.
1090846	Persicaria subsevilis	bristly waterpepper	e		Richard Schahinger (2944)	19-Mar-2010	sight	Point (509534,5410970) +/-10m.
1090463	Persicaria subsevilis	bristly waterpepper	e		Micah Visoiu (5870), R B Schahinger (19349)	10-Mar-2010	sight	Point (508997,5409765) +/-5m.
227393	Persicaria subsevilis	bristly waterpepper	e		A.M. Olsen (3763)	Dec-1937	sight	Point (509112,5409883) +/-3000m.
930621	Persicaria subsevilis	bristly waterpepper	e		A North (2500)	25-Jul-2001	sight	Point (509122,5410083) +/-50m.
343443	Persicaria subsevilis	bristly waterpepper	e		A North (2500)	30-Aug-2001	sight	Point (509162,5409983) +/-100m.
1090453	Persicaria subsevilis	bristly waterpepper	e		Micah Visoiu (5870), R B Schahinger (19349)	10-Mar-2010	sight	Point (509200,5409985) +/-5m.
1091272	Persicaria subsevilis	bristly waterpepper	e		R B Schahinger (19349)	31-Mar-2010	sight	Point (509941,5411891) +/-5m.
1091274	Persicaria subsevilis	bristly waterpepper	e		R B Schahinger (19349)	31-Mar-2010	sight	Point (509971,5411921) +/-5m.
1091273	Persicaria subsevilis	bristly waterpepper	e		R B Schahinger (19349)	31-Mar-2010	sight	Point (509958,5411924) +/-5m.
1091281	Persicaria subsevilis	bristly waterpepper	e		R B Schahinger (19349)	31-Mar-2010	sight	Point (509951,5411944) +/-5m.
1091280	Persicaria subsevilis	bristly waterpepper	e		R B Schahinger (19349)	31-Mar-2010	sight	Point (509959,5411947) +/-5m.
1091279	Persicaria subsevilis	bristly waterpepper	e		R B Schahinger (19349)	31-Mar-2010	sight	Point (509963,5411955) +/-5m.
1091276	Persicaria subsevilis	bristly waterpepper	e		R B Schahinger (19349)	31-Mar-2010	sight	Point (509982,5411940) +/-5m.
1091278	Persicaria subsevilis	bristly waterpepper	e		R B Schahinger (19349)	31-Mar-2010	sight	Point (510032,5411964) +/-5m.
1091275	Persicaria subsevilis	bristly waterpepper	e		R B Schahinger (19349)	31-Mar-2010	sight	Point (510130,5411972) +/-5m.
1091277	Persicaria subsevilis	bristly waterpepper	e		R B Schahinger (19349)	31-Mar-2010	sight	Point (510073,5411975) +/-5m.
1090907	Persicaria subsevilis	bristly waterpepper	e		Richard Schahinger (2944)	19-Mar-2010	sight	Point (509951,5411787) +/-10m.
1091283	Persicaria subsevilis	bristly waterpepper	e		R B Schahinger (19349)	31-Mar-2010	sight	Point (509891,5411806) +/-5m.
1091282	Persicaria subsevilis	bristly waterpepper	e		R B Schahinger (19349)	31-Mar-2010	sight	Point (509901,5411875) +/-5m.
1091284	Persicaria subsevilis	bristly waterpepper	e		R B Schahinger (19349)	31-Mar-2010	sight	Point (509903,5411797) +/-5m.
1091286	Persicaria subsevilis	bristly waterpepper	e		R B Schahinger (19349)	31-Mar-2010	sight	Point (509907,5411815) +/-5m.
1091285	Persicaria subsevilis	bristly waterpepper	e		R B Schahinger (19349)	31-Mar-2010	sight	Point (509907,5411803) +/-5m.

Threatened flora within 5000 metres



Id	Species	Common name	Ss	Ns	Observers	Date	Obs type	Position (gda94)
1090891	Persicaria subsessilis	bristly waterpepper	e		Richard Schahinger (2944)	19-Mar-2010	sight	Point (509890,5411613) +/- 5m.
1090893	Persicaria subsessilis	bristly waterpepper	e		Richard Schahinger (2944)	19-Mar-2010	sight	Point (509906,5411621) +/- 5m.
1090895	Persicaria subsessilis	bristly waterpepper	e		Richard Schahinger (2944)	19-Mar-2010	sight	Point (509937,5411631) +/- 5m.
1090900	Persicaria subsessilis	bristly waterpepper	e		Richard Schahinger (2944)	19-Mar-2010	sight	Point (509960,5411622) +/- 5m.
1090881	Persicaria subsessilis	bristly waterpepper	e		Richard Schahinger (2944)	19-Mar-2010	sight	Point (509748,5411457) +/- 14m.
1090883	Persicaria subsessilis	bristly waterpepper	e		Richard Schahinger (2944)	19-Mar-2010	sight	Point (509778,5411468) +/- 14m.
1090884	Persicaria subsessilis	bristly waterpepper	e		Richard Schahinger (2944)	19-Mar-2010	sight	Point (509788,5411487) +/- 15m.
1090888	Persicaria subsessilis	bristly waterpepper	e		Richard Schahinger (2944)	19-Mar-2010	sight	Point (509857,5411574) +/- 5m.
227421	Persicaria subsessilis	bristly waterpepper	e		A.V. Ratkowsky (3779)	02-Feb-1993	sight	Point (509512,5411383) +/- 2000m.
1090547	Persicaria subsessilis	bristly waterpepper	e		Micah Visoiu (5870), R B Schahinger (19349)	11-Mar-2010	sight	Point (509649,5410510) +/- 5m.
1090551	Persicaria subsessilis	bristly waterpepper	e		Micah Visoiu (5870), R B Schahinger (19349)	11-Mar-2010	sight	Point (509651,5410570) +/- 5m.
1090554	Persicaria subsessilis	bristly waterpepper	e		Micah Visoiu (5870), R B Schahinger (19349)	11-Mar-2010	sight	Point (509668,5410594) +/- 5m.
1101202	Persicaria subsessilis	bristly waterpepper	e		Micah Visoiu (5870)	10-Mar-2010	sight	Point (509643,5410594) +/- 100m.
1090556	Persicaria subsessilis	bristly waterpepper	e		Micah Visoiu (5870), R B Schahinger (19349)	11-Mar-2010	sight	Point (509665,5410629) +/- 5m.
1090559	Persicaria subsessilis	bristly waterpepper	e		Micah Visoiu (5870), R B Schahinger (19349)	11-Mar-2010	sight	Point (509652,5410694) +/- 5m.
1090561	Persicaria subsessilis	bristly waterpepper	e		Micah Visoiu (5870), R B Schahinger (19349)	11-Mar-2010	sight	Point (509634,5410740) +/- 5m.
1090563	Persicaria subsessilis	bristly waterpepper	e		Micah Visoiu (5870), R B Schahinger (19349)	11-Mar-2010	sight	Point (509623,5410759) +/- 5m.
1090849	Persicaria subsessilis	bristly waterpepper	e		Richard Schahinger (2944)	19-Mar-2010	sight	Point (509530,5410984) +/- 10m.
1090847	Persicaria subsessilis	bristly waterpepper	e		Richard Schahinger (2944)	19-Mar-2010	sight	Point (509532,5410987) +/- 10m.
1090850	Persicaria subsessilis	bristly waterpepper	e		Richard Schahinger (2944)	19-Mar-2010	sight	Point (509533,5410992) +/- 10m.
1090852	Persicaria subsessilis	bristly waterpepper	e		Richard Schahinger (2944)	19-Mar-2010	sight	Point (509537,5411007) +/- 10m.
930617	Persicaria subsessilis	bristly waterpepper	e		A North (2500)	26-Jul-2001	sight	Point (509512,5411033) +/- 50m.
1090857	Persicaria subsessilis	bristly waterpepper	e		Richard Schahinger (2944)	19-Mar-2010	sight	Point (509534,5411054) +/- 10m.
1090859	Persicaria subsessilis	bristly waterpepper	e		Richard Schahinger (2944)	19-Mar-2010	sight	Point (509536,5411067) +/- 10m.

Threatened flora within 5000 metres



Id	Species	Common name	Ss	Ns	Observers	Date	Obs type	Position (gda94)
1090527	Persicaria subsevilis	bristly waterpepper	e		Micah Visoiu (5870), R B Schahinger (19349)	11-Mar-2010	sight	Point (509487,5410343) +/- 5m.
1090529	Persicaria subsevilis	bristly waterpepper	e		Micah Visoiu (5870), R B Schahinger (19349)	11-Mar-2010	sight	Point (509519,5410358) +/- 5m.
1090533	Persicaria subsevilis	bristly waterpepper	e		Micah Visoiu (5870), R B Schahinger (19349)	11-Mar-2010	sight	Point (509564,5410395) +/- 5m.
1090535	Persicaria subsevilis	bristly waterpepper	e		Micah Visoiu (5870), R B Schahinger (19349)	11-Mar-2010	sight	Point (509588,5410406) +/- 5m.
1090449	Persicaria subsevilis	bristly waterpepper	e		Micah Visoiu (5870), R B Schahinger (19349)	10-Mar-2010	sight	Point (509229,5410056) +/- 5m.
1090522	Persicaria subsevilis	bristly waterpepper	e		Micah Visoiu (5870), R B Schahinger (19349)	11-Mar-2010	sight	Point (509377,5410274) +/- 5m.
342534	Persicaria subsevilis	bristly waterpepper	e		A North (2500)	30-Aug-2001	sight	Point (509412,5410333) +/- 100m.
1090524	Persicaria subsevilis	bristly waterpepper	e		Micah Visoiu (5870), R B Schahinger (19349)	11-Mar-2010	sight	Point (509417,5410302) +/- 5m.
1090525	Persicaria subsevilis	bristly waterpepper	e		Micah Visoiu (5870), R B Schahinger (19349)	11-Mar-2010	sight	Point (509474,5410321) +/- 5m.
342350	Persicaria subsevilis	bristly waterpepper	e		A North (2500)	30-Aug-2001	sight	Point (509512,5410323) +/- 100m.
227420	Persicaria subsevilis	bristly waterpepper	e		S.G. Hannaford (5570)	01-Jan-1600?	sight	Point (509512,5411383) +/- 2000m.
1090865	Persicaria subsevilis	bristly waterpepper	e		Richard Schahinger (2944)	19-Mar-2010	sight	Point (509532,5411154) +/- 10m.
1090862	Persicaria subsevilis	bristly waterpepper	e		Richard Schahinger (2944)	19-Mar-2010	sight	Point (509538,5411156) +/- 10m.
1090867	Persicaria subsevilis	bristly waterpepper	e		Richard Schahinger (2944)	19-Mar-2010	sight	Point (509553,5411210) +/- 10m.
1090870	Persicaria subsevilis	bristly waterpepper	e		Richard Schahinger (2944)	19-Mar-2010	sight	Point (509560,5411217) +/- 10m.
288689	Persicaria subsevilis	bristly waterpepper	e		A.V. Ratkowsky (3779)	18-Jan-1993	sight	Point (509212,5411383) +/- 100m.
1090539	Persicaria subsevilis	bristly waterpepper	e		Micah Visoiu (5870), R B Schahinger (19349)	11-Mar-2010	sight	Point (509608,5410439) +/- 5m.
1090565	Persicaria subsevilis	bristly waterpepper	e		Micah Visoiu (5870), R B Schahinger (19349)	11-Mar-2010	sight	Point (509550,5410796) +/- 5m.
289093	Poa mollis	soft tussockgrass	r		F.E. Burbury (4270)	1911	sight	Point (510912,5410283) +/- 2000m.
1087478	Poa mollis	soft tussockgrass	r		Anna Povey (3310)	18-Jun-2009	sight	Point (509877,5410732) +/- 10m.
953003	Poa mollis	soft tussockgrass	r		Anna Povey (3310)	13-Nov-2006	sight	Point (510067,5410489) +/- 10m.
153242	Poa mollis	soft tussockgrass	r		Fred Duncan (7477)	04-Sep-1995?	sight	Point (509712,5410383) +/- 100m.
1044491	Poa mollis	soft tussockgrass	r		Anna Povey (3310)	24-Nov-2008	sight	Point (509431,5410137) +/- 10m.
1087476	Poa mollis	soft tussockgrass	r		Anna Povey (3310)	17-Mar-2009	sight	Point (510259,5411929) +/- 10m.
929604	Poa mollis	soft tussockgrass	r		Anna Povey (3310)	19-Nov-2004	sight	Point (510312,5411483) +/- 100m.

Threatened flora within 5000 metres



Id	Species	Common name	Ss	Ns	Observers	Date	Obs type	Position (gda94)
948152	<i>Poa mollis</i>	soft tussockgrass	r		Anna Povey (3310)	05-Jul-2005	sight	Point (510314,5411852) +/- 10m.
951459	<i>Poa mollis</i>	soft tussockgrass	r		M Wapstra (1613)	16-Feb-2005	sight	Point (509792,5411623) +/- 25m.
153532	<i>Poa mollis</i>	soft tussockgrass	r		Fred Duncan (7477)	04-Sep-1995?	sight	Point (509612,5410283) +/- 100m.
228039	<i>Poa mollis</i>	soft tussockgrass	r		W.M. Curtis (5737)	27-Oct-1943	sight	Point (509512,5411383) +/- 2000m.
228143	<i>Prostanthera cuneata</i>	alpine mintbush	x		R.C. Gunn (5474)	03-Feb-1840	sight	Point (511612,5412683) +/- 7000m.
1087389	<i>Prostanthera rotundifolia</i>	roundleaf mintbush	v		Katriona Lee Hopkins (2888)	08-Oct-2009	sight	Point (509600,5411400) +/- 10m.
933272	<i>Prostanthera rotundifolia</i>	roundleaf mintbush	v		A.M. Olsen (3763)	21-Aug-1938	sight	Point (512641,5411443) +/- 3000m.
228041	<i>Prostanthera rotundifolia</i>	roundleaf mintbush	v		A.V. Ratkowsky (3779)	20-Oct-1991	sight	Point (509512,5411383) +/- 2000m.
228040	<i>Prostanthera rotundifolia</i>	roundleaf mintbush	v		- Unknown (21598)	19-Sep-1839	sight	Point (509512,5411383) +/- 2000m.
1087388	<i>Prostanthera rotundifolia</i>	roundleaf mintbush	v		Katriona Lee Hopkins (2888)	08-Oct-2009	sight	Point (509680,5411443) +/- 10m.
1087375	<i>Prostanthera rotundifolia</i>	roundleaf mintbush	v		Philip Barker (1911)	07-Oct-2009	sight	Point (509723,5411418) +/- 10m.
1087386	<i>Prostanthera rotundifolia</i>	roundleaf mintbush	v		Katriona Lee Hopkins (2888)	08-Oct-2009	sight	Point (509830,5411708) +/- 10m.
354652	<i>Prostanthera rotundifolia</i>	roundleaf mintbush	v		Philip Barker (1911)	03-Sep-1996	sight	Point (509912,5411783) +/- 100m.
1087475	<i>Prostanthera rotundifolia</i>	roundleaf mintbush	v		Anna Povey (3310)	17-Mar-2009	sight	Point (510033,5411806) +/- 10m.
1087384	<i>Prostanthera rotundifolia</i>	roundleaf mintbush	v		Katriona Lee Hopkins (2888)	07-Oct-2009	sight	Point (508360,5410546) +/- 10m.
343445	<i>Prostanthera rotundifolia</i>	roundleaf mintbush	v		A North (2500)	30-Aug-2001	sight	Point (508262,5410683) +/- 100m.
227394	<i>Prostanthera rotundifolia</i>	roundleaf mintbush	v		A North (2500)	1980	sight	Point (509112,5409883) +/- 3000m.
1087378	<i>Prostanthera rotundifolia</i>	roundleaf mintbush	v		Philip Barker (1911)	07-Oct-2009	sight	Point (509537,5410804) +/- 10m.
342353	<i>Prostanthera rotundifolia</i>	roundleaf mintbush	v		A North (2500)	30-Aug-2001	sight	Point (507912,5410883) +/- 100m.
1087392	<i>Prostanthera rotundifolia</i>	roundleaf mintbush	v		Katriona Lee Hopkins (2888)	08-Oct-2009	sight	Point (509541,5411130) +/- 10m.
1087376	<i>Prostanthera rotundifolia</i>	roundleaf mintbush	v		Philip Barker (1911)	07-Oct-2009	sight	Point (509600,5411330) +/- 10m.
1087390	<i>Prostanthera rotundifolia</i>	roundleaf mintbush	v		Katriona Lee Hopkins (2888)	08-Oct-2009	sight	Point (509540,5411341) +/- 10m.
1087391	<i>Prostanthera rotundifolia</i>	roundleaf mintbush	v		Katriona Lee Hopkins (2888)	08-Oct-2009	sight	Point (509500,5411276) +/- 10m.
342354	<i>Prostanthera rotundifolia</i>	roundleaf mintbush	v		A North (2500)	30-Aug-2001	sight	Point (509512,5410323) +/- 100m.
153587	<i>Prostanthera rotundifolia</i>	roundleaf mintbush	v		Fred Duncan (7477)	04-Sep-1995?	sight	Point (509712,5410483) +/- 100m.
1087394	<i>Prostanthera rotundifolia</i>	roundleaf mintbush	v		Katriona Lee Hopkins (2888)	08-Oct-2009	sight	Point (509690,5410458) +/- 10m.
1087393	<i>Prostanthera rotundifolia</i>	roundleaf mintbush	v		Katriona Lee Hopkins (2888)	08-Oct-2009	sight	Point (509543,5411069) +/- 10m.
1087377	<i>Prostanthera rotundifolia</i>	roundleaf mintbush	v		Philip Barker (1911)	07-Oct-2009	sight	Point (509519,5411101) +/- 10m.
928644	<i>Prostanthera rotundifolia</i>	roundleaf mintbush	v		L Rodway (1521)	01-Oct-1911	sight	Point (509302,5410278) +/- 500m.
552865	<i>Pterostylis grandiflora</i>	superb greenhood	r		- Unknown (21598)	01-May-1938?	sight	Point (510312,5408583) +/- 100m.
940970	<i>Pterostylis grandiflora</i>	superb greenhood	r		T.E. Burns (5652)	01-Jun-1951	sight	Point (512641,5411443) +/- 3000m.
942695	<i>Pterostylis ziegelerei</i>	grassland greenhood	v	VU	L Rodway (1521)	01-Jan-1889	sight	Point (512641,5411443) +/- 3000m.
566854	<i>Pterostylis ziegelerei</i>	grassland greenhood	v	VU	R Gunn (2130)	20-Oct-1841?	sight	Point (515112,5411183) +/- 5000m.
955400	<i>Pultenaea prostrata</i>	silky bushpea	v		- Unknown (21598)	01-Jan-1800?	sight	Point (512638,5409593) +/- 1000m.
1087396	<i>Ranunculus sessiliflorus</i> var. <i>sessiliflorus</i>	rockplate buttercup	r		Philip Barker (1911)	08-Oct-2009	sight	Point (508425,5409680) +/- 10m.

Threatened flora within 5000 metres



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153266	Ranunculus sessiliflorus var. sessiliflorus	rockplate buttercup	r		Fred Duncan (7477)	16-Aug-1995?	sight	Point (509512,5411883) +/- 100m.
343449	Ranunculus sessiliflorus var. sessiliflorus	rockplate buttercup	r		A North (2500)	30-Aug-2001	sight	Point (508012,5410883) +/- 100m.
153115	Ranunculus sessiliflorus var. sessiliflorus	rockplate buttercup	r		Fred Duncan (7477)	16-Aug-1995?	sight	Point (509712,5411483) +/- 100m.
598616	Ranunculus sessiliflorus var. sessiliflorus	rockplate buttercup	r		A North (2500)	01-Aug-2001	sight	Point (508412,5405283) +/- 300m.
153465	Ranunculus sessiliflorus var. sessiliflorus	rockplate buttercup	r		Fred Duncan (7477)	16-Aug-1995?	sight	Point (509712,5411583) +/- 100m.
227499	Schenkia australis	spike centaury	r		W.M. Curtis (5737)	Nov-1943	sight	Point (511612,5412683) +/- 7000m.
955284	Schoenoplectus tabernaemontani	river clubsedge	r		A North (2500)	30-Mar-2000	sight	Point (511412,5413383) +/- 100m.
228097	Schoenoplectus tabernaemontani	river clubsedge	r		W.V. Fitzgerald (5752)	Jan-1894	sight	Point (510812,5413183) +/- 200m.
1090517	Scutellaria humilis	dwarf skullcap	r		Micah Visoiu (5870), R B Schahinger (19349)	10-Mar-2010	sight	Point (508877,5409920) +/- 5m.
228042	Scutellaria humilis	dwarf skullcap	r		M. Hart (5028)	Jan-1948	sight	Point (509512,5411383) +/- 2000m.
1101193	Scutellaria humilis	dwarf skullcap	r		Micah Visoiu (5870)	10-Mar-2010	sight	Point (508745,5409796) +/- 100m.
1082918	Scutellaria humilis	dwarf skullcap	r		Roy Skabo (6388)	13-Dec-2009	sight	Point (508735,5409804) +/- 7m.
1201703	Scutellaria humilis	dwarf skullcap	r		Roy Skabo (6388)	05-Dec-2010	sight	Point (508280,5410768) +/- 7m.
227517	Scutellaria humilis	dwarf skullcap	r		A.M. Olsen (3763)	28-Dec-1937	sight	Point (511612,5412683) +/- 7000m.
1091188	Senecio macrocarpus	largefruit fireweed	x	VU	C Stuart (2799)	01-Jan-1800?	sight	Point (513910,5405722) +/- 5000m.
953005	Senecio squarrosus	leafy fireweed	r		Anna Povey (3310)	13-Nov-2006	sight	Point (509936,5410664) +/- 10m.
880085	Senecio squarrosus	leafy fireweed	r		A.V. Ratkowsky (3779)	01-Sep-1992?	sight	Point (511137,5409333) +/- 50m.
228262	Senecio squarrosus	leafy fireweed	r		S.G. Hannaford (5570)	Nov-1865	sight	Point (514012,5410083) +/- 1000m.
1204557	Senecio squarrosus	leafy fireweed	r		Helen Morgan (3225)	30-Oct-2009	sight	Point (510281,5408713) +/- 6m.
1204558	Senecio squarrosus	leafy fireweed	r		Helen Morgan (3225)	30-Oct-2009	sight	Point (510249,5408762) +/- 6m.
1204560	Senecio squarrosus	leafy fireweed	r		Helen Morgan (3225)	30-Oct-2009	sight	Point (510258,5408698) +/- 6m.
1087508	Senecio squarrosus	leafy fireweed	r		Anna Povey (3310)	30-Oct-2009	sight	Point (510152,5408907) +/- 10m.
1087511	Senecio squarrosus	leafy fireweed	r		Anna Povey (3310)	30-Oct-2009	sight	Point (510290,5408720) +/- 10m.
1087507	Senecio squarrosus	leafy fireweed	r		Anna Povey (3310)	30-Oct-2009	sight	Point (510288,5408697) +/- 10m.
1087510	Senecio squarrosus	leafy fireweed	r		Anna Povey (3310)	30-Oct-2009	sight	Point (510274,5408697) +/- 10m.
1087509	Senecio squarrosus	leafy fireweed	r		Anna Povey (3310)	30-Oct-2009	sight	Point (510248,5408759) +/- 10m.
228261	Senecio squarrosus	leafy fireweed	r		W.M. Curtis (5737)	Oct-1943	sight	Point (514012,5409083) +/- 400m.
227518	Senecio squarrosus	leafy fireweed	r		L. Rodway (4869)	Nov-1892	sight	Point (511612,5412683) +/- 12000m.
1163510	Siloxerus multiflorus	small wrinklewort	r		Anna Povey (3310)	04-Nov-2010	sight	Point (509433,5412220) +/- 20m.
971960	Siloxerus multiflorus	small wrinklewort	r		Roy Skabo (6388)	15-Oct-2007	sight	Point (509338,5412072) +/- 10m.
1077547	Siloxerus multiflorus	small wrinklewort	r		Roy Skabo (6388)	01-Nov-2009	sight	Point (508906,5410060) +/- 7m.
1077548	Siloxerus multiflorus	small wrinklewort	r		Roy Skabo (6388)	01-Nov-2009	sight	Point (508919,5410470) +/- 7m.
971964	Siloxerus multiflorus	small wrinklewort	r		Roy Skabo (6388)	15-Oct-2007	sight	Point (509586,5410025) +/- 10m.
929297	Spyridium eriocephalum var. eriocephalum	heath dustymiller	e		A Simson (2776)	01-Jan-1880	sight	Point (510302,5412043) +/- 500m.

Threatened flora within 5000 metres



Id	Species	Common name	Ss	Ns	Observers	Date	Obs type	Position (gda94)
928899	Spyridium eriocephalum var. eriocephalum	heath dustymiller	e		A Simson (2776)	20-Oct-1880	sight	Point (510302,5412043) +/- 500m.
940159	Spyridium eriocephalum var. eriocephalum	heath dustymiller	e		R.M. Johnson (6405)	22-Sep-1878	sight	Point (509857,5411447) +/- 1000m.
929298	Spyridium eriocephalum var. eriocephalum	heath dustymiller	e		A Simson (2776)	01-Jan-1880	sight	Point (510302,5412043) +/- 500m.
355044	Spyridium vexilliferum var. vexilliferum	helicopter bush	r		P Barker (6881)	03-Sep-1996?	sight	Point (509912,5411783) +/- 100m.
1087374	Spyridium vexilliferum var. vexilliferum	helicopter bush	r		Philip Barker (1911)	07-Oct-2009	sight	Point (509917,5411623) +/- 10m.
1087373	Spyridium vexilliferum var. vexilliferum	helicopter bush	r		Philip Barker (1911)	07-Oct-2009	sight	Point (509979,5411658) +/- 10m.
228144	Spyridium vexilliferum var. vexilliferum	helicopter bush	r		A.M. Olsen (3763)	Jan-1928	sight	Point (511612,5412683) +/- 7000m.
228043	Spyridium vexilliferum var. vexilliferum	helicopter bush	r		- Unknown (21598)	31-Aug-1959	sight	Point (509512,5411383) +/- 2000m.
228145	Spyridium vexilliferum var. vexilliferum	helicopter bush	r		W.M. Curtis (5737)	27-Nov-1938	sight	Point (511612,5412683) +/- 7000m.
228146	Tetradlea ciliata	northern pinkbells	r		L. Rodway (4869)	01-Jan-1600?	sight	Point (511612,5412683) +/- 12000m.
928593	Teucrium corymbosum	forest germander	r		F.E. Burbury (4270)	01-Jan-1911	sight	Point (509859,5413297) +/- 2000m.
971961	Triptilodiscus pygmaeus	dwarf sunray	v		Roy Skabo (6388)	17-Nov-2007	sight	Point (509586,5410025) +/- 10m.
939329	Utricularia australis	yellow bladderwort	r		R.C. Gunn (5474)	26-Mar-1842	sight	Point (510302,5412043) +/- 500m.
955424	Utricularia australis	yellow bladderwort	r		W Curtis (2504)	01-Jan-1800?	sight	Point (510302,5412043) +/- 500m.
929071	Velleia paradoxa	spur velleia	v		A Simson (2776)	04-Dec-1880	sight	Point (516813,5409584) +/- 2500m.
227422	Velleia paradoxa	spur velleia	v		A.V. Ratkowsky (3779)	04-Jan-1992	sight	Point (509512,5411383) +/- 2000m.
227997	Velleia paradoxa	spur velleia	v		A.M. Olsen (3763)	24-Dec-1938	sight	Point (509012,5409883) +/- 500m.
881720	Velleia paradoxa	spur velleia	v		A.V. Ratkowsky (3779)	01-Sep-1992?	sight	Point (511137,5409333) +/- 50m.
1234897	Veronica plebeia	trailing speedwell	r		Anna Povey (3310)	24-Feb-2011	sight	Point (508096,5411831) +/- 10m.
1234899	Veronica plebeia	trailing speedwell	r		Anna Povey (3310)	17-May-2011	sight	Point (511534,5408372) +/- 10m.
1087463	Veronica plebeia	trailing speedwell	r		Anna Povey (3310)	14-Nov-2009	sight	Point (509492,5411601) +/- 10m.
1087462	Veronica plebeia	trailing speedwell	r		Anna Povey (3310)	14-Nov-2009	sight	Point (509478,5411624) +/- 10m.
1087368	Veronica plebeia	trailing speedwell	r		Philip Barker (1911)	07-Oct-2009	sight	Point (508400,5410401) +/- 10m.
227423	Viola caleyana	swamp violet	r		A.V. Ratkowsky (3779)	18-Jan-1993	sight	Point (509512,5411383) +/- 2000m.
402639	Viola cunninghamii	alpine violet	r		Jamie Kirkpatrick (1315)	1984	sight	Point (508712,5406783) +/- 100m.
403405	Viola cunninghamii	alpine violet	r		Jamie Kirkpatrick (1315)	1984	sight	Point (508712,5406283) +/- 100m.
403301	Viola cunninghamii	alpine violet	r		Jamie Kirkpatrick (1315)	1984	sight	Point (508612,5406883) +/- 100m.
401766	Viola cunninghamii	alpine violet	r		Jamie Kirkpatrick (1315)	1984	sight	Point (514212,5409483) +/- 100m.
401821	Viola cunninghamii	alpine violet	r		Jamie Kirkpatrick (1315)	1984	sight	Point (514112,5410383) +/- 100m.
227519	Vittadinia gracilis	woolly new-holland-daisy	r		S.G. Hannaford (5570)	01-Jan-1600?	sight	Point (511612,5412683) +/- 7000m.
227645	Vittadinia gracilis	woolly new-holland-daisy	r		R.C. Gunn (5474)	24-Dec-1842	sight	Point (514612,5410183) +/- 2000m.
596956	Westringia angustifolia	narrowleaf westringia	r		A North (2500)	20-Nov-2003	sight	Point (510991,5408850) +/- 10m.
227494	Xerochrysum bicolor	eastcoast everlasting	r		S.G. Hannaford (5570)	Nov-1863	sight	Point (511612,5412683) +/- 7000m.
228066	Xerochrysum bicolor	eastcoast everlasting	r		A.M. Olsen (3763)	14-Jan-1937	sight	Point (509912,5411683) +/- 200m.

Threatened flora within 5000 metres



Unverified Records

For more information about threatened species, please contact the Manager, Threatened Species Section.

Telephone: (03) 6233 8759

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

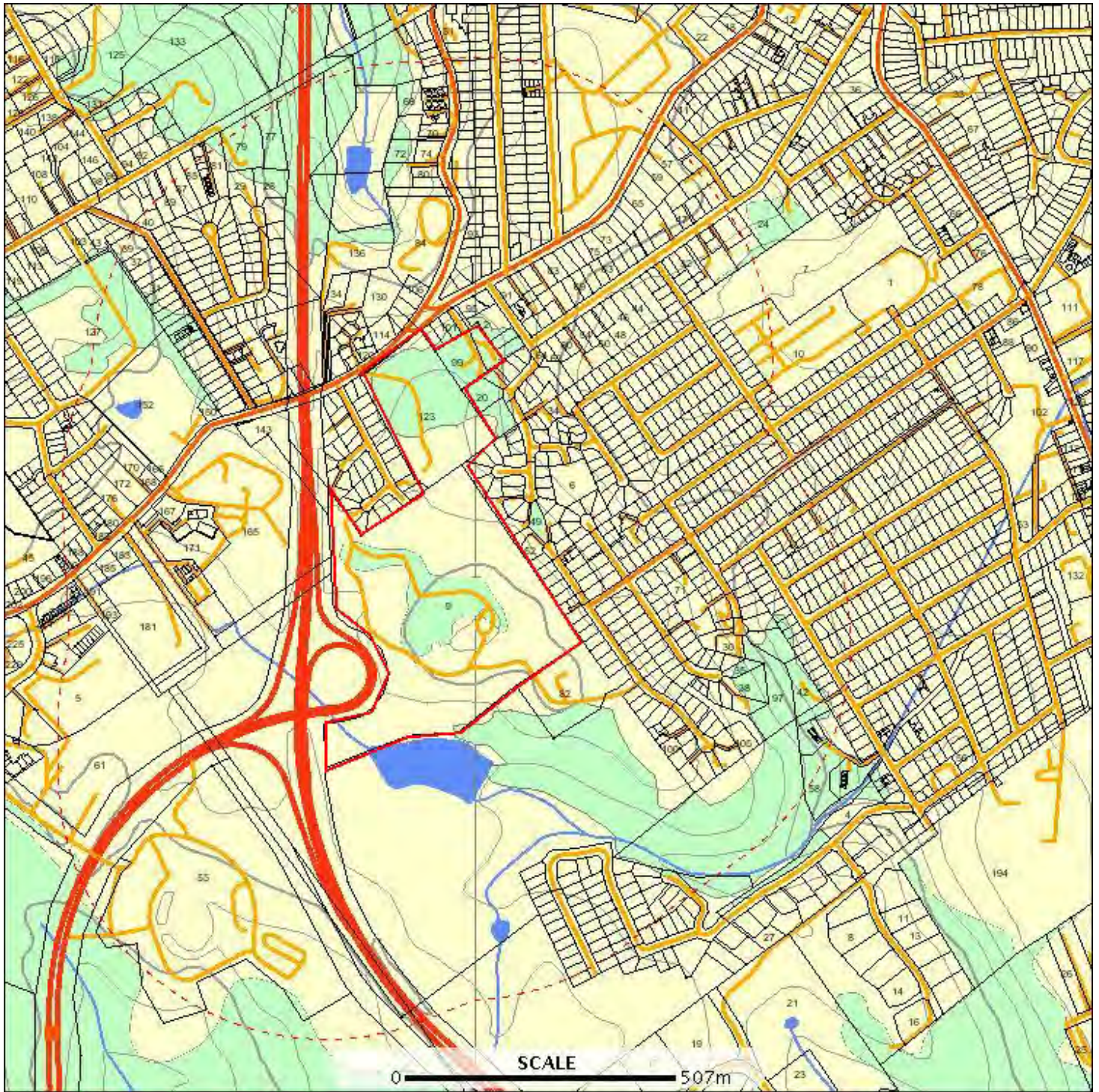
Address: GPO Box 44, Hobart, Tasmania, Australia, 7000

Threatened fauna within 500 metres



E: 511363
N: 5410168

E: 513038
N: 5410168



E: 511363
N: 5408139

E: 513038
N: 5408139

Threatened fauna within 500 metres



-  Threatened Fauna Point
-  Major Rivers
-  Other Rivers
-  Water Body
-  Estuaries
-  Sea
- Contours**
-  Index
-  Intermediate
-  Depression Index
-  Depression Intermediate
-  Land
-  Road Centreline Names
- Road Centrelines**
-  National/State Highway
-  Major Arterial Road
-  Arterial Road
-  Feeder
-  Access Road
-  Forestry
-  Vehicular Track
- Forest Groups**
-  Rainforest
-  Hardwood Plantation
-  Softwood Plantation
-  Other Native Forest
-  Tall Native Eucalypt Forest
- (cont)**
-  Low Native Eucalypt Forest
-  Non-Forest
-  No Data
-  Sea
-  Cadastral Parcels

Threatened fauna within 500 metres



Threatened fauna within 500 metres (based on Habitat Mapping)

Species	Common name	Ss	Ns	Potential	Known	Core
<i>Aquila audax</i>	wedge-tailed eagle	pe	PEN	2	0	0
<i>Perameles gunnii</i>	eastern barred bandicoot		VU	2	0	0
<i>Pasmaditta jungermanniae</i>	snail (cataract gorge)	v		1	0	0
<i>Tyto novaehollandiae</i>	masked owl	pe	PVU	2	0	2
<i>Litoria raniformis</i>	green and golden frog	v	VU	2	0	0
<i>Prototroctes maraena</i>	australian grayling	v	VU	2	0	0
<i>Accipiter novaehollandiae</i>	grey goshawk	e		2	0	0

For more information about threatened species, please contact the Manager, Threatened Species Section.

Telephone: (03) 6233 8759

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

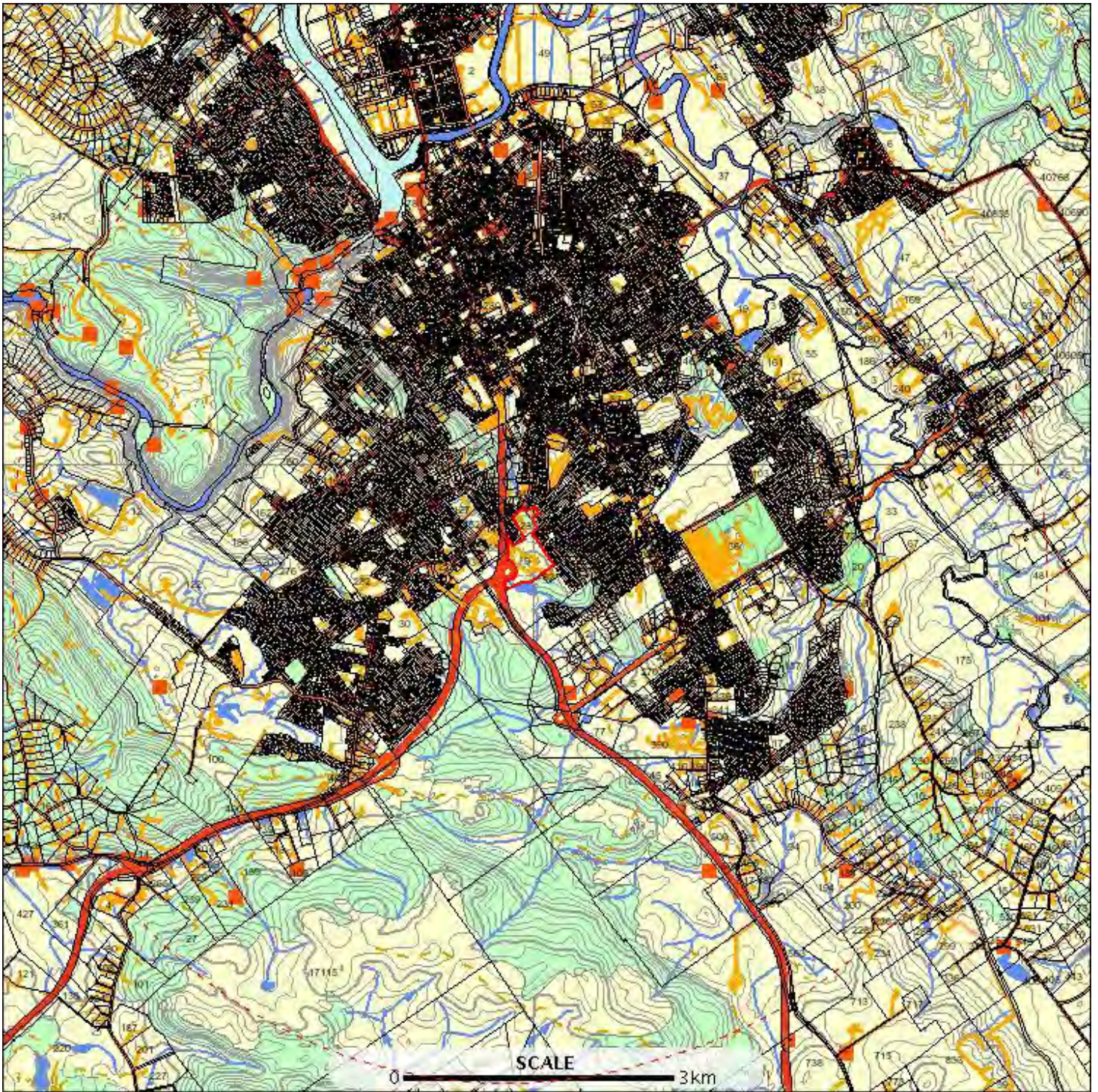
Address: GPO Box 44, Hobart, Tasmania, Australia, 7000

Threatened fauna within 5000 metres



E: 506863
N: 5414669

E: 517538
N: 5414669



E: 506863
N: 5403639

E: 517538
N: 5403639

Threatened fauna within 5000 metres



- | | | |
|-------------------------|----------------------------|-----------------------------|
| Threatened Fauna Point | Land | Other Native Forest |
| Place Names | Road Centrelines | Tall Native Eucalypt Forest |
| Relief Names | National/State Highway | Low Native Eucalypt Forest |
| Major Rivers | Major Arterial Road | Non-Forest |
| Other Rivers | Arterial Road | No Data |
| Water Body | Feeder | Sea |
| Estuaries | Access Road | Cadastral Parcels |
| Sea | Forestry | |
| Contours | Vehicular Track | |
| Index | Forest Groups | |
| Intermediate | Rainforest | |
| Depression Index | Hardwood Plantation | |
| Depression Intermediate | Softwood Plantation (cont) | |

Threatened fauna within 5000 metres



Verified Records

Id	Species	Common name	Ss	Ns	Observers	Date	Obs type	Position (gda94)
1200871	Accipiter novaehollandiae	grey goshawk	e		Anna Povey (3310)	17-Nov-2003	sight	Point (509412,5411883) +/- 100m.
953011	Accipiter novaehollandiae	grey goshawk	e		Anna Povey (3310)	30-Jul-2007	sight	Point (510011,5412924) +/- 50m.
878126	Accipiter novaehollandiae	grey goshawk	e		A.V. Ratkowsky (3779)	01-Sep-1991?	sight	Point (508112,5411183) +/- 100m.
1229580	Alcedo azurea subsp. diemenensis	azure kingfisher or azure kingfisher (tasmanian)	e	EN	- Unknown (21598)	1910s	sight	Point (516768,5410331) +/- 5000m.
607514	Aquila audax	wedge-tailed eagle	pe	PEN	Peter Duckworth (1926)	11-Sep-1982	sight	Point (508112,5411183) +/- 1000m.
532609	Beddomeia launcestonensis	hydrobiid snail (cataract gorge)	e		Ronald Calder Kershaw (2139)	19-Jan-1988	sight	Point (509812,5411583) +/- 1000m.
352579	Beddomeia launcestonensis	hydrobiid snail (cataract gorge)	e		- Unknown (21598)	01-Dec-1996??	sight	Point (509850,5411707) +/- 2000m.
533170	Beddomeia launcestonensis	hydrobiid snail (cataract gorge)	e		Janet H. Waterhouse (1375), Winston F. Ponder (2524), Frank E. Hermans (22887)	21-Feb-1989	sight	Point (507969,5410764) +/- 500m.
352604	Beddomeia launcestonensis	hydrobiid snail (cataract gorge)	e		- Unknown (21598)	01-Dec-1996??	sight	Point (509812,5411583) +/- 2000m.
1241134	Botaurus poiciloptilus	australasian bittern		EN	Eric John Woehler (8281)	30-Apr-1999	sight	Point (512207,5413713) +/- 200m.
1241131	Botaurus poiciloptilus	australasian bittern		EN	Eric John Woehler (8281)	07-Apr-2000	sight	Point (514249,5410995) +/- 200m.
1241132	Botaurus poiciloptilus	australasian bittern		EN	Eric John Woehler (8281)	30-Apr-2010	sight	Point (514249,5410995) +/- 200m.
1201868	Dasyurus maculatus	spotted-tailed quoll	r	VU	Michael J. Fox (22013)	11-Nov-2010	sight	Point (510109,5411666) +/- 10m.
1210007	Dasyurus maculatus	spotted-tailed quoll	r	VU	M Fox (1662)	02-Jan-2011	sight	Point (508397,5410192) +/- 100m.
357617	Dasyurus maculatus subsp. maculatus	spotted-tailed quoll	r	VU	Menna Jones (8901)	01-Jan-1994?	sight	Point (510312,5409783) +/- 25m.
358985	Dasyurus maculatus subsp. maculatus	spotted-tailed quoll	r	VU	Menna Jones (8901)	01-Jan-1992?	sight	Point (510612,5408183) +/- 1000m.
900783	Dasyurus maculatus subsp. maculatus	spotted-tailed quoll	r	VU	Greg Hocking (7572)	03-Mar-1992?	sight	Point (512612,5407683) +/- 10000m.
895665	Dasyurus maculatus subsp. maculatus	spotted-tailed quoll	r	VU	E Dgingto (7415)	26-Aug-1973?	sight	Point (514022,5405889) +/- 18500m.
358767	Dasyurus maculatus subsp. maculatus	spotted-tailed quoll	r	VU	Menna Jones (8901)	12-Jun-1996?	sight	Point (513712,5406483) +/- 100m.
877434	Lathamus discolor	swift parrot	e	EN	R Green (2126)	03-Oct-1987?	sight	Point (512312,5412683) +/- 100m.
877432	Lathamus discolor	swift parrot	e	EN	R Green (2126)	10-Dec-1987?	sight	Point (512112,5412883) +/- 100m.
321825	Lathamus discolor	swift parrot	e	EN	Peter Duckworth (1926)	02-Oct-1990	sight	Point (511912,5412383) +/- 100m.
877922	Lathamus discolor	swift parrot	e	EN	Ralph Cooper (2107)	06-Dec-1994?	sight	Point (512612,5412683) +/- 50m.
872637	Lathamus discolor	swift parrot	e	EN	C Plowman (5549)	14-Dec-1995?	sight	Point (512312,5412983) +/- 50m.
873170	Lathamus discolor	swift parrot	e	EN	R Green (2126)	03-Dec-1987?	sight	Point (512112,5412883) +/- 100m.
872662	Lathamus discolor	swift parrot	e	EN	C Plowman (5549)	14-Dec-1995?	sight	Point (512312,5411583) +/- 25m.
872643	Lathamus discolor	swift parrot	e	EN	J Nermet (1345)	19-Nov-1995?	sight	Point (511612,5412183) +/- 25m.
877102	Lathamus discolor	swift parrot	e	EN	Ralph Cooper (2107)	14-Dec-1995?	sight	Point (511612,5412183) +/- 25m.
1250170	Lathamus discolor	swift parrot	e	EN	Catherine Pearce (23265)	10-Sep-2011	car	Point (512000,5412000) +/- 5000m.
877424	Lathamus discolor	swift parrot	e	EN	P Marmion (1959)	05-Oct-1988?	sight	Point (513812,5412383) +/- 100m.
877095	Lathamus discolor	swift parrot	e	EN	C Plowman (5549)	14-Dec-1995?	sight	Point (513212,5413083) +/- 25m.

Threatened fauna within 5000 metres



Id	Species	Common name	Ss	Ns	Observers	Date	Obs type	Position (gda94)
1097493	Lathamus discolor	swift parrot	e	EN	Ralph Cooper (2107)	24-Oct-2009	sight	Point (511559,5414238) +/- 200m.
877433	Lathamus discolor	swift parrot	e	EN	R Green (2126)	02-Oct-1987?	sight	Point (511012,5412783) +/- 100m.
877655	Lathamus discolor	swift parrot	e	EN	C Plowman (5549)	23-Oct-1994?	sight	Point (511912,5413183) +/- 50m.
1097460	Lathamus discolor	swift parrot	e	EN	Ralph Cooper (2107)	24-Oct-2009	sight	Point (511788,5412387) +/- 200m.
953914	Litoria raniformis	green and golden frog	v	VU	Wendy Daalder (11822)	Feb-2004	sight	Point (513680,5407660) +/- 100m.
1159914	Litoria raniformis	green and golden frog	v	VU	Kathryn Curtis (21677)	Apr-2010	sight	Point (514044,5407413) +/- 100m.
1091127	Litoria raniformis	green and golden frog	v	VU	Lisa Clarkson (11442)	20-Oct-2009	sight	Point (513812,5407383) +/- 100m.
303577	Litoria raniformis	green and golden frog	v	VU	P Swatowski (1883)	01-Jan-1600?	sight	Point (510112,5412383) +/- 1000m.
303581	Litoria raniformis	green and golden frog	v	VU	P Swatowski (1883)	01-Jan-1600?	sight	Point (513412,5411883) +/- 1000m.
303576	Litoria raniformis	green and golden frog	v	VU	P Swatowski (1883)	01-Jan-1600?	sight	Point (515512,5412783) +/- 1000m.
303271	Litoria raniformis	green and golden frog	v	VU	S Fearn (2234)	11-Dec-1990?	sight	Point (514112,5413783) +/- 1000m.
855424	Migas plumleyi	spider (cataract gorge)	r		R Raven (2170), T Churchill (2369)	05-May-1987	sight	Point (510312,5412183) +/- 1000m.
1234941	Migas plumleyi	spider (cataract gorge)	r		Sandy Leighton (7048)	27-Mar-2001	sight	Point (509873,5411928) +/- 10m.
1234381	Migas plumleyi	spider (cataract gorge)	r		J Gallon (22554)	07-Feb-1987	sight	Point (510310,5412180) +/- 1000m.
1234942	Migas plumleyi	spider (cataract gorge)	r		Sandy Leighton (7048)	08-May-2001	sight	Point (510152,5412034) +/- 10m.
1229884	Pasmaditta jungermanniae	snail (cataract gorge)	v		Abbey C. Throssell (18069), Kevin J. Bonham (18070)	25-Dec-2010	sight	Point (509978,5412008) +/- 50m.
532626	Pasmaditta jungermanniae	snail (cataract gorge)	v		- Unknown (21598)	01-Jan-1600?	sight	Point (509912,5411883) +/- 100m.
1229885	Pasmaditta jungermanniae	snail (cataract gorge)	v		Kevin J. Bonham (18070)	11-Mar-2011	sight	Point (510005,5411844) +/- 50m.
898058	Perameles gunnii	eastern barred bandicoot		VU	Nick Mooney (16443)	12-Jun-1979?	sight	Point (514022,5405889) +/- 18500m.
895452	Perameles gunnii	eastern barred bandicoot		VU	B Munday (3913)	08-May-1974?	sight	Point (514033,5411440) +/- 1850m.
740229	Perameles gunnii	eastern barred bandicoot		VU	Greg Hocking (7572)	25-Oct-1992	sight	Point (514335,5405684) +/- 1340m.
895522	Perameles gunnii	eastern barred bandicoot		VU	K Little (1403)	30-Oct-1978?	sight	Point (511246,5409594) +/- 1850m.
895390	Perameles gunnii	eastern barred bandicoot		VU	K Little (1403)	15-Oct-1977?	sight	Point (509849,5405896) +/- 1850m.
895391	Perameles gunnii	eastern barred bandicoot		VU	B Munday (3913)	25-Apr-1976?	sight	Point (508460,5407748) +/- 1850m.
748148	Perameles gunnii	eastern barred bandicoot		VU	Greg Hocking (7572)	14-Apr-1993	sight	Point (508138,5405999) +/- 100m.
895201	Perameles gunnii	eastern barred bandicoot		VU	K Little (1403)	03-Sep-1973?	sight	Point (515413,5405886) +/- 3000m.
1058189	Perameles gunnii	eastern barred bandicoot		VU	S Fearn (2234)	17-Dec-2007	sight	Point (507116,5410366) +/- 5m.
895598	Perameles gunnii	eastern barred bandicoot		VU	R Baxter (2006)	29-Aug-1978?	sight	Point (515417,5407736) +/- 1850m.
895451	Perameles gunnii	eastern barred bandicoot		VU	K Little (1403)	23-Nov-1977?	sight	Point (515413,5405886) +/- 1850m.
1238840	Perameles gunnii	eastern barred bandicoot		VU	Shannon Troy (12201)	12-Dec-2007	sight	Point (507268,5409675) +/- 10m.
1238841	Perameles gunnii	eastern barred bandicoot		VU	Shannon Troy (12201)	12-Dec-2007	sight	Point (510353,5409124) +/- 10m.
60771915	Prototroctes maraena	australian grayling	v	VU	Unknown Unknown (17361)	01-Jan-1976	sight	Point (510697,5412430) +/- 20m.
350569	Prototroctes maraena	australian grayling	v	VU	- Unknown (21598)	01-Jan-1986?	sight	Point (510812,5412483) +/- 100m.

Threatened fauna within 5000 metres



Id	Species	Common name	Ss	Ns	Observers	Date	Obs type	Position (gda94)
60771082	Prototroctes maraena	australian grayling	v	VU	Andrew Taylor (17286), J. Patil (1105238)	05-Dec-2001	sight	Point (513436,5413824) +/- 20m.
607939	Pseudemoia rawlinsoni	glossy grass skink	r		E Green QVM (7418)	19-Dec-1988?	sight	Point (514033,5411440) +/- 670m.
1075951	Sarcophilus harrisii	tasmanian devil	e	EN	Nick Mooney (16443)	10-Nov-2003	sight	Point (516661,5410632) +/- 1000m.
896521	Sarcophilus harrisii	tasmanian devil	e	EN	R Baxter (2006)	26-Aug-1973?	sight	Point (515417,5407736) +/- 1850m.
896522	Sarcophilus harrisii	tasmanian devil	e	EN	K Little (1403)	28-Jan-1978?	sight	Point (515413,5405886) +/- 1850m.
896356	Sarcophilus harrisii	tasmanian devil	e	EN	W Hawley (2468)	13-Jul-1965?	sight	Point (514022,5405889) +/- 18500m.
896581	Sarcophilus harrisii	tasmanian devil	e	EN	N Broth (1775)	15-Dec-1973?	sight	Point (514022,5405889) +/- 18500m.
1092642	Sarcophilus harrisii	tasmanian devil	e	EN	Angela ? (21135)	22-Jan-2010	sight	Point (515418,5412921) +/- 50m.
1154024	Sarcophilus harrisii	tasmanian devil	e	EN	Craig Plaisted (21287)	15-Jan-2010	sight	Point (511453,5408250) +/- 300m.
1163365	Sarcophilus harrisii	tasmanian devil	e	EN	Jocelyn Hockley (20086)	24-Feb-2009	sight	Point (510854,5409450) +/- 10m.
1163442	Sarcophilus harrisii	tasmanian devil	e	EN	Jocelyn Hockley (20086)	18-Jan-2010	sight	Point (510854,5409450) +/- 10m.
1163364	Sarcophilus harrisii	tasmanian devil	e	EN	Jocelyn Hockley (20086)	22-Dec-2008	sight	Point (510854,5409450) +/- 10m.
1163527	Sarcophilus harrisii	tasmanian devil	e	EN	Jocelyn Hockley (20086)	02-Nov-2010	sight	Point (510854,5409450) +/- 10m.
1163440	Sarcophilus harrisii	tasmanian devil	e	EN	Jocelyn Hockley (20086)	15-Apr-2010	sight	Point (510854,5409450) +/- 10m.
1163523	Sarcophilus harrisii	tasmanian devil	e	EN	Jocelyn Hockley (20086)	26-Jun-2010	sight	Point (510854,5409450) +/- 10m.
1163366	Sarcophilus harrisii	tasmanian devil	e	EN	Jocelyn Hockley (20086)	29-Jan-2009	sight	Point (510854,5409450) +/- 10m.
1163377	Sarcophilus harrisii	tasmanian devil	e	EN	Jocelyn Hockley (20086)	01-Dec-2009	sight	Point (510854,5409450) +/- 10m.
1163441	Sarcophilus harrisii	tasmanian devil	e	EN	Jocelyn Hockley (20086)	01-Feb-2010	sight	Point (510854,5409450) +/- 10m.
1163363	Sarcophilus harrisii	tasmanian devil	e	EN	Jocelyn Hockley (20086)	01-Jul-2009	sight	Point (510854,5409450) +/- 10m.
1163376	Sarcophilus harrisii	tasmanian devil	e	EN	Jocelyn Hockley (20086)	30-Nov-2009	sight	Point (510854,5409450) +/- 10m.
1163522	Sarcophilus harrisii	tasmanian devil	e	EN	Jocelyn Hockley (20086)	16-Jul-2010	sight	Point (510854,5409450) +/- 10m.
1163519	Sarcophilus harrisii	tasmanian devil	e	EN	Jocelyn Hockley (20086)	01-Jul-2010	sight	Point (510854,5409450) +/- 10m.
1082564	Sarcophilus harrisii	tasmanian devil	e	EN	Colette Harmsen (20946)	09-Feb-2009	sight	Point (510383,5407607) +/- 0m.
1087904	Sarcophilus harrisii	tasmanian devil	e	EN	Colette Harmsen (18606)	12-Jan-2010	sight	Point (510383,5407607) +/- 0m.
1087411	Sarcophilus harrisii	tasmanian devil	e	EN	Phil Wise (20059)	01-Oct-2009	sight	Point (510383,5407607) +/- 0m.
1087412	Sarcophilus harrisii	tasmanian devil	e	EN	Phil Wise (20059)	24-Jul-2009	sight	Point (510383,5407607) +/- 0m.
1082563	Sarcophilus harrisii	tasmanian devil	e	EN	Colette Harmsen (20946)	09-Feb-2009	sight	Point (510383,5407607) +/- 0m.
1082562	Sarcophilus harrisii	tasmanian devil	e	EN	Colette Harmsen (20946)	09-Feb-2009	sight	Point (510383,5407607) +/- 0m.
1087906	Sarcophilus harrisii	tasmanian devil	e	EN	Colette Harmsen (18606)	12-Jan-2010	sight	Point (510383,5407607) +/- 0m.
1087413	Sarcophilus harrisii	tasmanian devil	e	EN	Phil Wise (20059)	24-Jul-2009	sight	Point (510383,5407607) +/- 0m.
1087903	Sarcophilus harrisii	tasmanian devil	e	EN	Colette Harmsen (18606)	12-Jan-2010	sight	Point (510383,5407607) +/- 0m.
1087905	Sarcophilus harrisii	tasmanian devil	e	EN	Colette Harmsen (18606)	12-Jan-2010	sight	Point (510383,5407607) +/- 0m.

Threatened fauna within 5000 metres



Id	Species	Common name	Ss	Ns	Observers	Date	Obs type	Position (gda94)
1082561	Sarcophilus harrisii	tasmanian devil	e	EN	Colette Harmsen (20946)	09-Feb-2009	sight	Point (510383,5407607) +/- 0m.
1087410	Sarcophilus harrisii	tasmanian devil	e	EN	Phil Wise (20059)	24-Jul-2009	sight	Point (510383,5407607) +/- 0m.
1075896	Sarcophilus harrisii	tasmanian devil	e	EN	Robert Kerkham (20602)	11-Sep-2003	sight	Point (509990,5407594) +/- 1000m.
1160659	Sarcophilus harrisii	tasmanian devil	e	EN	Colette Harmsen (18606)	11-Sep-2010	sight	Point (510767,5407007) +/- 2000m.
1163525	Sarcophilus harrisii	tasmanian devil	e	EN	Jocelyn Hockley (20086)	10-Sep-2010	sight	Point (510854,5409450) +/- 10m.
1163375	Sarcophilus harrisii	tasmanian devil	e	EN	Jocelyn Hockley (20086)	28-Sep-2009	sight	Point (510854,5409450) +/- 10m.
1163526	Sarcophilus harrisii	tasmanian devil	e	EN	Jocelyn Hockley (20086)	10-Sep-2010	sight	Point (510854,5409450) +/- 10m.
1163443	Sarcophilus harrisii	tasmanian devil	e	EN	Jocelyn Hockley (20086)	25-Mar-2010	sight	Point (510854,5409450) +/- 10m.
1163373	Sarcophilus harrisii	tasmanian devil	e	EN	Jocelyn Hockley (20086)	30-Sep-2009	sight	Point (510854,5409450) +/- 10m.
1163433	Sarcophilus harrisii	tasmanian devil	e	EN	Jocelyn Hockley (20086)	01-Aug-2010	sight	Point (510854,5409450) +/- 10m.
1163378	Sarcophilus harrisii	tasmanian devil	e	EN	Jocelyn Hockley (20086)	01-Aug-2009	sight	Point (510854,5409450) +/- 10m.
1163434	Sarcophilus harrisii	tasmanian devil	e	EN	Jocelyn Hockley (20086)	22-Mar-2010	sight	Point (510854,5409450) +/- 10m.
1163374	Sarcophilus harrisii	tasmanian devil	e	EN	Jocelyn Hockley (20086)	24-Sep-2009	sight	Point (510854,5409450) +/- 10m.
1163516	Sarcophilus harrisii	tasmanian devil	e	EN	Jocelyn Hockley (20086)	01-May-2010	sight	Point (510854,5409450) +/- 10m.
1092293	Sarcophilus harrisii	tasmanian devil	e	EN	Colette Harmsen (18606)	17-Feb-2010	sight	Point (509229,5405614) +/- 10m.
1153015	Sarcophilus harrisii	tasmanian devil	e	EN	Alice Cordwell (20824)	06-Aug-2009	sight	Point (508317,5405960) +/- 100m.
1159820	Sarcophilus harrisii	tasmanian devil	e	EN	Katherine Kimberley (21671)	29-Jun-2010	sight	Point (508314,5412576) +/- 50m.
1250347	Sarcophilus harrisii	tasmanian devil	e	EN	Mandy How (23068)	31-Jan-2012	car	Point (507744,5411321) +/- 100m.
896506	Thylacinus cynocephalus	thylacine	x	EX	M Swales (1562)	01-Jan-1969?	sight	Point (514022,5405889) +/- 18500m.
896932	Thylacinus cynocephalus	thylacine	x	EX	T Thomas (2338)	02-Jun-1972?	sight	Point (515429,5413287) +/- 1850m.
359169	Tyto novaehollandiae	masked owl	pe	PVU	C McCormack (5462)	11-Oct-1982?	sight	Point (513480,5413661) +/- 1000m.
1234900	Tyto novaehollandiae	masked owl	pe	PVU	Anna Povey (3310)	1999	sight	Point (511967,5412838) +/- 500m.
359165	Tyto novaehollandiae	masked owl	pe	PVU	M Thompson (1760)	15-Aug-1984?	sight	Point (513476,5411441) +/- 5000m.
358422	Tyto novaehollandiae	masked owl	pe	PVU	R Green (2126)	25-Sep-1964?	sight	Point (513476,5411441) +/- 500m.
352265	Tyto novaehollandiae	masked owl	pe	PVU	Phil Bell (1915)	26-Jun-1996?	sight	Point (509662,5409608) +/- 100m.
359201	Tyto novaehollandiae	masked owl	pe	PVU	J Rose (1360)	05-Feb-1979?	sight	Point (513480,5413661) +/- 1000m.

Unverified Records

Threatened fauna within 5000 metres (based on Habitat Mapping)

Species	Common name	Ss	Ns	Potential	Known	Core
Pseudemoia rawlinsoni	glossy grass skink	r		1	0	0
Aquila audax	wedge-tailed eagle	pe	PEN	2	0	0
Perameles gunnii	eastern barred bandicoot		VU	2	0	0
Pasmaditta jungermanniae	snail (cataract gorge)	v		1	0	0
Galaxias fontanus	swan galaxias	e	EN	2	0	0

Threatened fauna within 5000 metres



Species	Common name	Ss	Ns	Potential	Known	Core
Galaxiella pusilla	eastern dwarf galaxias	v	VU	1	1	0
Tyto novaehollandiae	masked owl	pe	PVU	2	0	2
Litoria raniformis	green and golden frog	v	VU	2	0	0
Prototroctes maraena	australian grayling	v	VU	2	0	0
Accipiter novaehollandiae	grey goshawk	e		2	0	0
Haliaeetus leucogaster	white-bellied sea-eagle	v		1	0	0

For more information about threatened species, please contact the Manager, Threatened Species Section.

Telephone: (03) 6233 8759

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

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

Raptor nests and sightings within 500 metres



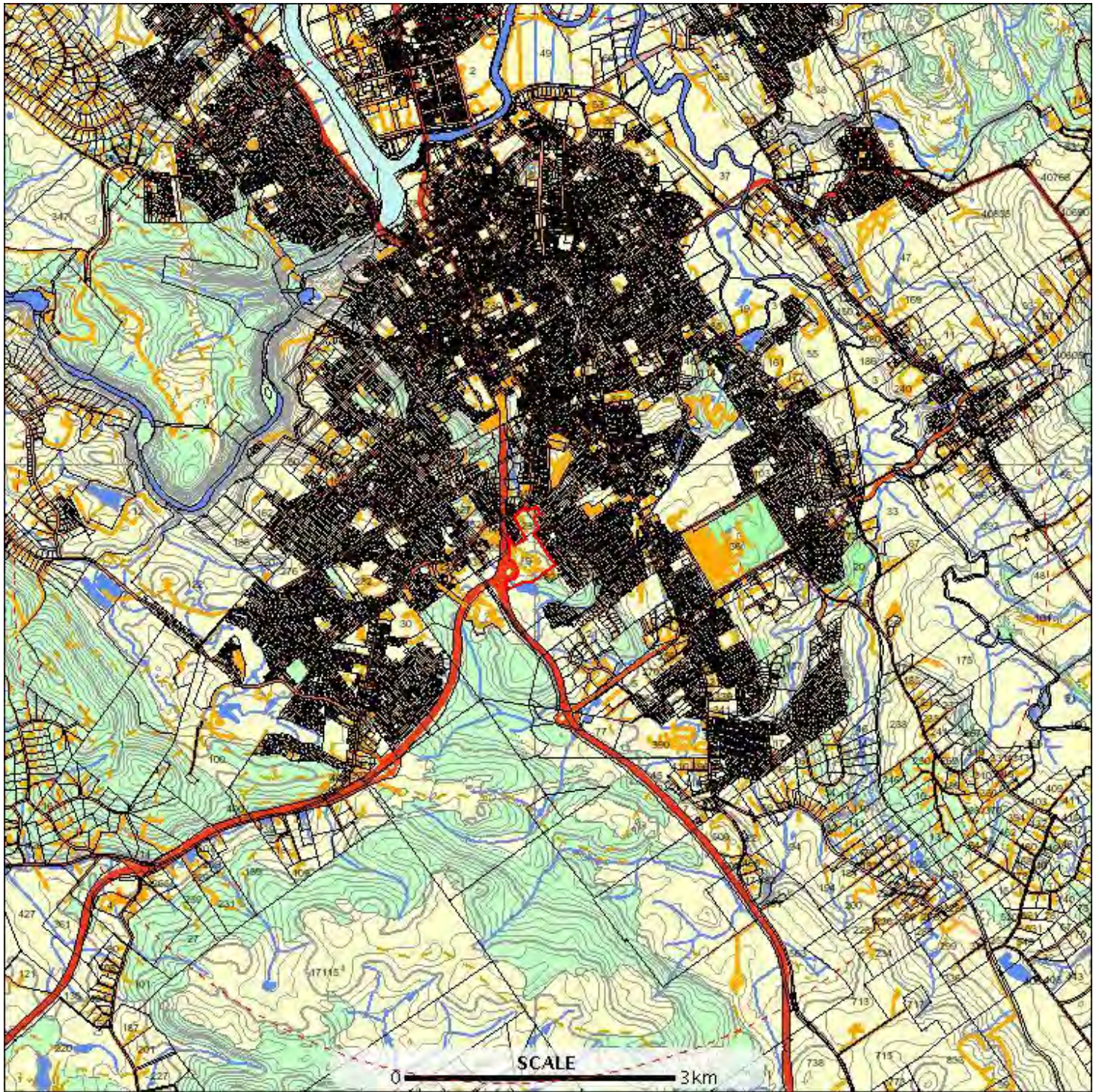
*** No Raptor nests or sightings found within 500 metres. ***

Raptor nests and sightings within 5000 metres



E: 506863
N: 5414669

E: 517538
N: 5414669


























E: 506863
N: 5403639

E: 517538
N: 5403639

Raptor nests and sightings within 5000 metres



- | | | |
|----------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
|  Raptor Nests |  Land |  Other Native Forest |
| Place Names | Road Centrelines |  Tall Native Eucalypt Forest |
| Relief Names |  National/State Highway |  Low Native Eucalypt Forest |
|  Major Rivers |  Major Arterial Road |  Non-Forest |
|  Other Rivers |  Arterial Road |  No Data |
|  Water Body |  Feeder |  Sea |
|  Estuaries |  Access Road |  Cadastral Parcels |
|  Sea |  Forestry | |
| Contours |  Vehicular Track | |
|  Index | Forest Groups | |
|  Intermediate |  Rainforest | |
|  Depression Index |  Hardwood Plantation | |
|  Depression Intermediate |  Softwood Plantation (cont) | |

Raptor nests and sightings within 5000 metres



Verified Records

Nest id/location foreign id	Species name	Observer	Obs date	Obs type	Position (gda94)	Season	Nest productivity	Nest occupancy
	Aquila audax subsp. fleayi	Peter Duckworth (1926)	11-Sep-1982	sight	Point (508112,5411183) +/- 100m.			
	Tyto novaehollandiae	Phil Bell (1915)	26-Jun-1996?	sight	Point (509662,5409608) +/- 100m.			
	Tyto novaehollandiae	R Green (2126)	25-Sep-1964?	sight	Point (513476,5411441) +/- 500m.			
	Tyto novaehollandiae	M Thompson (1760)	15-Aug-1984?	sight	Point (513476,5411441) +/- 5000m.			
	Tyto novaehollandiae	C McCormack (5462)	11-Oct-1982?	sight	Point (513480,5413661) +/- 1000m.			
	Tyto novaehollandiae	J Rose (1360)	05-Feb-1979?	sight	Point (513480,5413661) +/- 1000m.			
	Aquila audax	Peter Duckworth (1926)	11-Sep-1982	sight	Point (508112,5411183) +/- 1000m.			
	Accipiter novaehollandiae	A.V. Ratkowsky (3779)	01-Sep-1991?	sight	Point (508112,5411183) +/- 100m.			
	Falco peregrinus	Nick Mooney (16443)	1980s	nest	Point (508971,5409886) +/- 0m.			
	Accipiter novaehollandiae	Anna Povey (3310)	30-Jul-2007	sight	Point (510011,5412924) +/- 50m.			
	Accipiter novaehollandiae	Anna Povey (3310)	17-Nov-2003	sight	Point (509412,5411883) +/- 100m.			
	Aquila audax subsp. fleayi	Janet Briddon (22161)	2010s	nest	Point (508027,5410582) +/- 50m.			
	Tyto novaehollandiae	Anna Povey (3310)	1999	sight	Point (511967,5412838) +/- 500m.			

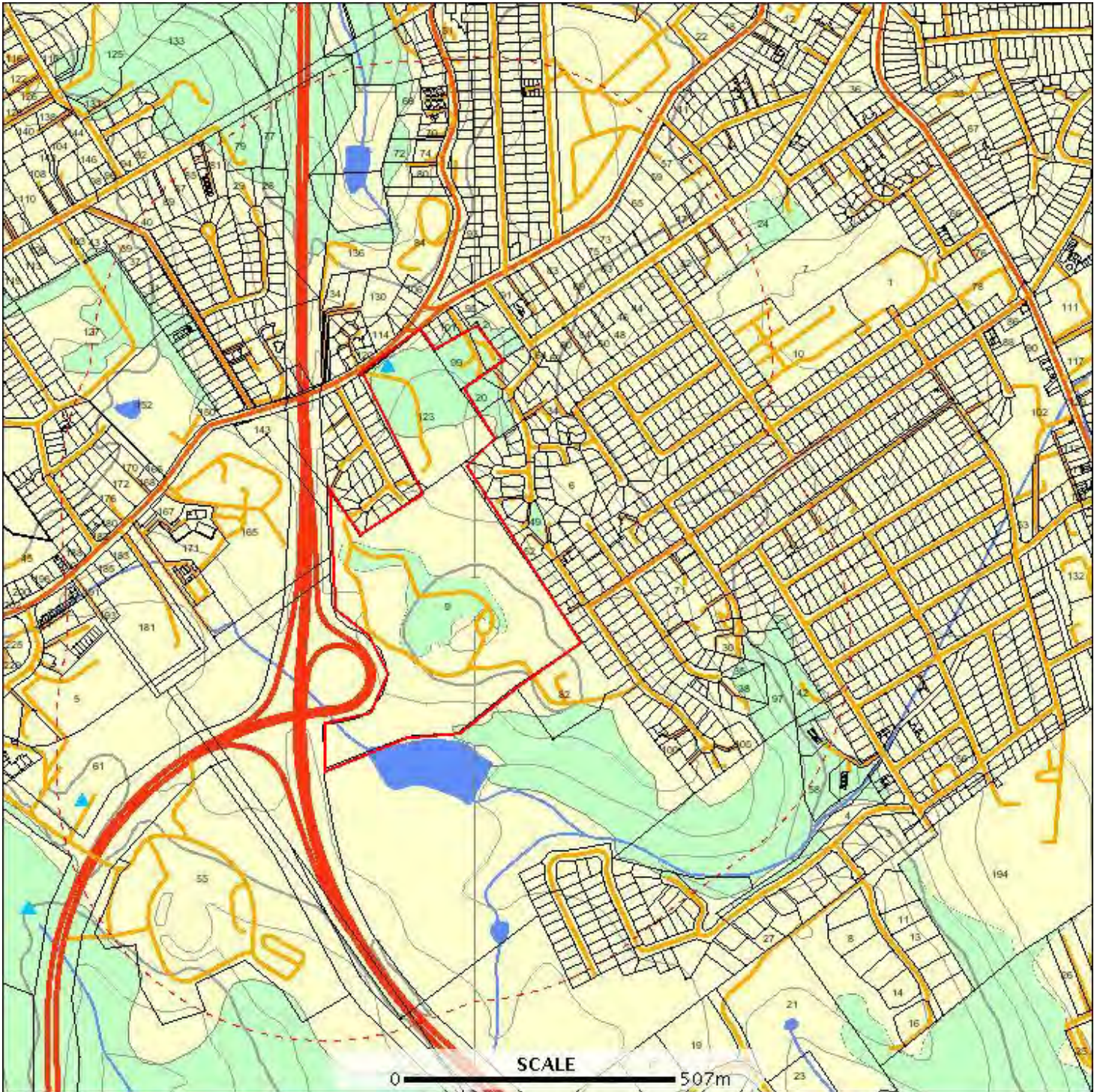
Unverified Records

Tas Management Act Weeds within 500 m



E: 511363
N: 5410168

E: 513038
N: 5410168



E: 511363
N: 5408139

E: 513038
N: 5408139

Tas Management Act Weeds within 500 m



- | | | |
|-------------------------------|------------------------------|-----------------------------|
| Weeds Watch List Point | Land | Softwood Plantation |
| Priority Weeds | Road Centreline Names | Other Native Forest |
| Weeds Management Act | Road Centrelines | Tall Native Eucalypt Forest |
| Major Rivers | National/State Highway | Low Native Eucalypt Forest |
| Other Rivers | Major Arterial Road | Non-Forest |
| Water Body | Arterial Road | No Data |
| Estuaries | Feeder | Sea |
| Sea | Access Road | Cadastral Parcels |
| Contours | Forestry | |
| Index | Vehicular Track | |
| Intermediate | Forest Groups | |
| Depression Index | Rainforest | |
| Depression Intermediate | Hardwood Plantation (cont) | |

Tas Management Act Weeds within 500 m



Verified Records

Id	Species	Common name	Observers	Date	Position (gda94)	Location	Obs state	Wma	Wons density	Data source
1227067	Erica lusitanica	spanish heath	- Unknown (21598)	08-Jan-1995	MultiLine +/- 0m.		Present	Yes		
912418	Erica lusitanica	spanish heath	David Elliott (3323)	01-Sep-2001	Point (511512,5408683) +/- 1000m.		Present	Yes		
589476	Genista monspessulana	canary broom	A North (2500)	20-Nov-2003	Point (512080,5409490) +/- 10m.		Present	Yes		
596959	Rubus fruticosus	blackberry	A North (2500)	20-Nov-2003	Point (512080,5409490) +/- 10m.		Present	Yes		
1226130	Rubus fruticosus	blackberry	- Unknown (21598)	08-Jan-1995	MultiLine +/- 0m.		Present	Yes		
1226545	Ulex europaeus	gorse	- Unknown (21598)	08-Jan-1995	MultiLine +/- 0m.		Present	Yes		
1226566	Ulex europaeus	gorse	- Unknown (21598)	08-Jan-1995	MultiLine +/- 0m.		Present	Yes		
596960	Ulex europaeus	gorse	A North (2500)	20-Nov-2003	Point (512080,5409490) +/- 10m.		Present	Yes		

Unverified Records

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

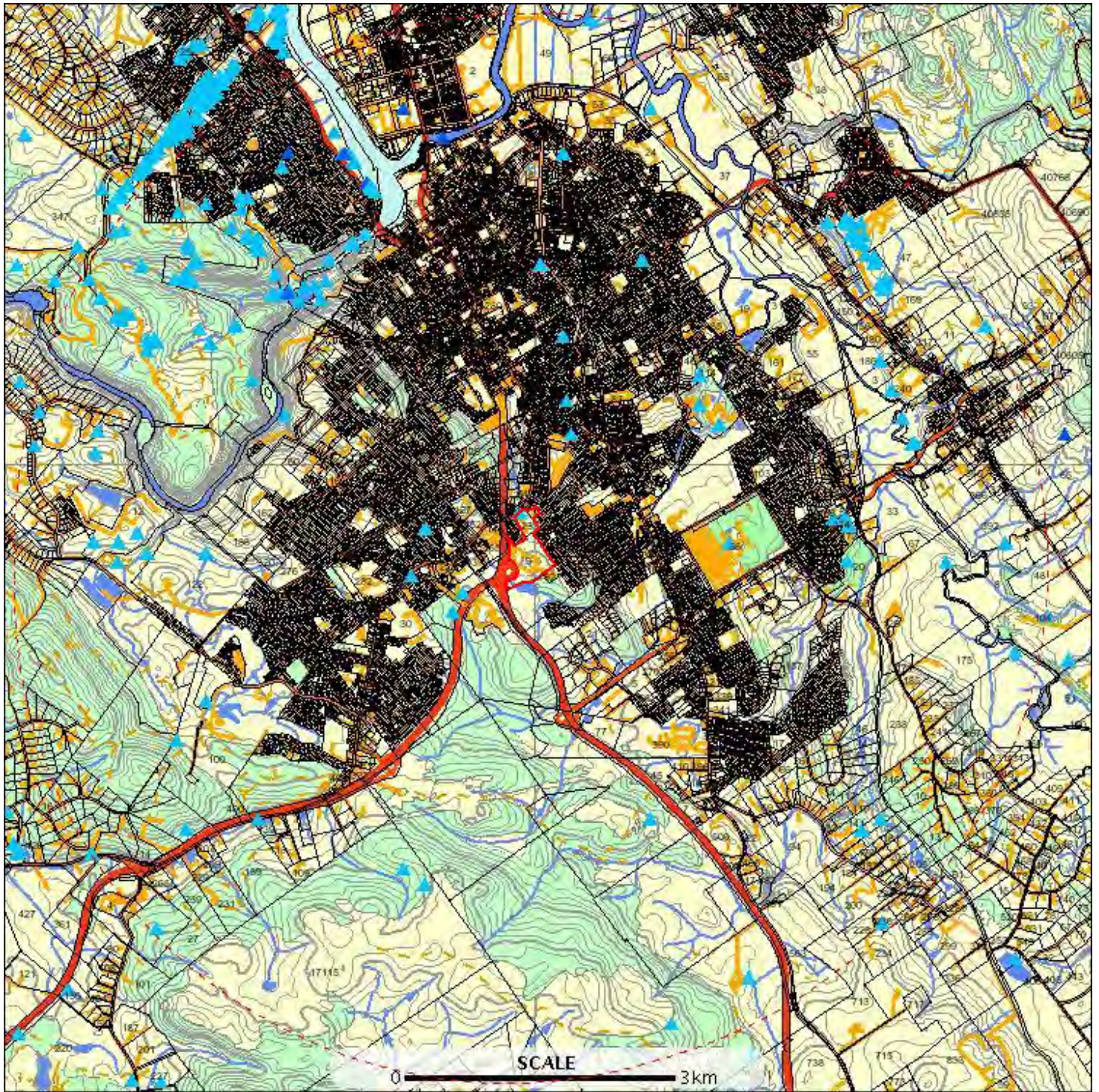
<http://www.dpipwe.tas.gov.au/inter.nsf/WebPages/TPRY-52J8Z3?open>

Tas Management Act Weeds within 5000 m



E: 506863
N: 5414669

E: 517538
N: 5414669



E: 506863
N: 5403639

E: 517538
N: 5403639

Tas Management Act Weeds within 5000 m



- Weeds Watch List Point**
- Priority Weeds
- Weeds Management Act
- Place Names**
- Relief Names**
- Major Rivers
- Other Rivers
- Water Body
- Estuaries
- Sea
- Contours**
- Index
- Intermediate (cont)
- Depression Index
- Depression Intermediate
- Land
- Road Centrelines**
- National/State Highway
- Major Arterial Road
- Arterial Road
- Feeder
- Access Road
- Forestry
- Vehicular Track
- Forest Groups**
- Rainforest
- Hardwood Plantation (cont)
- Softwood Plantation
- Other Native Forest
- Tall Native Eucalypt Forest
- Low Native Eucalypt Forest
- Non-Forest
- No Data
- Sea
- Cadastral Parcels

Tas Management Act Weeds within 5000 m



Verified Records

Id	Species	Common name	Observers	Date	Position (gda94)	Location	Obs state	Wma	Wons density	Data source
289096	Achillea millefolium	yarrow	R.S. Smith (5509)	Feb-1971	Point (510912,5413583) +/- 2000m.	Launceston.	Present	No		
942387	Anredera cordifolia	madeira vine	- Unknown (21598)	03-May-1965	Point (512529,5411276) +/- 10000m.		Present	No		
289067	Anthemis cotula	stinking chamomile	B HydeWyatt (3866)	Jan-1975	Point (510912,5405883) +/- 2000m.	Mt. Pleasant, Launceston	Present	Yes		
909196	Asparagus asparagoides	bridal creeper	Brian Robson (3087)	1999	Point (509772,5411712) +/- 50m.		Present	Yes		
909163	Asparagus asparagoides	bridal creeper	Brian Robson (3087)	1999	Point (509678,5411707) +/- 50m.		Present	Yes		
909195	Asparagus asparagoides	bridal creeper	Brian Robson (3087)	1999	Point (509767,5411717) +/- 50m.		Present	Yes		
909165	Asparagus asparagoides	bridal creeper	Brian Robson (3087)	1999	Point (509759,5411726) +/- 50m.		Present	Yes		
909164	Asparagus asparagoides	bridal creeper	Brian Robson (3087)	1999	Point (509757,5411729) +/- 50m.		Present	Yes		
909198	Asparagus asparagoides	bridal creeper	Brian Robson (3087)	1999	Point (510079,5411648) +/- 50m.		Present	Yes		
1168389	Asparagus asparagoides	bridal creeper	Jamie Cooper (6512)	01-Jun-2008	Point (515383,9487,5409441.6629) +/- -1m.		Present	Yes	2	
1168390	Asparagus asparagoides	bridal creeper	Jamie Cooper (6512)	01-Jun-2008	Point (515266.2541,5409429.4745) +/- -1m.		Present	Yes	2	
909200	Asparagus asparagoides	bridal creeper	Brian Robson (3087)	1999	Point (510155,5412050) +/- 50m.		Present	Yes		
908510	Asparagus asparagoides	bridal creeper	Brian Robson (3087)	1999	Point (509584,5411706) +/- 50m.		Present	Yes		
908512	Asparagus asparagoides	bridal creeper	Brian Robson (3087)	1999	Point (509755,5411730) +/- 50m.		Present	Yes		
908511	Asparagus asparagoides	bridal creeper	Brian Robson (3087)	1999	Point (509750,5411737) +/- 50m.		Present	Yes		
909202	Asparagus asparagoides	bridal creeper	Brian Robson (3087)	1999	Point (510399,5412217) +/- 50m.		Present	Yes		
908513	Asparagus asparagoides	bridal creeper	Brian Robson (3087)	1999	Point (509769,5411715) +/- 50m.		Present	Yes		
908529	Asparagus asparagoides	bridal creeper	Brian Robson (3087)	1999	Point (510526,5412316) +/- 50m.		Present	Yes		
909201	Asparagus asparagoides	bridal creeper	Brian Robson (3087)	1999	Point (510381,5412213) +/- 50m.		Present	Yes		
908528	Asparagus asparagoides	bridal creeper	Brian Robson (3087)	1999	Point (510402,5412233) +/- 50m.		Present	Yes		
909199	Asparagus asparagoides	bridal creeper	Brian Robson (3087)	1999	Point (510127,5411835) +/- 50m.		Present	Yes		
909197	Asparagus asparagoides	bridal creeper	Brian Robson (3087)	1999	Point (509854,5411634) +/- 50m.		Present	Yes		
1228307	Asphodelus fistulosus	onion weed	M Sharman (22311)	26-Feb-2008	Polygon +/- 0m.		Present	Yes	6	North Esk Catchment Weed Mapping
944100	Asphodelus fistulosus	onion weed	K. Graham (4790)	20-Jun-2001	Point (512532,5413126) +/- 2000m.		Present	Yes		

Tas Management Act Weeds within 5000 m



Id	Species	Common name	Observers	Date	Position (gda94)	Location	Obs state	Wma	Wons density	Data source
1228308	Asphodelus fistulosus	onion weed	M Sharman (22311)	26-Feb-2008	Polygon +/- 0m.		Present	Yes	6	North Esk Catchment Weed Mapping
771317	Carduus tenuiflorus	winged thistle	- Unknown (21598)	30-Mar-1996?	Point (508612,5407183) +/- 50m.		Present	Yes		
879906	Carduus tenuiflorus	winged thistle	A.V. Ratkowsky (3779)	01-Sep-1992?	Point (511137,5409333) +/- 50m.		Present	Yes		
401940	Carduus tenuiflorus	winged thistle	Jamie Kirkpatrick (1315)	1984	Point (513412,5406383) +/- 100m.		Present	Yes		
1229342	Chrysanthemoides monilifera subsp. monilifera	boneseed	- Unknown (21598)	10-Oct-2006	Polygon +/- 0m.		Present	Yes		
1229343	Chrysanthemoides monilifera subsp. monilifera	boneseed	- Unknown (21598)	10-Oct-2006	Polygon +/- 0m.		Present	Yes		
1229344	Chrysanthemoides monilifera subsp. monilifera	boneseed	- Unknown (21598)	10-Oct-2006	Polygon +/- 0m.		Present	Yes		
1229345	Chrysanthemoides monilifera subsp. monilifera	boneseed	- Unknown (21598)	09-Oct-2006	Polygon +/- 0m.		Present	Yes		
1229346	Chrysanthemoides monilifera subsp. monilifera	boneseed	- Unknown (21598)	12-Oct-2006	Polygon +/- 0m.		Present	Yes		
1229347	Chrysanthemoides monilifera subsp. monilifera	boneseed	- Unknown (21598)	12-Oct-2006	Polygon +/- 0m.		Present	Yes		
1229348	Chrysanthemoides monilifera subsp. monilifera	boneseed	- Unknown (21598)	13-Oct-2006	Polygon +/- 0m.		Present	Yes		
1229349	Chrysanthemoides monilifera subsp. monilifera	boneseed	- Unknown (21598)	13-Oct-2006	Polygon +/- 0m.		Present	Yes		
1229350	Chrysanthemoides monilifera subsp. monilifera	boneseed	- Unknown (21598)	11-Oct-2006	Polygon +/- 0m.		Present	Yes		
1229351	Chrysanthemoides monilifera subsp. monilifera	boneseed	- Unknown (21598)	11-Oct-2006	Polygon +/- 0m.		Present	Yes		
1229392	Chrysanthemoides monilifera subsp. monilifera	boneseed	- Unknown (21598)	09-Oct-2007	Polygon +/- 0m.		Present	Yes		
1229393	Chrysanthemoides monilifera subsp. monilifera	boneseed	- Unknown (21598)	09-Oct-2007	Polygon +/- 0m.		Present	Yes		
1229395	Chrysanthemoides monilifera subsp. monilifera	boneseed	- Unknown (21598)	12-Oct-2007	Polygon +/- 0m.		Present	Yes		
1229396	Chrysanthemoides monilifera subsp. monilifera	boneseed	- Unknown (21598)	11-Oct-2007	Polygon +/- 0m.		Present	Yes		
1229397	Chrysanthemoides monilifera subsp. monilifera	boneseed	- Unknown (21598)	11-Oct-2007	Polygon +/- 0m.		Present	Yes		
1229398	Chrysanthemoides monilifera subsp. monilifera	boneseed	- Unknown (21598)	10-Oct-2007	Polygon +/- 0m.		Present	Yes		

Tas Management Act Weeds within 5000 m



Id	Species	Common name	Observers	Date	Position (gda94)	Location	Obs state	Wma	Wons density	Data source
1229399	Chrysanthemoides monilifera subsp. monilifera	boneseed	- Unknown (21598)	10-Oct-2006	Polygon +/- 0m.		Present	Yes		
1229400	Chrysanthemoides monilifera subsp. monilifera	boneseed	- Unknown (21598)	09-Oct-2006	Polygon +/- 0m.		Present	Yes		
911978	Chrysanthemoides monilifera subsp. monilifera	boneseed	- Unknown (21598)	01-Jan-1600?	Point (513330,5412050) +/- 5000m.	Launc, Punchbowl area	Present	Yes		
494454	Chrysanthemoides monilifera subsp. monilifera	boneseed	Mike Askey-Doran (1624)	1990	Point (508912,5412613) +/- 100m.		Present	Yes		
1084040	Chrysanthemoides monilifera subsp. monilifera	boneseed	B. Jackson (3844)	12-Sep-2009	Point (508831,5412041) +/- 0m.		Present	Yes		
1229373	Chrysanthemoides monilifera subsp. monilifera	boneseed	- Unknown (21598)	14-Oct-2007	Polygon +/- 0m.		Present	Yes		
1231207	Chrysanthemoides monilifera subsp. monilifera	boneseed	Anna Povey (3310)	11-Jun-2011	Point (508739,5412160) +/- 20m.	East of powerlines, in forest along ridge	Present	Yes		
470007	Chrysanthemoides monilifera subsp. monilifera	boneseed	Louise Gilfedder (1499)	01-Jan-1600?	Point (513912,5410883) +/- 100m.		Present	Yes		
1229374	Chrysanthemoides monilifera subsp. monilifera	boneseed	- Unknown (21598)	14-Oct-2007	Polygon +/- 0m.		Present	Yes		
504761	Chrysanthemoides monilifera subsp. monilifera	boneseed	Mike Askey-Doran (1624)	1990	Point (509262,5412683) +/- 100m.		Present	Yes		
494426	Chrysanthemoides monilifera subsp. monilifera	boneseed	Mike Askey-Doran (1624)	1990	Point (509332,5412683) +/- 100m.		Present	Yes		
1002663	Chrysanthemoides monilifera subsp. monilifera	boneseed	Roy Skabo (6388)	09-Jan-2005	Point (508605,5411857) +/- 5m.	Trevallyn bushland	Present	Yes		
1229339	Chrysanthemoides monilifera subsp. monilifera	boneseed	- Unknown (21598)	10-Oct-2006	Polygon +/- 0m.		Present	Yes		
1229372	Chrysanthemoides monilifera subsp. monilifera	boneseed	- Unknown (21598)	09-Oct-2007	Polygon +/- 0m.		Present	Yes		
912004	Chrysanthemoides monilifera subsp. monilifera	boneseed	Chris Moore (3358)	01-Dec-2000	Point (515212,5412433) +/- 100m.	Launc, Waverly	Present	Yes		
590319	Chrysanthemoides monilifera subsp. monilifera	boneseed	David Ziegeler (7381)	06-Oct-2004	Point (512300,5412000) +/- 100m.		Present	Yes		
1084042	Chrysanthemoides monilifera subsp. monilifera	boneseed	B. Jackson (3844)	25-Oct-2009	Point (509612,5411898) +/- 0m.		Present	Yes		
1229371	Chrysanthemoides monilifera subsp. monilifera	boneseed	- Unknown (21598)	06-Oct-2007	Polygon +/- 0m.		Present	Yes		
1084044	Chrysanthemoides monilifera subsp. monilifera	boneseed	B. Jackson (3844)	18-Oct-2009	Point (509380,5410834) +/- 0m.		Present	Yes		

Tas Management Act Weeds within 5000 m



Id	Species	Common name	Observers	Date	Position (gda94)	Location	Obs state	Wma	Wons density	Data source
1084047	Chrysanthemoides monilifera subsp. monilifera	boneseed	B. Jackson (3844)	14-Nov-2009	Point (509612,5411691) +/- 0m.		Present	Yes		
1084046	Chrysanthemoides monilifera subsp. monilifera	boneseed	B. Jackson (3844)	01-Aug-2009	Point (508781,5412010) +/- 0m.		Present	Yes		
1084045	Chrysanthemoides monilifera subsp. monilifera	boneseed	B. Jackson (3844)	01-Aug-2009	Point (509268,5412557) +/- 0m.		Present	Yes		
1229341	Chrysanthemoides monilifera subsp. monilifera	boneseed	- Unknown (21598)	11-Oct-2006	Polygon +/- 0m.		Present	Yes		
596961	Chrysanthemoides monilifera subsp. monilifera	boneseed	A North (2500)	20-Nov-2003	Point (512566,5410622) +/- 10m.		Present	Yes		
1226031	Chrysanthemoides monilifera subsp. monilifera	boneseed	- Unknown (21598)	08-Jan-1995	MultiLine +/- -1m.		Present	Yes		
1229340	Chrysanthemoides monilifera subsp. monilifera	boneseed	- Unknown (21598)	09-Oct-2006	Polygon +/- 0m.		Present	Yes		
290975	Cirsium arvense var. arvense	californian thistle	- Unknown (21598)	15-Mar-1924	Point (516812,5411383) +/- 2000m.	St. Leonards, Launceston	Present	Yes		
290962	Cirsium arvense var. arvense	californian thistle	- Unknown (21598)	01-Jan-1600?	Point (516812,5411383) +/- 2000m.	St. Leonards, Launceston	Present	Yes		
1226028	Cortaderia jubata	pink pampas grass	- Unknown (21598)	08-Jan-1995	Line +/- -1m.		Present	Yes		
257709	Cytisus scoparius	english broom	W.M. Curtis (5737)	Oct-1942	Point (514212,5409183) +/- 1000m.	Carr Villa, Launceston.	Present	Yes		
1163488	Echium plantagineum	patersons curse	Anna Povey (3310)	28-Sep-2010	Point (515804,5411836) +/- 10m.	St Leonards Road, lot with access to Waverley Millsite.	Present	Yes		
1163479	Echium plantagineum	patersons curse	Anna Povey (3310)	28-Sep-2010	Point (515380,5412437) +/- 10m.	Waverley Millsite, Hogarth St, Waverley	Present	Yes		
1163484	Echium plantagineum	patersons curse	Anna Povey (3310)	28-Sep-2010	Point (515678,5412009) +/- 10m.	St Leonards Road, lot with access to Waverley Millsite.	Present	Yes		
1163474	Echium plantagineum	patersons curse	Anna Povey (3310)	28-Sep-2010	Point (515487,5412317) +/- 10m.	Waverley Millsite, Hogarth St, Waverley	Present	Yes		
1163481	Echium plantagineum	patersons curse	Anna Povey (3310)	28-Sep-2010	Point (515589,5412099) +/- 10m.	St Leonards Road, lot with access to Waverley Millsite.	Present	Yes		
1163476	Echium plantagineum	patersons curse	Anna Povey (3310)	28-Sep-2010	Point (515411,5412433) +/- 10m.	Waverley Millsite, Hogarth St, Waverley	Present	Yes		
1163487	Echium plantagineum	patersons curse	Anna Povey (3310)	28-Sep-2010	Point (515803,5411860) +/- 10m.	St Leonards Road, lot with access to Waverley Millsite.	Present	Yes		
1163489	Echium plantagineum	patersons curse	Anna Povey (3310)	28-Sep-2010	Point (515788,5411796) +/- 10m.	St Leonards Road, lot with access to Waverley Millsite.	Present	Yes		

Tas Management Act Weeds within 5000 m



Id	Species	Common name	Observers	Date	Position (gda94)	Location	Obs state	Wma	Wons density	Data source
1163469	Echium plantagineum	patersons curse	Anna Povey (3310)	28-Sep-2010	Point (515451,5412432) +/- 10m.	Waverley Millsite, Hogarth St, Waverley	Present	Yes		
1160862	Echium plantagineum	patersons curse	Anna Povey (3310)	30-Sep-2010	Point (509680,5412993) +/- 10m.	47 Broadview Crescent, Trevallyn, on nature strip	Present	Yes		
1163470	Echium plantagineum	patersons curse	Anna Povey (3310)	28-Sep-2010	Point (515548,5412423) +/- 10m.	Waverley Millsite, Hogarth St, Waverley	Present	Yes		
1163477	Echium plantagineum	patersons curse	Anna Povey (3310)	28-Sep-2010	Point (515391,5412451) +/- 10m.	Waverley Millsite, Hogarth St, Waverley	Present	Yes		
1163475	Echium plantagineum	patersons curse	Anna Povey (3310)	28-Sep-2010	Point (515416,5412416) +/- 10m.	Waverley Millsite, Hogarth St, Waverley	Present	Yes		
1163490	Echium plantagineum	patersons curse	Anna Povey (3310)	28-Sep-2010	Point (515746,5411810) +/- 10m.	St Leonards Road, lot with access to Waverley Millsite.	Present	Yes		
1163471	Echium plantagineum	patersons curse	Anna Povey (3310)	28-Sep-2010	Point (515575,5412293) +/- 10m.	Waverley Millsite, Hogarth St, Waverley	Present	Yes		
1163485	Echium plantagineum	patersons curse	Anna Povey (3310)	28-Sep-2010	Point (515761,5411742) +/- 10m.	St Leonards Road, lot with access to Waverley Millsite.	Present	Yes		
1163483	Echium plantagineum	patersons curse	Anna Povey (3310)	28-Sep-2010	Point (515701,5412043) +/- 10m.	St Leonards Road, lot with access to Waverley Millsite.	Present	Yes		
1163472	Echium plantagineum	patersons curse	Anna Povey (3310)	28-Sep-2010	Point (515570,5412206) +/- 10m.	Waverley Millsite, Hogarth St, Waverley	Present	Yes		
1163473	Echium plantagineum	patersons curse	Anna Povey (3310)	28-Sep-2010	Point (515499,5412240) +/- 10m.	Waverley Millsite, Hogarth St, Waverley	Present	Yes		
1163480	Echium plantagineum	patersons curse	Anna Povey (3310)	28-Sep-2010	Point (515440,5412301) +/- 10m.	Waverley Millsite, Hogarth St, Waverley	Present	Yes		
1163486	Echium plantagineum	patersons curse	Anna Povey (3310)	28-Sep-2010	Point (515772,5411787) +/- 10m.	St Leonards Road, lot with access to Waverley Millsite.	Present	Yes		
1163482	Echium plantagineum	patersons curse	Anna Povey (3310)	28-Sep-2010	Point (515682,5412091) +/- 10m.	St Leonards Road, lot with access to Waverley Millsite.	Present	Yes		
1163478	Echium plantagineum	patersons curse	Anna Povey (3310)	28-Sep-2010	Point (515390,5412466) +/- 10m.	Waverley Millsite, Hogarth St, Waverley	Present	Yes		
290147	Echium vulgare	vipers bugloss	A. Simson (3720)	01-Jan-1600?	Point (513412,5413583) +/- 20000m.	North Esk River at Launceston.	Present	Yes		
152929	Erica lusitanica	spanish heath	Fred Duncan (7477)	16-Aug-1995?	Point (509412,5412183) +/- 100m.		Present	Yes		
881587	Erica lusitanica	spanish heath	A.V. Ratkowsky (3779)	01-Sep-1992?	Point (511137,5409333) +/- 50m.		Present	Yes		
596937	Erica lusitanica	spanish heath	A North (2500)	20-Nov-2003	Point (510991,5408850) +/- 10m.		Present	Yes		

Tas Management Act Weeds within 5000 m



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1231208	Erica lusitanica	spanish heath	Anna Povey (3310)	11-Jun-2011	Point (508724,5412214) +/- 10m.	west of powerlines	Present	Yes		
1002661	Erica lusitanica	spanish heath	Roy Skabo (6388)	14-Jul-2008	Point (508953,5411209) +/- 5m.	Trevallyn Nature Recreation Area	Present	Yes		
911567	Erica lusitanica	spanish heath	David Elliott (3323)	01-Sep-2001	Point (511412,5408483) +/- 1000m.		Present	Yes		
1216011	Erica lusitanica	spanish heath	Anna Povey (3310)	12-Feb-2011	Point (508076,5412353) +/- 10m.	Near small dam behind Archery Firetrail	Present	Yes		
1227080	Erica lusitanica	spanish heath	- Unknown (21598)	08-Jan-1995	MultiLine +/- 0m.		Present	Yes		
1227067	Erica lusitanica	spanish heath	- Unknown (21598)	08-Jan-1995	MultiLine +/- 0m.		Present	Yes		
1231206	Erica lusitanica	spanish heath	Anna Povey (3310)	11-Jun-2011	Point (508739,5412160) +/- 20m.	East of powerlines	Present	Yes		
1010102	Erica lusitanica	spanish heath	Roy Skabo (6388)	13-Jul-2008	Point (508953,5411209) +/- 5m.	Trevallyn Nature Recreation Area	Present	Yes		
912418	Erica lusitanica	spanish heath	David Elliott (3323)	01-Sep-2001	Point (511512,5408683) +/- 1000m.		Present	Yes		
1084025	Erica lusitanica	spanish heath	B. Jackson (3844)	18-Apr-2009	Point (507972,5412345) +/- 0m.		Present	Yes		
590500	Genista monspessulana	canary broom	A North (2500)	01-Aug-2001	Point (508412,5405283) +/- 300m.	Remount Refuse Disposal Area	Present	Yes		
589468	Genista monspessulana	canary broom	A North (2500)	20-Nov-2003	Point (510991,5408850) +/- 10m.		Present	Yes		
589476	Genista monspessulana	canary broom	A North (2500)	20-Nov-2003	Point (512080,5409490) +/- 10m.		Present	Yes		
589493	Genista monspessulana	canary broom	A North (2500)	20-Nov-2003	Point (512566,5410622) +/- 10m.		Present	Yes		
288766	Hypericum perforatum subsp. veronense	perforated st johns-wort	A.V. Ratkowsky (3779)	18-Jan-1993	Point (509212,5411383) +/- 2000m.	Cataract Gorge.	Present	Yes		
1230648	Iris pseudacorus	yellow flag iris	Jonah Gouldthorpe (6071), M L Baker (9318)	14-Dec-2010	Point (510539,5412828) +/- 10m.	West Tamar Hwy	Present	No		
945256	Myriophyllum aquaticum	parrotfeather	Denis IMorris (6606)	29-Nov-1978	Point (511128,5405727) +/- 2000m.		Present	Yes		
1178667	Onopordum acanthium	cotton thistle or scotch thistle	K. Graham (4790)	1993	Point (514412.1737,5404783.3632) +/- 100m.		Present	Yes	7	
1171539	Pennisetum villosum	feathertop	M L Baker (9318)	13-Feb-2009	Point (512529.042,5411275.855) +/- 50m.		Present	Yes	7	
1182323	Prunus laurocerasus	cherry laurel	M L Baker (9318)	14-Oct-2005	Point (509739,5411719) +/- 50m.		Present	No	7	
1171532	Prunus laurocerasus	cherry laurel	M L Baker (9318)	13-Feb-2009	Point (509747.3035,5413130.445) +/- 50m.		Present	No	7	
1228304	Rubus fruticosus	blackberry	M Sharman (22311)	26-Feb-2008	Polygon +/- 0m.		Present	Yes	6	North Esk Catchment Weed Mapping
1226223	Rubus fruticosus	blackberry	- Unknown (21598)	08-Jan-1995	Line +/- 0m.		Present	Yes		
1226130	Rubus fruticosus	blackberry	- Unknown (21598)	08-Jan-1995	MultiLine +/- 0m.		Present	Yes		

Tas Management Act Weeds within 5000 m



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470063	Rubus fruticosus	blackberry	Louise Gilfedder (1499)	01-Jan-1600?	Point (513912,5410883) +/- 100m.		Present	Yes		
504856	Rubus fruticosus	blackberry	Mike Askey-Doran (1624)	1990	Point (508912,5412613) +/- 100m.		Present	Yes		
1226303	Rubus fruticosus	blackberry	- Unknown (21598)	08-Jan-1995	Line +/- 0m.		Present	Yes		
494421	Rubus fruticosus	blackberry	Mike Askey-Doran (1624)	1990	Point (509262,5412683) +/- 100m.		Present	Yes		
881686	Rubus fruticosus	blackberry	A.V. Ratkowsky (3779)	01-Sep-1992?	Point (511137,5409333) +/- 50m.		Present	Yes		
589399	Rubus fruticosus	blackberry	A North (2500)	20-Nov-2003	Point (507755,5406042) +/- 10m.		Present	Yes		
589415	Rubus fruticosus	blackberry	A North (2500)	20-Nov-2003	Point (509438,5406388) +/- 10m.		Present	Yes		
343867	Rubus fruticosus	blackberry	Richard Schahinger (2944)	12-Feb-2002	Point (510315,5413125) +/- 10m.	West Tamar Fitness Trail	Present	Yes		
504809	Rubus fruticosus	blackberry	Mike Askey-Doran (1624)	1990	Point (509332,5412683) +/- 100m.		Present	Yes		
761841	Rubus fruticosus	blackberry	- Unknown (21598)	30-Mar-1996?	Point (508912,5407583) +/- 50m.		Present	Yes		
1226166	Rubus fruticosus	blackberry	- Unknown (21598)	08-Jan-1995	Line +/- 0m.		Present	Yes		
402717	Rubus fruticosus	blackberry	Jamie Kirkpatrick (1315)	1984	Point (508712,5406283) +/- 100m.		Present	Yes		
584044	Rubus fruticosus	blackberry	David Ziegeler (7381)	06-Oct-2004	Point (512300,5412000) +/- 100m.		Present	Yes		
1226151	Rubus fruticosus	blackberry	- Unknown (21598)	08-Jan-1995	MultiLine +/- 0m.		Present	Yes		
596959	Rubus fruticosus	blackberry	A North (2500)	20-Nov-2003	Point (512080,5409490) +/- 10m.		Present	Yes		
1226315	Rubus fruticosus	blackberry	- Unknown (21598)	08-Jan-1995	Line +/- 0m.		Present	Yes		
401854	Rubus fruticosus	blackberry	Jamie Kirkpatrick (1315)	1984	Point (513912,5410583) +/- 100m.		Present	Yes		
153588	Rubus fruticosus	blackberry	Fred Duncan (7477)	04-Sep-1995?	Point (509712,5410483) +/- 100m.		Present	Yes		
596954	Rubus fruticosus	blackberry	A North (2500)	20-Nov-2003	Point (510991,5408850) +/- 10m.		Present	Yes		
590538	Rubus fruticosus	blackberry	A North (2500)	01-Aug-2001	Point (508412,5405283) +/- 300m.	Pateena Road	Present	Yes		
1228305	Rubus fruticosus	blackberry	M Sharman (22311)	26-Feb-2008	Polygon +/- 0m.		Present	Yes	6	North Esk Catchment Weed Mapping
1224479	Salix Xfragilis var. fragilis	crack willow	Andrew Baldwin (22268)	27-Oct-2009	Point (510574,5412796) +/- 10m.		Present	Yes		
494448	Salix Xfragilis var. fragilis	crack willow	Mike Askey-Doran (1624)	1990	Point (509332,5412683) +/- 100m.		Present	Yes		
1224480	Salix Xfragilis var. fragilis	crack willow	Andrew Baldwin (22268)	27-Oct-2009	Point (510568,5412806) +/- 10m.		Present	Yes		
1224482	Salix Xfragilis var. fragilis	crack willow	Andrew Baldwin (22268)	27-Oct-2009	Point (510419,5413030) +/- 10m.		Present	Yes		

Tas Management Act Weeds within 5000 m



Id	Species	Common name	Observers	Date	Position (gda94)	Location	Obs state	Wma	Wons density	Data source
1224483	Salix Xfragilis var. fragilis	crack willow	Andrew Baldwin (22268)	27-Oct-2009	Point (510410,5413046) +/- 10m.		Present	Yes		
1224484	Salix Xfragilis var. fragilis	crack willow	Andrew Baldwin (22268)	27-Oct-2009	Point (510409,5413048) +/- 10m.		Present	Yes		
1224478	Salix Xfragilis var. fragilis	crack willow	Andrew Baldwin (22268)	27-Oct-2009	Point (510588,5412782) +/- 10m.		Present	Yes		
1224486	Salix Xfragilis var. fragilis	crack willow	Andrew Baldwin (22268)	27-Oct-2009	Point (510288,5413115) +/- 10m.		Present	Yes		
1228306	Salix Xfragilis var. fragilis	crack willow	M Sharman (22311)	26-Feb-2008	Polygon +/- 0m.		Present	Yes	6	North Esk Catchment Weed Mapping
1228309	Salix Xfragilis var. fragilis	crack willow	M Sharman (22311)	26-Feb-2008	Polygon +/- 0m.		Present	Yes	6	North Esk Catchment Weed Mapping
1224485	Salix Xfragilis var. fragilis	crack willow	Andrew Baldwin (22268)	27-Oct-2009	Point (510367,5413116) +/- 10m.		Present	Yes		
1224476	Salix Xfragilis var. fragilis	crack willow	Andrew Baldwin (22268)	27-Oct-2009	Point (510625,5412734) +/- 10m.		Present	Yes		
1224477	Salix Xfragilis var. fragilis	crack willow	Andrew Baldwin (22268)	27-Oct-2009	Point (510595,5412773) +/- 10m.		Present	Yes		
481090	Salix Xpendulina var. pendulina	weeping willow	Louise Gilfedder (1499)	01-Jan-1600?	Point (513912,5410883) +/- 100m.		Present	No		
1180143	Salix Xsepulcralis nothovar. chrysocoma	golden weeping willow	- Unknown (21598)	20-Nov-2006	Point (510212,5413342) +/- 1m.		Present	Yes	3	Tas Seeding Willows Project
494478	Senecio jacobaea	ragwort	Mike Askey-Doran (1624)	1990	Point (508912,5412613) +/- 100m.		Present	Yes		
908797	Senecio jacobaea	ragwort	John Ireson (3188)	12-Mar-1996	Point (507792,5410093) +/- 100m.		Present	Yes		
908175	Senecio jacobaea	ragwort	John Ireson (3188)	27-Feb-1996	Point (507222,5410513) +/- 100m.		Present	Yes		
908416	Senecio jacobaea	ragwort	John Ireson (3188)	26-Jan-1994	Point (508312,5409083) +/- 100m.		Present	Yes		
908796	Senecio jacobaea	ragwort	John Ireson (3188)	12-Mar-1996	Point (507172,5410163) +/- 100m.		Present	Yes		
1228313	Senecio jacobaea	ragwort	M Sharman (22311)	26-Feb-2008	Polygon +/- 0m.		Present	Yes	6	North Esk Catchment Weed Mapping
908798	Senecio jacobaea	ragwort	John Ireson (3188)	12-Mar-1996	Point (507812,5410313) +/- 100m.		Present	Yes		
1228312	Senecio jacobaea	ragwort	M Sharman (22311)	26-Feb-2008	Polygon +/- 0m.		Present	Yes	6	North Esk Catchment Weed Mapping
908792	Senecio jacobaea	ragwort	John Ireson (3188)	27-Feb-1996	Point (507772,5409193) +/- 100m.		Present	Yes		
908706	Senecio jacobaea	ragwort	John Ireson (3188)	19-Jan-1996	Point (508212,5409283) +/- 100m.		Present	Yes		
907933	Senecio jacobaea	ragwort	John Ireson (3188)	01-Feb-1995	Point (508012,5408983) +/- 100m.		Present	Yes		
908766	Senecio jacobaea	ragwort	John Ireson (3188)	20-Feb-1996	Point (508912,5409083) +/- 100m.		Present	Yes		

Tas Management Act Weeds within 5000 m



Id	Species	Common name	Observers	Date	Position (gda94)	Location	Obs state	Wma	Wons density	Data source
1065834	Senecio jacobaea	ragwort	Bruce Jackson (5818)	05-Jan-2009	Point (508627,5412526) +/- 6m.		Present	Yes		
590542	Senecio jacobaea	ragwort	A North (2500)	01-Aug-2001	Point (508412,5405283) +/- 300m.	Remount Refuse Disposal Area	Present	Yes		
880084	Senecio jacobaea	ragwort	A.V. Ratkowsky (3779)	01-Sep-1992?	Point (511137,5409333) +/- 50m.		Present	Yes		
908707	Senecio jacobaea	ragwort	John Ireson (3188)	22-Jan-1996	Point (508022,5409193) +/- 100m.		Present	Yes		
908122	Senecio jacobaea	ragwort	John Ireson (3188)	20-Feb-1996	Point (516412,5408983) +/- 100m.		Present	Yes		
771349	Senecio jacobaea	ragwort	- Unknown (21598)	30-Mar-1996?	Point (508612,5407183) +/- 50m.		Present	Yes		
908294	Senecio jacobaea	ragwort	John Ireson (3188)	04-Feb-1997	Point (517112,5408083) +/- 100m.		Present	Yes		
908733	Senecio jacobaea	ragwort	John Ireson (3188)	06-Feb-1996	Point (517012,5409183) +/- 100m.		Present	Yes		
940214	Solanum marginatum	white-edged nightshade	R.S. Smith (5509)	21-Apr-1977	Point (511128,5405727) +/- 2000m.		Present	Yes		
1171531	Spartina anglica	rice grass or common cordgrass	M L Baker (9318)	13-Feb-2009	Point (509747.3035,5413130.445) +/- 50m.		Present	No	7	
257439	Tradescantia fluminensis	wandering creeper	D.I. Morris (4111)	Dec-1976	Point (511312,5413283) +/- 100m.	North Esk River at Launceston, almost at the Customs house	Present	No		
345072	Tradescantia fluminensis	wandering creeper	Richard Schahinger (2944)	12-Feb-2002	Point (510315,5413125) +/- 10m.	West Tamar Fitness Trail	Present	No		
1228310	Ulex europaeus	gorse	M Sharman (22311)	26-Feb-2008	Polygon +/- 0m.		Present	Yes	6	North Esk Catchment Weed Mapping
1228311	Ulex europaeus	gorse	M Sharman (22311)	26-Feb-2008	Polygon +/- 0m.		Present	Yes	6	North Esk Catchment Weed Mapping
1084031	Ulex europaeus	gorse	B. Jackson (3844)	18-Apr-2009	Point (507848,5411661) +/- 0m.		Present	Yes		
1010103	Ulex europaeus	gorse	Roy Skabo (6388)	09-Aug-2008	Point (508406,5411221) +/- 5m.	Trevallyn Nature Recreation Area	Present	Yes		
761845	Ulex europaeus	gorse	- Unknown (21598)	30-Mar-1996?	Point (508912,5407583) +/- 50m.		Present	Yes		
909414	Ulex europaeus	gorse	Andrew Drenen (3354)	Jun-2001	Point (516092,5410200) +/- 17m.		Present	Yes		
909395	Ulex europaeus	gorse	Andrew Drenen (3354)	Aug-2000	Point (515408,5408997) +/- 186m.		Present	Yes		
881719	Ulex europaeus	gorse	A.V. Ratkowsky (3779)	01-Sep-1992?	Point (511137,5409333) +/- 50m.		Present	Yes		
355046	Ulex europaeus	gorse	Philip Barker (1911)	03-Sep-1996?	Point (509912,5411783) +/- 100m.		Present	Yes		
596955	Ulex europaeus	gorse	A North (2500)	20-Nov-2003	Point (510991,5408850) +/- 10m.		Present	Yes		
590326	Ulex europaeus	gorse	David Ziegeler (7381)	06-Oct-2004	Point (512300,5412000) +/- 100m.		Present	Yes		

Tas Management Act Weeds within 5000 m



Id	Species	Common name	Observers	Date	Position (gda94)	Location	Obs state	Wma	Wons density	Data source
1084032	Ulex europaeus	gorse	B. Jackson (3844)	18-Apr-2009	Point (508002,5411475) +/- 0m.		Present	Yes		
1001343	Ulex europaeus	gorse	Roy Skabo (6388)	23-Jun-2005	Point (508261,5411992) +/- 30m.		Present	Yes		
1065842	Ulex europaeus	gorse	Bruce Jackson (5818)	26-Jan-2009	Point (509336,5412266) +/- 6m.		Present	Yes		
1010104	Ulex europaeus	gorse	Roy Skabo (6388)	09-Aug-2008	Point (508388,5411258) +/- 5m.	Trevallyn Nature Recreation Area	Present	Yes		
378329	Ulex europaeus	gorse	Stephen Harris (2289)	1985	Point (510012,5411783) +/- 100m.		Present	Yes		
909366	Ulex europaeus	gorse	Andrew Drenen (3354)	Aug-2000	Point (515422,5409360) +/- 48m.		Present	Yes		
1010101	Ulex europaeus	gorse	Roy Skabo (6388)	11-Aug-2000	Point (508845,5411348) +/- 5m.	trevallyn nature recreation area	Present	Yes		
1084038	Ulex europaeus	gorse	B. Jackson (3844)	13-Sep-2009	Point (508707,5411860) +/- 0m.		Present	Yes		
910097	Ulex europaeus	gorse	Andrew Drenen (3354)	Aug-2000	Point (515557,5406277) +/- 62m.		Present	Yes		
1084037	Ulex europaeus	gorse	B. Jackson (3844)	25-Apr-2009	Point (508704,5411859) +/- 0m.		Present	Yes		
1163513	Ulex europaeus	gorse	Anna Povey (3310)	28-Sep-2010	Point (515746,5411810) +/- 10m.	St Leonards Road, lot with access to Waverley Millsite.	Present	Yes		
1084034	Ulex europaeus	gorse	B. Jackson (3844)	18-Apr-2009	Point (508138,5411499) +/- 0m.		Present	Yes		
909415	Ulex europaeus	gorse	Andrew Drenen (3354)	Jun-2001	Point (516064,5410184) +/- 3m.		Present	Yes		
1226619	Ulex europaeus	gorse	- Unknown (21598)	08-Jan-1995	Line +/- 0m.		Present	Yes		
1065836	Ulex europaeus	gorse	Bruce Jackson (5818)	26-Jan-2009	Point (508773,5411830) +/- 7m.		Present	Yes		
910105	Ulex europaeus	gorse	Andrew Drenen (3354)	Jun-2001	Point (515860,5410730) +/- 68m.		Present	Yes		
1084030	Ulex europaeus	gorse	B. Jackson (3844)	18-Apr-2009	Point (507729,5411851) +/- 0m.		Present	Yes		
1010105	Ulex europaeus	gorse	Roy Skabo (6388)	09-Aug-2008	Point (508310,5411233) +/- 5m.	Trevallyn Nature Recreation Area	Present	Yes		
1010106	Ulex europaeus	gorse	Roy Skabo (6388)	09-Aug-2008	Point (508314,5411129) +/- 5m.	Trevallyn Nature Recreation Area	Present	Yes		
1021948	Ulex europaeus	gorse	Roy Skabo (6388)	19-Sep-2008	Point (507838,5411664) +/- 6m.	trevallyn nature recreation area	Present	Yes		
598643	Ulex europaeus	gorse	A North (2500)	01-Aug-2001	Point (508412,5405283) +/- 300m.	Pateena Road	Present	Yes		
909398	Ulex europaeus	gorse	Andrew Drenen (3354)	Aug-2000	Point (513630,5404317) +/- 49m.		Present	Yes		
589494	Ulex europaeus	gorse	A North (2500)	20-Nov-2003	Point (512566,5410622) +/- 10m.		Present	Yes		

Tas Management Act Weeds within 5000 m



Id	Species	Common name	Observers	Date	Position (gda94)	Location	Obs state	Wma	Wons density	Data source
910106	Ulex europaeus	gorse	Andrew Drenen (3354)	Jun-2001	Point (515742,5411028) +/- 80m.		Present	Yes		
356126	Ulex europaeus	gorse	Philip Barker (1911)	21-Nov-1996?	Point (514112,5410383) +/- 100m.		Present	Yes		
910121	Ulex europaeus	gorse	Andrew Drenen (3354)	Jun-2001	Point (515969,5410448) +/- 74m.		Present	Yes		
1084039	Ulex europaeus	gorse	B. Jackson (3844)	13-Sep-2009	Point (508709,5411917) +/- 0m.		Present	Yes		
1226545	Ulex europaeus	gorse	- Unknown (21598)	08-Jan-1995	MultiLine +/- 0m.		Present	Yes		
1226569	Ulex europaeus	gorse	- Unknown (21598)	08-Jan-1995	Line +/- 0m.		Present	Yes		
1065841	Ulex europaeus	gorse	Bruce Jackson (5818)	26-Jan-2009	Point (509336,5412304) +/- 6m.		Present	Yes		
494480	Ulex europaeus	gorse	Mike Askey-Doran (1624)	1990	Point (508912,5412613) +/- 100m.		Present	Yes		
1226558	Ulex europaeus	gorse	- Unknown (21598)	08-Jan-1995	MultiLine +/- 0m.		Present	Yes		
1084033	Ulex europaeus	gorse	B. Jackson (3844)	18-Apr-2009	Point (508058,5411440) +/- 0m.		Present	Yes		
152936	Ulex europaeus	gorse	Fred Duncan (7477)	16-Aug-1995?	Point (509412,5412183) +/- 100m.		Present	Yes		
596960	Ulex europaeus	gorse	A North (2500)	20-Nov-2003	Point (512080,5409490) +/- 10m.		Present	Yes		
1084029	Ulex europaeus	gorse	B. Jackson (3844)	18-Apr-2009	Point (508734,5411872) +/- 0m.		Present	Yes		
1163512	Ulex europaeus	gorse	Anna Povey (3310)	28-Sep-2010	Point (515788,5411796) +/- 10m.	St Leonards Road, lot with access to Waverley Millsite.	Present	Yes		
494424	Ulex europaeus	gorse	Mike Askey-Doran (1624)	1990	Point (509262,5412683) +/- 100m.		Present	Yes		
1226708	Ulex europaeus	gorse	- Unknown (21598)	08-Jan-1995	Line +/- 0m.		Present	Yes		
909361	Ulex europaeus	gorse	Andrew Drenen (3354)	Aug-2000	Point (515747,5406388) +/- 77m.		Present	Yes		
1226566	Ulex europaeus	gorse	- Unknown (21598)	08-Jan-1995	MultiLine +/- 0m.		Present	Yes		
481115	Ulex europaeus	gorse	Louise Gilfedder (1499)	01-Jan-1600?	Point (513912,5410883) +/- 100m.		Present	Yes		
589401	Ulex europaeus	gorse	A North (2500)	20-Nov-2003	Point (507755,5406042) +/- 10m.		Present	Yes		
1163511	Ulex europaeus	gorse	Anna Povey (3310)	28-Sep-2010	Point (515380,5412437) +/- 10m.	Waverley Millsite, Hogarth St, Waverley	Present	Yes		
910096	Ulex europaeus	gorse	Andrew Drenen (3354)	Aug-2000	Point (515761,5405346) +/- 156m.		Present	Yes		
1065849	Ulex europaeus	gorse	Anna Povey (3310)	09-May-2009	Point (509323,5412277) +/- 5m.		Present	Yes		
1084035	Ulex europaeus	gorse	B. Jackson (3844)	18-Apr-2009	Point (508083,5411518) +/- 0m.		Present	Yes		
1084041	Ulex europaeus	gorse	B. Jackson (3844)	18-Oct-2009	Point (509457,5412154) +/- 0m.		Present	Yes		

Tas Management Act Weeds within 5000 m



Id	Species	Common name	Observers	Date	Position (gda94)	Location	Obs state	Wma	Wons density	Data source
1065833	Ulex europaeus	gorse	Bruce Jackson (5818)	05-Jan-2009	Point (509164,5412374) +/- 6m.		Present	Yes		
1226721	Ulex europaeus	gorse	- Unknown (21598)	08-Jan-1995	MultiLine +/- 0m.		Present	Yes		
771353	Ulex europaeus	gorse	- Unknown (21598)	30-Mar-1996?	Point (508612,5407183) +/- 50m.		Present	Yes		
1065843	Ulex europaeus	gorse	Bruce Jackson (5818)	26-Jan-2009	Point (509436,5412276) +/- 6m.		Present	Yes		
1226717	Ulex europaeus	gorse	- Unknown (21598)	08-Jan-1995	Line +/- 0m.		Present	Yes		
1065837	Ulex europaeus	gorse	Bruce Jackson (5818)	26-Jan-2009	Point (509164,5412374) +/- 6m.		Present	Yes		
257585	Xanthium spinosum	bathurst burr	A North (2500)	29-Mar-2000	Point (512812,5414483) +/- 100m.	North Esk River, Launceston. Near old Powder Magazine.	Present	Yes		
289573	Xanthium spinosum	bathurst burr	W.M. Curtis (5737)	01-Jan-1600?	Point (512612,5410283) +/- 2000m.	Launceston	Present	Yes		

Unverified Records

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

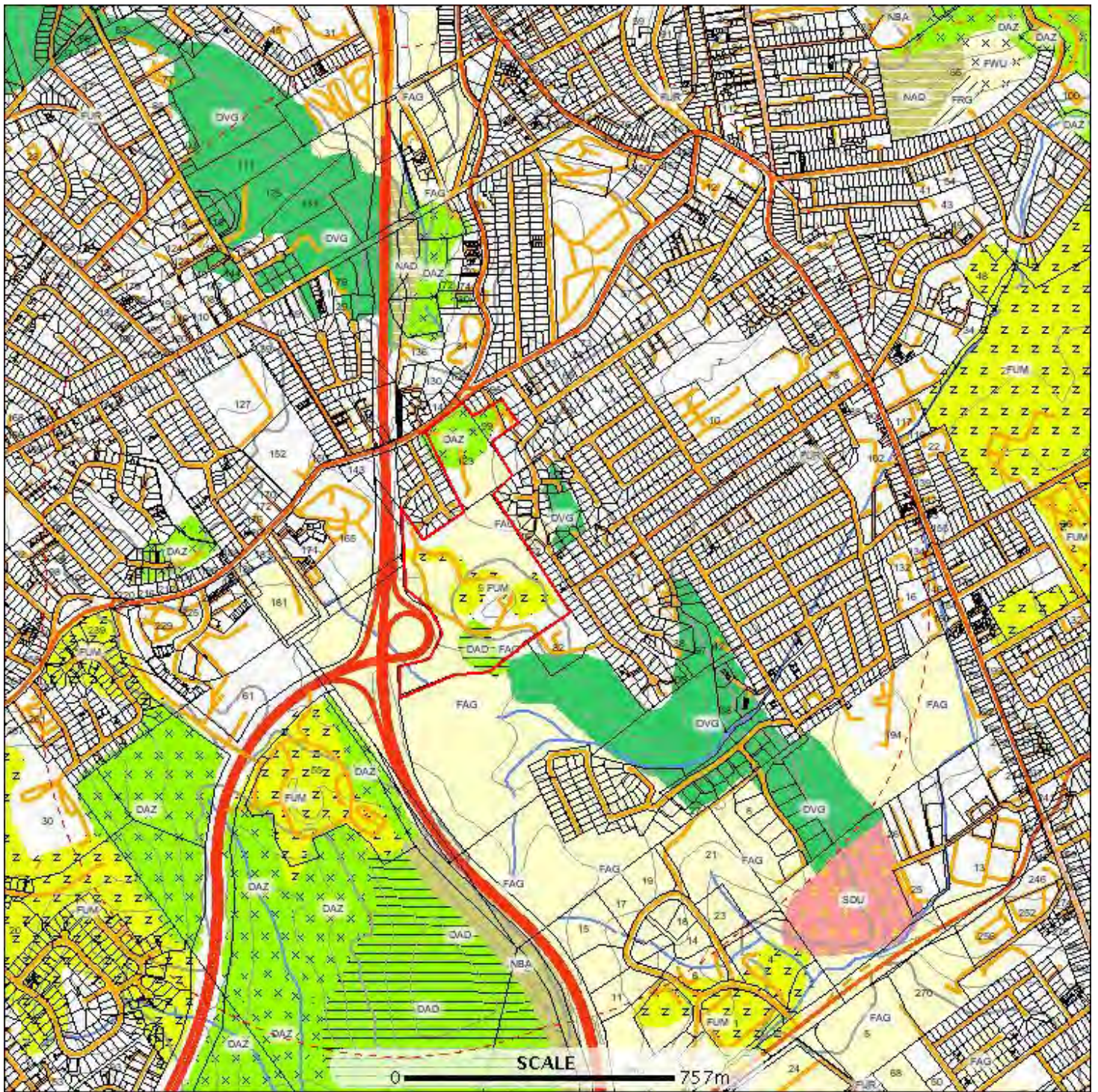
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TASVEG communities within 1000 metres



E: 510862
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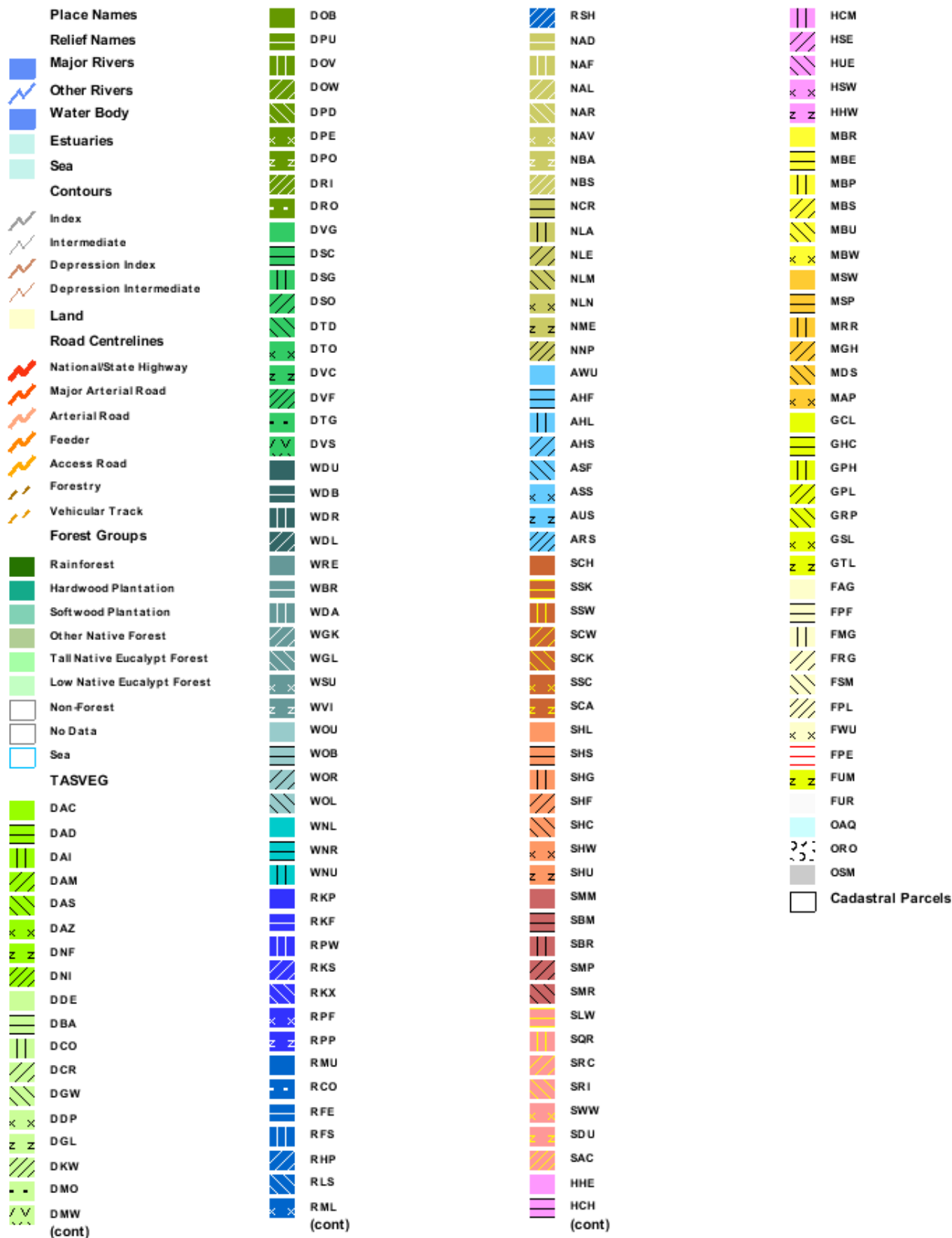
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N: 5407639

TASVEG communities within 1000 metres



TASVEG communities within 1000 metres



Id	Code	Community	Emergent species
101482257	DAZ	Eucalyptus amygdalina inland forest and woodland on Cainozoic deposits	
101482255	FAG	Agricultural land	
101483213	DVG	Eucalyptus viminalis grassy forest and woodland	
101483516	FAG	Agricultural land	
101481599	NBA	Bursaria - Acacia woodland and scrub	
101481597	DAZ	Eucalyptus amygdalina inland forest and woodland on Cainozoic deposits	
101483211	FAG	Agricultural land	Eucalyptus viminalis
101481944	FAG	Agricultural land	
101481781	FAG	Agricultural land	
101482258	DVG	Eucalyptus viminalis grassy forest and woodland	
101483304	DAZ	Eucalyptus amygdalina inland forest and woodland on Cainozoic deposits	
101483212	FAG	Agricultural land	Eucalyptus viminalis
101483224	FUM	Extra-urban miscellaneous	
101482677	FUR	Urban areas	
101481344	DAZ	Eucalyptus amygdalina inland forest and woodland on Cainozoic deposits	
101481614	DAZ	Eucalyptus amygdalina inland forest and woodland on Cainozoic deposits	
101481598	DAZ	Eucalyptus amygdalina inland forest and woodland on Cainozoic deposits	
101482540	DVG	Eucalyptus viminalis grassy forest and woodland	
101481945	FAG	Agricultural land	
101483207	DAD	Eucalyptus amygdalina forest and woodland on dolerite	
101481600	FAG	Agricultural land	
101483210	DAZ	Eucalyptus amygdalina inland forest and woodland on Cainozoic deposits	
101483303	NAD	Acacia dealbata forest	
101483218	FUM	Extra-urban miscellaneous	
101483223	DAD	Eucalyptus amygdalina forest and woodland on dolerite	
101482256	FAG	Agricultural land	
101483515	DVG	Eucalyptus viminalis grassy forest and woodland	
101481345	DAZ	Eucalyptus amygdalina inland forest and woodland on Cainozoic deposits	
101483208	FUM	Extra-urban miscellaneous	
101482538	FUR	Urban areas	
101481595	FUM	Extra-urban miscellaneous	
101483302	DVG	Eucalyptus viminalis grassy forest and woodland	
101483209	FUM	Extra-urban miscellaneous	
101481614	DAD	Eucalyptus amygdalina forest and woodland on dolerite	
101483222	DAZ	Eucalyptus amygdalina inland forest and woodland on Cainozoic deposits	

For more information about TASVEG maps, please contact the Coordinator, Tasmanian Vegetation Monitoring and Mapping Program.

Telephone: (03) 6233 4501

Email: TASVEG@dpipwe.tas.gov.au

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

Threatened communities within 1000 metres



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N: 5410668

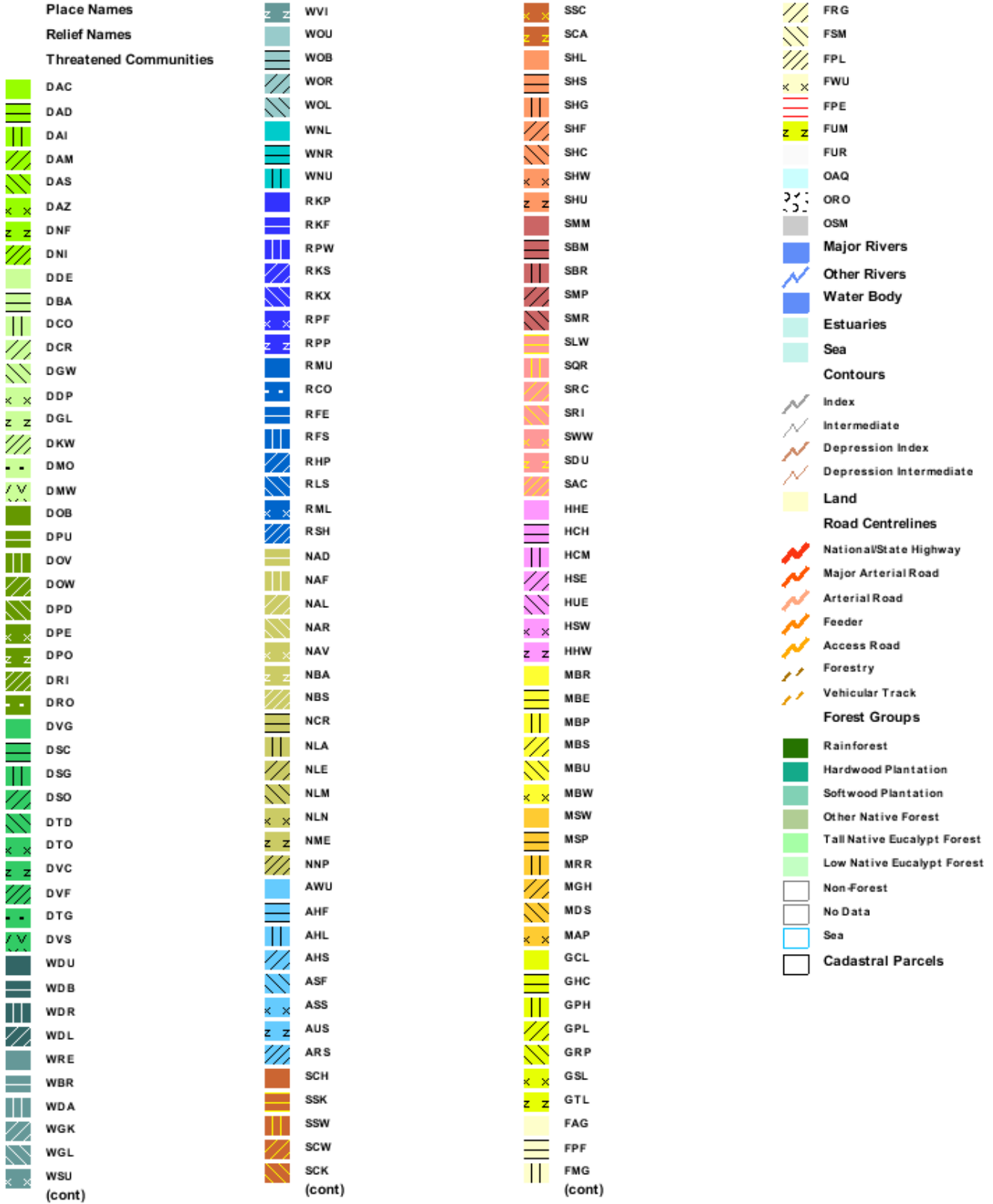
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N: 5407639

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N: 5407639

Threatened communities within 1000 metres



Threatened communities within 1000 metres



Code	Title	Status
DAZ	Eucalyptus amygdalina inland forest and woodland on Cainozoic deposits	V
DAZ	Eucalyptus amygdalina inland forest and woodland on Cainozoic deposits	V
DAZ	Eucalyptus amygdalina inland forest and woodland on Cainozoic deposits	V
DAZ	Eucalyptus amygdalina inland forest and woodland on Cainozoic deposits	V
DAZ	Eucalyptus amygdalina inland forest and woodland on Cainozoic deposits	V
DAZ	Eucalyptus amygdalina inland forest and woodland on Cainozoic deposits	V
DAZ	Eucalyptus amygdalina inland forest and woodland on Cainozoic deposits	V
DAZ	Eucalyptus amygdalina inland forest and woodland on Cainozoic deposits	V
DAZ	Eucalyptus amygdalina inland forest and woodland on Cainozoic deposits	V
DAZ	Eucalyptus amygdalina inland forest and woodland on Cainozoic deposits	V

For more information about threatened vegetation communities, please contact the Resource Management and Conservation Division.

Ph: (03) 6233 4501,

Fax: (03) 6233 3186

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

Geoconservation sites within 1000 metres



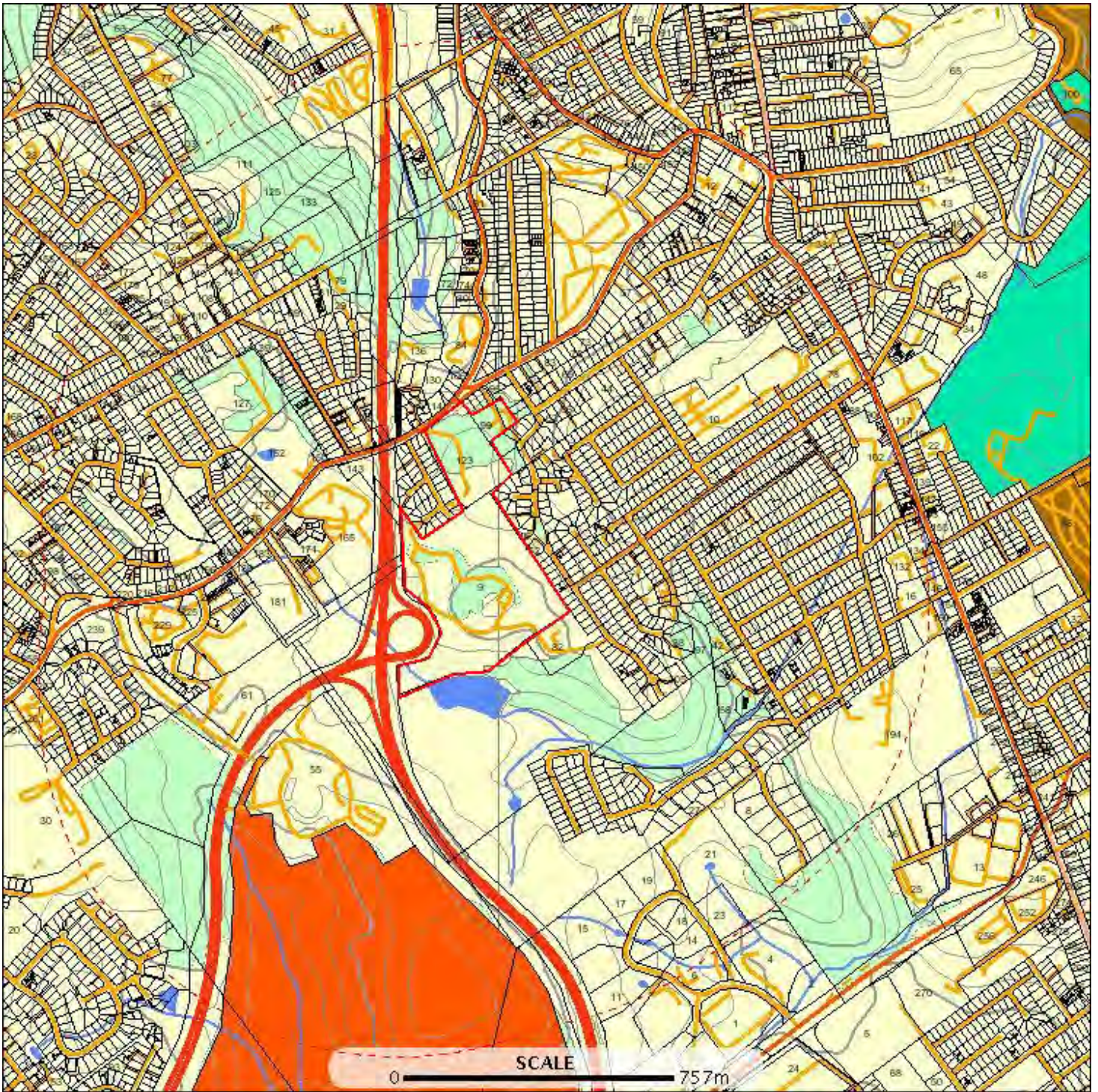
*** No Geoconservation sites found within 1000 metres. ***

Reserves within 1000 metres



E: 510862
N: 5410668

E: 513539
N: 5410668



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Reserves within 1000 metres



Tasmanian Reserve Estate	Private Sanctuary	Road Centrelines	Cadastral Parcels
Conservation Area	Private land within WHA	National/State Highway	
Forest Reserve	Management Agreement	Major Arterial Road	
Game Reserve	Part 5 Agreement (Meander Dam Offset)	Arterial Road	
Historic Site	Other Private Reserve	Feeder	
Indigenous Protected Area	Place Names	Access Road	
National Park	Relief Names	Forestry	
Nature Reserve	Major Rivers	Vehicular Track	
Nature Recreation Area	Other Rivers	Forest Groups	
Regional Reserve	Water Body	Rainforest	
State Reserve	Estuaries	Hardwood Plantation	
Wellington Park	Sea	Softwood Plantation	
Public authority land within WHA	Contours	Other Native Forest	
Informal Reserve on State Forest or Forestry Tas managed land	Index	Tall Native Eucalypt Forest	
Informal Reserve on other public land	Intermediate	Low Native Eucalypt Forest	
Conservation Covenant (NCA)	Depression Index	Non-Forest	
Private Nature Reserve and Conservation Covenant (NCA)	Depression Intermediate	No Data	
Private Sanctuary and Conservation Covenant (NCA) (cont)	Land	Sea	

Reserves within 1000 metres



Name	Classification	Status
Kate Reed Nature Recreation Area	Nature Recreation Area	Other Formal Reserve

For more information about the Tasmanian Reserve Estate, please contact the Land Conservation Branch DPIPWE.

Ph: (03) 6233 2744

Fax (03) 6223 8603

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



Appendix B
EPBCA Protected Matters Report



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 about the EPBC Act including significance guidelines, forms and application process details can be found at <http://www.environment.gov.au/epbc/assessmentsapprovals/index.html>

Report created: 05/03/12 11:20:49

[Summary](#)

[Details](#)

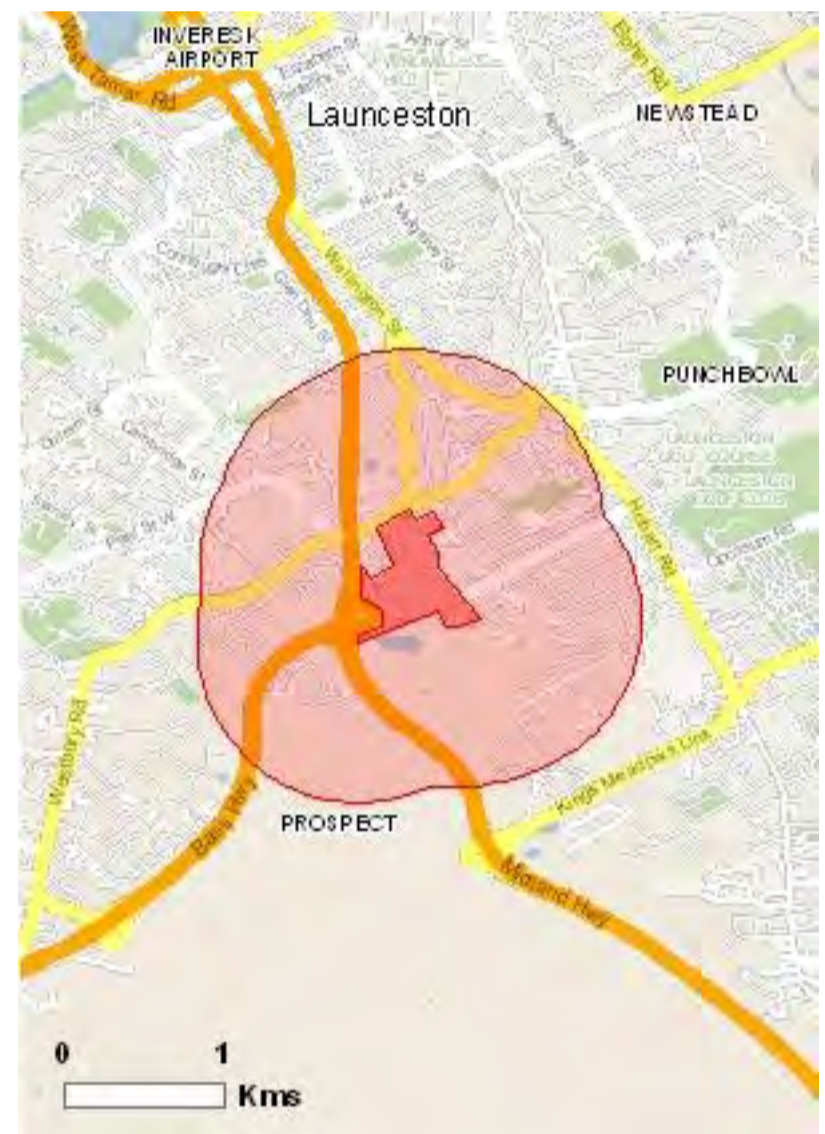
[Matters of NES](#)

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

[Extra Information](#)

[Caveat](#)

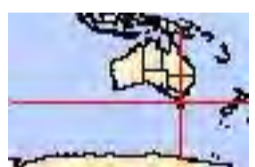
[Acknowledgements](#)



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

[Coordinates](#)

[Buffer: 1.0Km](#)



Summary

Matters of National Environment 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 - see <http://www.environment.gov.au/epbc/assessmentsapprovals/guidelines/index.html>

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International	None
Great Barrier Reef Marine Park:	None
Commonwealth Marine Areas:	None
Threatened Ecological Communities:	None
Threatened Species:	17
Migratory Species:	9

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 and the heritage values of a place on the Register of the National Estate. Information on the new heritage laws can be found at <http://www.environment.gov.au/heritage/index.html>

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.

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. Information on EPBC Act permit requirements and application forms can be found at <http://www.environment.gov>.

Commonwealth Lands:	None
Commonwealth Heritage Places:	None
Listed Marine Species:	8
Whales and Other Cetaceans:	None
Critical Habitats:	None
Commonwealth Reserves:	None

Extra Information

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

Place on the RNE:	2
State and Territory Reserves:	1
Regional Forest Agreements:	1
Invasive Species:	7
Nationally Important Wetlands:	None

Details

Matters of National Environmental Significance

Threatened Species		[Resource Information]
Name	Status	Type of Presence
BIRDS		
Aquila audax fleayi		
Wedge-tailed Eagle (Tasmanian) [64435]	Endangered	Species or species habitat may occur within area

Name	Status		Type of Presence
Botaurus poiciloptilus Australasian Bittern [1001]	Endangered		Species or species habitat known to occur within area
Ceyx azureus diemenensis Tasmanian Azure Kingfisher [25977]	Endangered		Species or species habitat may occur within area
Lathamus discolor Swift Parrot [744]	Endangered		Species or species habitat may occur within area
Tyto novaehollandiae castanops Masked Owl (Tasmanian) [67051]	Vulnerable		Breeding known to occur within area
FISH			
Prototroctes maraena Australian Grayling [26179]	Vulnerable		Species or species habitat may occur within area
FROGS			
Litoria raniformis Growling Grass Frog, Southern Bell Frog, Green and Golden Frog, Warty Swamp Frog [1828]	Vulnerable		Species or species habitat likely to occur within area
MAMMALS			
Dasyurus maculatus maculatus (Tasmanian population) Spotted-tail Quoll, Spot-tailed Quoll, Tiger Quoll (Tasmanian population) [75183]	Vulnerable		Species or species habitat likely to occur within area
Perameles gunnii gunnii Eastern Barred Bandicoot (Tasmania) [66651]	Vulnerable		Species or species habitat likely to occur within area
Sarcophilus harrisii Tasmanian Devil [299]	Endangered		Species or species habitat likely to occur within area
PLANTS			
Caladenia caudata Tailed Spider-orchid [17067]	Vulnerable		Species or species habitat likely to occur within area
Callitris oblonga subsp. oblonga [64864]	Endangered		Species or species habitat likely to occur within area
Carex tasmanica Curly Sedge [9101]	Vulnerable		Species or species habitat likely to occur within area
Epacris exserta South Esk Heath [19879]	Endangered		Species or species habitat known to occur within area
Glycine latrobeana Clover Glycine, Purple Clover [13910]	Vulnerable		Species or species habitat likely to occur within area
Prasophyllum apoxychilum Tapered Leek-orchid [64947]	Endangered		Species or species habitat may occur within area
Pterostylis commutata Midland Greenhood [64535]	Critically Endangered		Species or species habitat may occur within area

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		

Name	Threatened	Type of Presence
Apus pacificus Fork-tailed Swift [678]		Species or species habitat may occur within area
Ardea alba Great Egret, White Egret [59541]		Species or species habitat may occur within area
Ardea ibis Cattle Egret [59542]		Species or species habitat may occur within area
Migratory Terrestrial Species		
Haliaeetus leucogaster White-bellied Sea-Eagle [943]		Species or species habitat likely to occur within area
Hirundapus caudacutus White-throated Needletail [682]		Species or species habitat may occur within area
Myiagra cyanoleuca Satin Flycatcher [612]		Breeding likely to occur within area
Migratory Wetlands Species		
Ardea alba Great Egret, White Egret [59541]		Species or species habitat may occur within area
Ardea ibis Cattle Egret [59542]		Species or species habitat may occur within area
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]		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		
Apus pacificus Fork-tailed Swift [678]		Species or species habitat may occur within area
Ardea alba Great Egret, White Egret [59541]		Species or species habitat may occur within area
Ardea ibis Cattle Egret [59542]		Species or species habitat may 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 likely to occur within area
Hirundapus caudacutus White-throated Needletail [682]		Species or species habitat may occur within area

Name	Threatened	Type of Presence
Lathamus discolor Swift Parrot [744]	Endangered	Species or species habitat may occur within area
Myiagra cyanoleuca Satin Flycatcher [612]		Breeding likely to occur within area

Extra Information

Places on the RNE [\[Resource Information \]](#)

Note that not all Indigenous sites may be listed.

Name	State	Status
Natural		
Kate Reed Nature Recreation Area and Adjacent Areas (1998 Bounda	TAS	Indicative Place
Historic		
Mount Pleasant Homestead and Outbuildings	TAS	Registered

State and Territory Reserves [\[Resource Information \]](#)

Name	State
Kate Reed	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,

Name	Status	Type of Presence
Mammals		
Capra hircus Goat [2]		Species or species habitat likely to occur within area
Felis catus Cat, House Cat, Domestic Cat [19]		Species or species habitat likely to occur within area
Oryctolagus cuniculus Rabbit, European Rabbit [128]		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
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 reichardtiji 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

Name	Status		Type of Presence within area
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Coordinates

-41.46616 147.14422,-41.46515 147.14606,-41.46578 147.1465,-41.46534 147.14743,
-41.46613 147.14806,-41.46664 147.14721,-41.46751 147.1478,-41.46849 147.1478,
-41.47138 147.15025,-41.47184 147.14879,-41.47178 147.14821,-41.47094 147.1477,
-41.47267 147.14317,-41.47225 147.14317,-41.47178 147.14454,-41.47083 147.1446,
-41.47016 147.14344,-41.46824 147.14334,-41.46911 147.14403,-41.46826 147.14517,
-41.46614 147.14426,-41.46616 147.14422

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 Heritage and Register of National Estate properties, Wetlands of International 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

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

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.

For species where the distributions are well known, maps are digitised from sources such as recovery plans and detailed habitat studies. Where appropriate, core breeding, foraging and roosting areas are indicated under 'type of presence'. For species whose distributions are less well known, point locations are collated from government wildlife authorities, museums, and non-government organisations; bioclimatic distribution models are generated and these validated by experts. In some cases, the distribution maps are based solely on expert knowledge.

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.

Acknowledgements

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

- [-Department of Environment, Climate Change and Water, New South Wales](#)
- [-Department of Sustainability and Environment, Victoria](#)
- [-Department of Primary Industries, Parks, Water and Environment, Tasmania](#)
- [-Department of Environment and Natural Resources, South Australia](#)
- [-Parks and Wildlife Service NT, NT Dept of Natural Resources, Environment and the Arts](#)
- [-Environmental and Resource Management, Queensland](#)
- [-Department of Environment and Conservation, Western Australia](#)
- [-Department of the Environment, Climate Change, Energy and Water](#)
- [-Birds Australia](#)
- [-Australian Bird and Bat Banding Scheme](#)
- [-Australian National Wildlife Collection](#)
- Natural history museums of Australia
- [-Museum Victoria](#)

[-Australian Museum](#)

[-SA 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, Atherton and Canberra](#)

[-University of New England](#)

[-Ocean Biogeographic Information System](#)

[-Australian Government, Department of Defence](#)

[-State Forests of NSW](#)

-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](#).

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		Name	Signature	Name	Signature	Date
0	F Richardson	J Davies	 for JD	A Jungalwalla		4/4/2012