



# Reserve Activity Plan

2017 - 2021

## CANOPUS-CENTAURI BUSHLAND RESERVE

ADVICE PREPARED BY  
TASFLORA FOR  
CLARENCE CITY COUNCIL  
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*Weed Control and Native Vegetation Specialists*

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## 1 BACKGROUND

The Canopus-Centauri Bushland Reserve is an 11 hectare area of bushland, pipeline reserve and rural land located in the suburb of Mt Rumney on Hobart's eastern shore. The Reserve is owned and managed by Clarence City Council (Council). It is valued by locals for its natural setting and recreational opportunities, and it provides an attractive setting for locals to traverse Mt Rumney's natural bushland environment away from road verges and traffic.

Two bushfire management plans have been previously prepared for part of the Reserve,<sup>1,2</sup> and the Reserve is encompassed by a broader Mt Rumney and Mt Canopus vegetation management plan.<sup>3</sup> However no specific overarching management plan has previously been prepared for the Reserve. In this context, Tasflora has been engaged by Council to develop a five year Reserve Activity Plan for on ground management activities within the Reserve, including the development of an implementation plan identifying immediate and ongoing management priorities to be undertaken during the period 2017-2021.

Council's *Clarence Bushland and Coastal Strategy* summarises plans and strategies relevant to reserves within the Clarence municipality. A key recommendation derived from the Strategy was to develop and implement reserve activity plans for all bushland and coastal reserves managed by Council. Currently Council has developed and partially implemented 20 RAPs and will be developing three new reserve activity plans in 2016-17, including this plan. The development of reserve activity plans is a key component of Council's 'Climate Change Adaptation Pathway' and provides a strategic approach to strengthening the resilience to the impacts of climate change of Council's natural reserves through protecting and improving the condition of their natural values.

The recommendations contained within this *Canopus-Centauri Bushland Reserve Activity Plan 2017-2021*, which was adopted by Council in October 2017, are intended to provide guidance for on ground activities that can be implemented by Council, community groups and/or volunteers. It is acknowledged that it may not be possible to undertake all recommended activities due to resource constraints; rather the intent of this plan is to provide a guide to management concepts and outcomes that could be achieved if sufficient funding can be obtained.

## 2 OBJECTIVES

The objectives of the *Canopus-Centauri Bushland Reserve Activity Plan 2017-2021* are to:

- ensure the Reserve is sustainably managed to preserve and enhance its

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<sup>1</sup> AVK Environmental Management (2011). *Canopus-Centauri Bushfire Management Plan*. Unpublished report for Clarence City Council.

<sup>2</sup> AVK Environmental Management (2015). *Draft Canopus-Centauri Bushfire Management Plan*. Unpublished report for Clarence City Council.

<sup>3</sup> *Mt Rumney and Mt Canopus Vegetation Management Plan 2013-2018*. Unpublished report for the Mt Rumney Landcare Group Inc..

- natural, cultural and social values;
- identify priority management activities to be undertaken within the Reserve by Council, community groups and/or volunteers as resources become available during the period 2017-2021; and
- encourage community engagement through raising awareness of the Reserves' values and encourage participation in activities to minimise threats to these values.

### 3 SITE DESCRIPTION

The area covered by the *Canopus-Centauri Bushland Reserve Activity Plan 2017-2021* is illustrated in Figure 1. It includes the following Reserves which are owned and managed by Council.

- 20 Canopus Road - approximately 6.5 ha of bushland reserve between the Tasman Highway and Centauri Road, and 2.6 ha of pipeline reserve (mostly associated with the Clarence Recycled Water Scheme) which runs parallel to the Tasman Highway between 20 Alliance Drive and Grahams Road.
- 52 Grahams Road – approximately 1.8 ha of predominantly rural land.



**Figure 1:** Area covered by the *Canopus-Centauri Bushland Reserve Activity Plan 2017-2021* (base map sourced from the LIST).



The Reserve is zoned as Open Space under the Clarence Interim Planning Scheme 2015.<sup>4</sup>

## 4 SITE VALUES

### 4.1 Native flora

Two native vegetation communities are present at 20 Canopus Road, as described in the Reserve's bushfire management plan. *Eucalyptus ovata* forest and woodland (TASVEG code DOV) occupies the eastern strip of the Reserve (refer Figure 2), with *Eucalyptus amygdalina* forest and woodland on mudstone (DAM) occurring along the pipeline reserve section running adjacent to the Tasman Highway. A small area of *Eucalyptus globulus* dry forest and woodland (DGL) occurs at 52 Grahams Road. A full description of each of the communities occurring within the Reserve is provided at Appendix 1.



**Figure 2:** Typical *Eucalyptus ovata* forest and woodland community at 20 Canopus Road.

Both the DOV and DGL communities are listed as threatened native vegetation communities under the *Nature Conservation Act 2002*. A vegetation condition assessment of the DOV community was undertaken in March 2017 and is provided at Appendix 2.

Several threatened flora species listed under the Tasmanian *Threatened Species Protection Act 1995* and/or the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* have been previously recorded within the bushland section of 20 Canopus Road. A summary of these is provided at Appendix 1.

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<sup>4</sup> <http://www.iplan.tas.gov.au/pages/plan/book.aspx?exhibit=claips>

## 4.2 Native fauna

The Reserve contains suitable habitat for a range of native wildlife (mammals, birds, reptiles, amphibians and invertebrates), including:

- mature or dead eucalypt trees with hollows, which provide potential den and nest sites for possums, bats and hollow-nesting bird species, including the endangered swift parrot (*Lathamus discolor*);
- mature, flowering eucalypt trees that provide a foraging source for possums and birds, including *Eucalyptus ovata* (black gum) trees which are a foraging source for the swift parrot;
- open grassy woodland which provides a foraging source for small mammals, including the threatened eastern barred bandicoot (*Perameles gunnii*);
- shrubs and other understorey species that provide nesting, shelter and a foraging source for birds and small mammals;
- fallen timber and leaf litter, which provide shelter and foraging habitat for small birds, reptiles and invertebrates; and
- freshwater ponds which provide habitat for frogs and invertebrates.

As noted above, the Reserve contains potential foraging and/or nesting habitat for two threatened fauna species: the swift parrot and the eastern barred bandicoot, with the latter species being observed in the Reserve in November 2016 (Paul Grey, NRM Facilitator for Sorell Council, pers. comm. November 2016). Further information on these species is provided at Appendix 1.

A bat survey was undertaken in the Reserve in November 2016. Four of Tasmania's eight micro bat species were recorded, including the little forest bat (*Vespadelus vulturnus*), the large forest bat (*Vespadelus darlingtoni*), the eastern false pipistrelle (*Falsistrellus tasmaniensis*) and Gould's wattled bat (*Chalinolobus gouldii*).

A bird survey was undertaken in the Reserve by BirdLife Tasmania in February 2017. Twelve native bird species were recorded during a half hour period, as summarised in Appendix 3.

## 4.3 Cultural heritage

### 4.3.1 Aboriginal heritage

The municipality of Clarence, including the Mt Rumney area, was previously occupied by the Mumirimina band of the Oyster Bay tribe.<sup>5</sup> There are no known Aboriginal heritage sites within the Reserve.

Under the Tasmanian *Aboriginal Relics Act 1975* (the Aboriginal Relics Act), it is an offence to 'destroy, damage, disfigure, conceal, uncover, expose, excavate or otherwise interfere with a relic' unless a permit has been granted. It is therefore

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<sup>5</sup> Alexander, A. (2003). *The eastern shore: a history of Clarence*. Clarence City Council, Rosny Park.



important to ensure that no Aboriginal artefacts or other cultural material are exposed or disturbed without a permit during Reserve management activities. In the event that an Aboriginal artefact is inadvertently uncovered, an Unanticipated Discovery Plan should be implemented immediately (refer Appendix 4) and the items reported to Aboriginal Heritage Tasmania for advice.

### **4.3.2 Historic heritage**

The Grahams Road end of the pipeline reserve section of 20 Canopus Road contains the remnants of a stone bridge (refer Figure 3) which is likely to have been constructed for the former Bellerive-Sorell railway line which operated between 1892 and 1926.



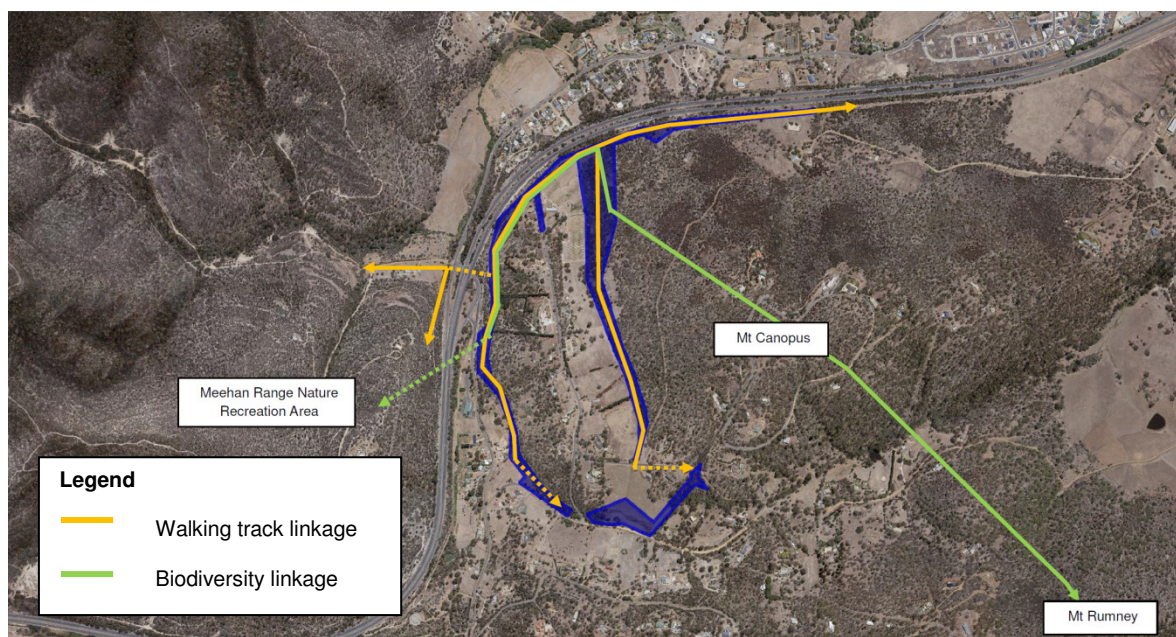
**Figure 3:** Historic stone bridge at 20 Canopus Road.

## **4.4 Recreational values**

The Reserve is utilised by locals and visitors for walking, dog exercise, cycling and horse exercise. Community feedback indicated a preference for retaining the area as available for horse exercise.

## **4.5 Landscape setting and connectivity**

The Reserve provides an attractive setting for locals to traverse Mt Rumney's natural bushland environment away from road verges and traffic. It also forms an important wildlife corridor outside of private property. Connectivity between areas of bushland provides an important ecological link for flora and fauna to enable gene flow between populations and to allow animals to move across the landscape for foraging, nesting and breeding. The Reserve is connected to vegetated private land in the Meehan Range to the south via Mt Canopus and Mt Rumney (refer Figure 3), and indirectly to the Meehan Range Nature Recreation Area across the Tasman Highway to the west.



**Figure 3:** Connectivity between the Canopus-Centauri Bushland Reserve and other bushland areas (base map sourced from the LIST).

Connectivity from a user perspective is currently good, although community consultation has indicated that improvements could be made. The track along the pipeline reserve section of 20 Canopus Road forms part of the Tangara Trail and connects to the south with the Alliance Drive section of the Tangara Trail. While there is a walking track traversing most of 20 Canopus Road, further improvements could be made by creating a walking track circuit via 52 Grahams Road (discussed further in section 11).

Landscape setting and connectivity are important for the long term viability of Clarence's bushland areas as well as ongoing visual amenity and recreational opportunities within the municipality. It is important that these linkages be preserved and strengthened through strategic land use planning.

## 5 STAKEHOLDER CONSULTATION

A public meeting and community 'walk and talk' session was facilitated by Council and Tasflora on 27 November 2016 and attended by 10 local residents, including members of the Mt Rumney Landcare Group. The purpose of the session was to seek input on the values and management issues associated with the Reserve. A feedback form seeking input to the *Canopus-Centauri Bushland Reserve Activity Plan 2017-2021* was also mailed to local residents and relevant stakeholders.

The draft *Canopus-Centauri Bushland Reserve Activity Plan 2017-2021* was released for community consultation in April - May 2017. Seven submissions on the draft plan were received during the consultation period. A Canopus-Centauri Bushland Reserve Activity Plan Report Card was developed as a key tool in encouraging stakeholder feedback on the draft plan and was mailed out to residents and other interested stakeholders. The content of the Report Card and a summary of the issues raised in the submissions received are provided at Appendix 5.



Where possible, all relevant community feedback has been considered in the development of the *Canopus-Centauri Bushland Reserve Activity Plan 2017-2021*. However some issues identified during the consultation process are beyond the scope of this plan or pertain to management issues outside the Reserve. These issues have been noted by Council and will be addressed through other processes where feasible.

## 6 WEED MANAGEMENT

### 6.1 Weed species present

Several weed species are found in the Reserve, some of which are classified as declared weeds under the Tasmanian *Weed Management Act 1999* and/or Weeds of National Significance (WONS). Weeds occurring within the DOV community at 20 Canopus Road should be targeted as a priority to prevent their further spread throughout this threatened native vegetation community.

A list of weed species recorded in the bushland area at 20 Canopus Road, including their status and recommended control methods, is provided at Appendix 6. To assist with identification, a picture of each weed species is also provided. The distribution of declared weed species is provided in Appendix 7.

### 6.2 Recommendations for weed control work

Weed control recommendations in this plan primarily focus on the bushland area in the eastern section of 20 Canopus Road where the threatened *Eucalyptus ovata* community occurs.

***Recommendation 1: Priority should be given to controlling weeds occurring in the threatened Eucalyptus ovata forest and woodland community at 20 Canopus Road.***

Due to their presently limited distribution, weed control work should initially focus on controlling the declared weeds Spanish heath (*Erica lusitanica*) and vipers bugloss (*Echium vulgare*) to prevent their further spread into the Reserve. This control should be coordinated in conjunction with adjacent landowners whose properties contain these species.

***Recommendation 2: Control Spanish heath and vipers bugloss at 20 Canopus Road as an immediate priority, with communication/coordination with surrounding landholders to be undertaken by Council's Weeds Planning Officer.***

Following control of these priority weeds, a sweep should be undertaken of the bushland area of 20 Canopus Road to remove all declared and environmental woody weeds, including blackberry (*Rubus fruticosus* aggregate), sweet briar (*Rosa rubiginosa*) and hawthorn. Work should commence at the Canopus Road entrance and work in a northerly direction down the valley. Given the dense infestations in places, consideration should be given to engaging a contractor to undertake the initial sweep to remove all weeds encountered. Follow-up

maintenance over the following years could then be undertaken by volunteers and/or contractors.

***Recommendation 3: Undertake a sweep of the bushland area of 20 Canopus Road and control all declared and environmental woody weeds encountered.***

A significant number of thistles have germinated throughout the Reserve following a recent planned vegetation burn. While not considered as high a priority as removing woody weeds, their control would be highly desirable to improve the condition of the threatened DOV community.

***Recommendation 4: Control dense infestations of thistles in the bushland area of 20 Canopus Road to facilitate natural regeneration.***

A mature melaleuca tree (*Melaleuca* sp.) is growing in close proximity to Reserve entrance CD1. It is recommended that this tree be removed due to the ability of this species to easily spread into bushland areas.

***Recommendation 5: Remove the mature melaleuca tree growing near CD1.***

### **6.3 Maintenance weed control work**

Weed control activities will not be successful unless a commitment is made to undertaking ongoing follow-up maintenance activities. An annual sweep to remove all new germinants of previously targeted weeds should be undertaken, with ongoing annual follow-up required until the soil seed bank is exhausted. This work could be undertaken by volunteers and/or contractors.

***Recommendation 6: Undertake an annual sweep of the Reserve to remove germinants of declared and environmental weeds.***

### **6.4 Non-priority weeds**

Broadleaf weeds and exotic grasses are common through the Reserve and are not considered a priority for control except in revegetation areas and where their removal is desirable as part of an ongoing general Reserve maintenance program (eg along track edges) or fuel reduction purposes.

***Recommendation 7: Undertake control of exotic grasses and broadleaf weeds only in revegetation areas and where necessary as part of a general Reserve maintenance program.***

In order to monitor the success of the weed control program, follow-up GPS weed mapping should be undertaken after five years to assess progress and facilitate planning of future weed control activities. As well, GPS mapping by contractors and volunteers as they control weeds should be encouraged, with data to be entered into DPIPWE's Natural Values Atlas or provided to Council to enable its database to be updated.

***Recommendation 8: Undertake GPS mapping of all weeds in the Reserve after five years to monitor progress and inform future weed control priorities.***



## 7 REGENERATION AND REVEGETATION

### 7.1 Regeneration

Natural regeneration should be encouraged within the Reserve as the most cost effective and natural means of restoring its original vegetation in areas where disturbance has occurred. Apart from weed control, management activities in areas of intact native vegetation should be limited to encourage the natural regeneration process.

### 7.2 Revegetation activities

The primary purpose of undertaking new revegetation activities is to preserve and enhance existing areas of remnant native vegetation, provide habitat for native birds and animals, and improve the visual amenity for users of the Reserve.

Large scale revegetation activities are not considered necessary in the Reserve. While large areas of grassland are apparent, natural regeneration is occurring. Small scale supplanting of native plants is only considered necessary if large bare areas are creating following removal of dense infestations of weeds. If undertaken within the DOV community at 20 Canopus Drive, only plants that naturally form part of a DOV community should be planted and, where possible, plants should be grown from the seed or cuttings of plants local to the area to ensure local variants are planted.

***Recommendation 9: Revegetation should only be considered a priority in bare areas that may be created following weed control.***

Some planting of trees has been undertaken near the Canopus Road entrance. The Reserve's Bushfire Management Plan states that these plantings need to be maintained as per class 3 fire trail standards as outlined in MP1 of *Bushfire Management Strategy - Best Management Practice Guidelines*. Any future planting of trees should also be undertaken in accordance with section 3.7 of the Reserve's Bushfire Management Plan (e.g. planting should not be undertaken within two metres of the edge of fire trails).<sup>6</sup>

***Recommendation 10: Any future planting of trees must be undertaken in accordance with section 3.7 of the Reserve's Bushfire Management Plan.***

Revegetation and landscaping activities will not be successful unless a commitment is made to undertake follow-up maintenance activities. In particular, it is important to ensure that sufficient resources are available for ongoing maintenance (eg weeding, watering) before establishing new sites. Specific attention should be given to maintenance of planted trees at the top of the Reserve.

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<sup>6</sup> AVK Environmental Management (2015). *Draft Canopus-Centauri Bushfire Management Plan*. Unpublished report for Clarence City Council.

***Recommendation 11: New revegetation and landscaping activities should not be committed to unless sufficient resources are available to undertake ongoing regular maintenance of newly planted areas.***

## 8 FAUNA HABITAT MANAGEMENT

As described in section 4.2, the Reserve provides important habitat for a range of wildlife, including mammals, birds, reptiles, amphibians and invertebrates. A variety of canopy layers, dead trees, hollow logs, fallen timber and leaf litter are required to provide important habitat for wildlife, including mammals, birds, reptiles and invertebrates. Leaf litter and dead wood are often viewed as a fire risk in bushland reserves located in urban areas. However, it is important that fauna habitat requirements are considered when planning any future bushfire management activities in the Reserves. The Reserve's current bushfire management plan recognises this.

The drainage line flowing into 20 Canopus Road from the junction of Canopus Road and Grahams Road may provide habitat for aquatic fauna, including frogs and aquatic invertebrates. This flow line is infested with dense blackberry thickets and impeded by debris and vegetation. There is also minor erosion occurring along the flow line. To reduce erosion and improve water quality for aquatic fauna, the drainage line should be cleared of weeds and debris, and two small rock bioremediation retention basins should also be installed.

Uncontrolled domestic dogs and cats have the potential to harass or kill native wildlife. The Reserve is currently used for on-lead dog exercise under Council's Dog Management Policy.<sup>7</sup> A recent survey of Mt Rumney residents undertaken by the Mt Rumney Landcare Group found that Mt Rumney/Canopus Hill residents are concerned about cat management issues. Council promotes responsible cat ownership, and will continue to encourage local residents to meet their obligations under the *Cat Management Act 2009* through having their cats microchipped, desexed and under effective control (eg indoors at night).

***Recommendation 12A: Clear weeds and debris from the drainage line near GR1 and install two small rock bioremediation retention basins.***

***Recommendation 12B: Distribute 'Responsible Cat Ownership' brochure to Mt Rumney residents.***

## 9 VEGETATION AND FAUNA MONITORING

An assessment of the condition of the DOV community within the Reserve was undertaken in March 2017 (refer Appendix 2). Information from regular vegetation condition assessments (VCAs) will enable an evaluation of the impact and effectiveness of management actions on the Reserves' native vegetation. The TASVEG VCA method should be undertaken by trained Council staff or consultants using standard TASVEG VCA forms.<sup>8</sup> Photo points have already been

<sup>7</sup> Clarence City Council (2015). Dog Management Policy. Clarence City Council, Tasmania.

<sup>8</sup> Full details of the TASVEG VCA method can be found at: [http://dpipwe.tas.gov.au/conservation/flora-of-tasmania/monitoring-and-mapping-tasmanias-vegetation-\(tasveg\)/vegetation-monitoring-in-tasmania](http://dpipwe.tas.gov.au/conservation/flora-of-tasmania/monitoring-and-mapping-tasmanias-vegetation-(tasveg)/vegetation-monitoring-in-tasmania)

established to provide further information on vegetation condition and annual regeneration growth.

***Recommendation 13: Undertake a follow-up Vegetation Condition Assessment (VCA) in the Reserve in 2021.***

***Recommendation 14: Monitor photo points within the VCA zone annually to facilitate monitoring of vegetation condition.***

The Reserve contains unique habitat for a range of wildlife species, and it is expected that species diversity could increase over time with ongoing appropriate vegetation management practices. As discussed in section 4.2, a fauna survey (using hair traps and bat nets) was undertaken in November 2016 and a bird survey was undertaken in February 2017. Follow-up fauna and bird surveys to identify the species present in the Reserve are recommended to be undertaken at the end of the plan (ie 2021) as a basis for monitoring species diversity over time.<sup>9</sup>

***Recommendation 15: Undertake fauna surveys in 2021 to assess species diversity and further inform on ground management activities.***

An analysis of all completed VCAs, fauna surveys and photo points should be undertaken in 2021 to determine trends and implications for ongoing vegetation management in the Reserves. This should be undertaken in conjunction with a review of the *Canopus-Centauri Reserve Activity Plan 2017-2021* scheduled for 2021 (refer Section 16).

***Recommendation 16: Undertake an analysis of all photo points, VCAs and fauna surveys in 2021 to determine trends and inform future management activities.***

## 10 RESERVE ENTRANCES

The main entrances to the Reserve are illustrated in Figure 4. The main entrances are currently from Canopus Road (CR1) and Centauri Drive (CD1), with parking and access to 20 Canopus Road from the Grahams Road entrance (GR1) possible but not clearly signposted. Key management issues identified for these entrances are summarised in Table 1. Two new, low key entrances to 52 Grahams Road are proposed in conjunction with a new walking track circuit (refer Section 11).

***Recommendation 17: Improve Reserve entrances by installing additional signage and improving accessibility and visual amenity.***

## 11 TRACKS AND TRAILS

Consultation during the development of this plan has indicated that there is a level of community desire for a walking track circuit linking 20 Canopus Road with 52 Grahams Road. This could be achieved through:

<sup>9</sup> If possible, bird surveys should be undertaken in conjunction with BirdLife Tasmania using standard BirdLife Australia monitoring techniques.



**Figure 4:** Main entrances to the Reserve, including two proposed new entrances GR2 and CR2 (base map sourced from the LIST).

**Table 1:** Recommended management activities to be undertaken at Reserve entrances.

Issue	Description	Recommendation
Signage	There is no clear sign identifying the Reserve name at the Grahams Road entrance to 20 Canopus Drive or at 52 Grahams Road	Install standard Reserve name signs at GR1, GR2 and CR2
	Reserve sign at CR1 is hard to see from the road due to overhanging tree branches	Prune branches overhanging the sign at CR1
Parking	Parking at CR1 and GB2 is limited to the narrow road verge	Assess the demand for more formal car parking at CR1 and GR2 following completion of the proposed new walking track circuit (refer section 11) and, if deemed required, evaluate the best option to create car parking spaces.
Visual amenity	Some entrances would benefit from landscaping activities and/or regular maintenance	Undertake landscaping at CR1 as per concept landscape plan detailed in Appendix 8. Install two panels of split log and rail fencing at GR1 (consistent with the thematic entrance fencing elsewhere along the Tangara Trail)



- sensitively resurfacing the walking track between CR1 and the Tasman Highway using gravel;
- upgrading the first 200m of the existing track into 20 Canopus Road from Reserve entrance GR1, including the installation of a piped culvert in the small water flow line that crosses the track;
- delineating and constructing a new walking track through 52 Grahams Road from GR2 to CR2;
- delineating and constructing a new walking track along the Canopus Road roadside verge from CR2 to CR1;
- installing a track network map at Reserve entrances CR1, GR1 and GR2 to promote a walking track circuit encompassing 20 Canopus Road and 52 Grahams Road; and
- installing unobtrusive track direction signage at track junctions.

***Recommendation 18: Assess the feasibility of creating a walking track circuit encompassing 20 Canopus Road and 52 Grahams Road, including improving the condition of existing tracks, creating new walking track linkages and installing track signage.***

The track network through 20 Canopus Road requires maintenance to the standard specified in the Reserve's bushfire management plan.

***Recommendation 19: Undertake track management activities as detailed in the Reserve's bushfire management plan.***

## 12 INFRASTRUCTURE

There is currently limited community infrastructure located within the Reserve, and its natural environment would be enhanced through minimising significant additional infrastructure installation. This sentiment was reflected during the community consultation process.

No additional infrastructure is proposed within the next five years, with the exception of limited new signage (as discussed in sections 10, 11 and 14). While dog waste infrastructure was suggested during community consultation, no evidence of dog waste was observed in the Reserve during the development of this plan, and it is considered that funding of regular dog waste collection from this Reserve could be better spent on alternative management activities.

A further review of the infrastructure requirements of the Reserve should be undertaken in 2021.

***Recommendation 20: Undertake a review of the infrastructure requirements of the Reserve in 2021.***

With regard to existing infrastructure, the wooden beams across the top of the historic stone bridge near GR1 are rotten and subject to collapse. While the bridge is not along the alignment of the track, from a risk management perspective these beams require replacement. Due to the potential heritage values associated with

the bridge, advice from Council's Historic Heritage Officer should be sought prior to any remediation work of this structure.

***Recommendation 21: Engage with Council's Historic Heritage Officer regarding the restoration of the historic stone bridge near GR1.***

### **13 BUSHFIRE MANAGEMENT**

The Reserve is located in a bushfire prone area, as defined by the Clarence Interim Planning Scheme. A five year Bushfire Management Plan encompassing 20 Canopus Road was developed for Council in 2011 and updated in 2015.<sup>10,11</sup> Key recommendations in the plan include no broad scale burning within the next five years and maintaining and repairing fire trails to required standards. The Bushfire Management Plan is scheduled for review in 2021.

### **14 COMMUNITY PARTICIPATION AND AWARENESS**

Community participation and awareness has an important role to play in protecting the natural, cultural and recreational values of the Reserve. For example, the Mt Rumney Landcare Group has previously undertaken voluntary revegetation, weed control and fauna monitoring activities at 20 Canopus Drive. Consultation with this Landcare Group revealed a strong appreciation of the support provided by Council and NRM South. With over 30 members, the Group expressed a strong desire to continue engaging and working with Council to care for Mt Rumney's natural values, and indicated that a subgroup of the Mt Rumney Landcare Group could be formed to specifically care for the Canopus-Centauri Bushland Reserve.

***Recommendation 22: Continue to actively support the Mt Rumney Landcare Group Inc.***

Interpretation signs provide an important opportunity to display information on the Reserves' natural values and how to become involved in caring for these. A small interpretation sign is proposed at CR1 with information about the natural values of the Reserve (including the threatened flora and fauna species present), a map of the Reserve's track network and information about the activities of the Mt Rumney Landcare Group and how to become involved. A further interpretation sign regarding the historic stone bridge near GR1 is also proposed.

***Recommendation 23: Install an interpretation sign regarding the Reserve's natural values and Mt Rumney Landcare Group activities at Reserve entrance CR1.***

***Recommendation 24: Install an interpretation sign regarding the historic stone bridge near GR1 in consultation with Council's Historic Heritage Officer.***

<sup>10</sup> AVK Environmental Management (2011). *Canopus-Centauri Bushfire Management Plan*. Unpublished report for Clarence City Council.

<sup>11</sup> AVK Environmental Management (2015). *Draft Canopus-Centauri Bushfire Management Plan*. Unpublished report for Clarence City Council.

Under the Tasmanian *Work Health and Safety Act 2012*, volunteers are considered 'workers' when working for Council on Council owned land. Council therefore has a duty of care to provide a safe workplace for volunteer workers who may undertake management activities within the Reserves.

- All volunteers have rights and responsibilities. Volunteers have the right to a safe work environment, to be treated fairly and with respect, to public liability insurance, to safe equipment, tools and personal protective equipment (PPE), to adequate instruction to perform tasks, to contribute their suggestions and to receive acknowledgement for their contributions. Volunteers also have the right to refuse work if they consider it unsafe.
- Volunteers also have the responsibility to care for the health and safety of others, to respect others, to follow policies, procedures and instructions, and to care for their own health and safety.

With this in mind, all volunteers need to refer to the relevant Council Safe Work Method Statements (SWMSs) before undertaking works in the Reserves, including cut and paste work weed control work, brushcutting and spreading of mulch. These are available from Council's Natural Areas Volunteer Coordinator (Chris Johns, phone 6217 9715 or email [cjohns@ccc.tas.gov.au](mailto:cjohns@ccc.tas.gov.au)). All spot spraying should be undertaken by certified operators (eg Council staff, contractors).

## 15 IMPLEMENTATION PLAN

A map illustrating the location of on ground management activities recommended within the Reserve is provided at Figure 5. This is based on the key recommendations contained within this plan, which are summarised in detail at Appendix 9.

Based on these recommendations, an Implementation Plan with associated performance measures has been developed and is provided at Table 2. It identifies three stages of management activities to be undertaken within the Reserves:

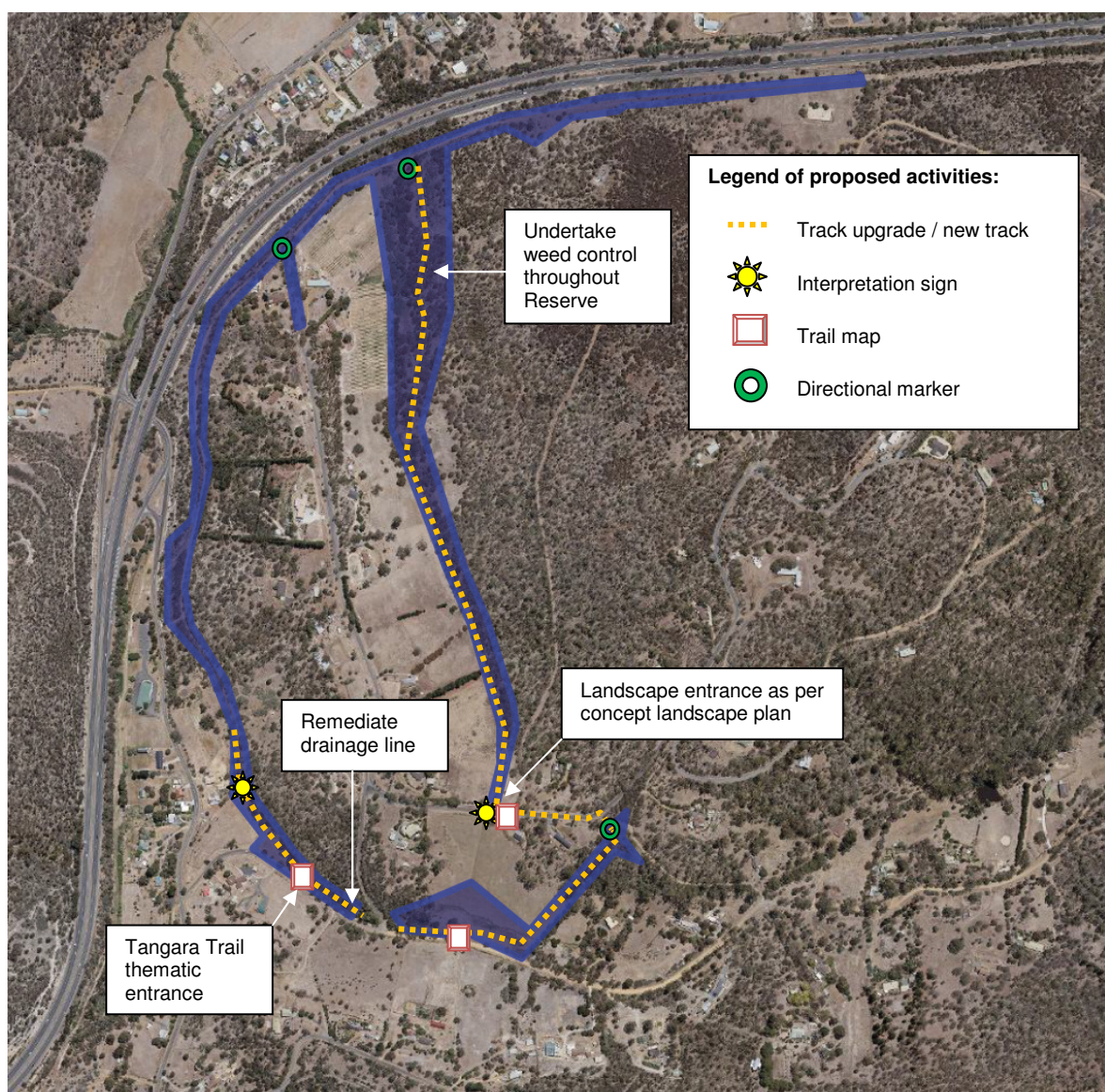
- Priority 1 - immediate (6-12 months) management activities.
- Priority 2 – medium term (1-3 years) management priorities.
- Priority 3 – long term (5 years) management priorities.

The intent of the Implementation Plan is to provide a guide to outcomes that could be achieved within the Reserve by Clarence City Council, contractors and/or volunteer groups within the period 2017-2021 if sufficient resources are available.

The Implementation Plan provides an indication of the level of funding required to achieve these outcomes.<sup>12</sup> While it would be desirable to undertake all the recommended activities, it is acknowledged that this may not be possible due to

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<sup>12</sup> Funding details are based on an internal Council document which provides a detailed five year cost estimate for all planned activities. This has been developed primarily for Council budgetary processes and potential grant applications. Specific details may be sought by contacting Council's NRM Planner (Phil Watson, phone 6217 9713 or email [pwatson@ccc.tas.gov.au](mailto:pwatson@ccc.tas.gov.au)).



**Figure 5:** Overview of key proposed on ground management activities in the Canopus-Centauri Bushland Reserve (aerial photo from the LIST).

resource constraints, and implementation will ultimately be guided by what is achievable with resources as they become available. Federal, State and Local Government grants programs may provide an opportunity to obtain resources to implement many of the recommendations contained within this report.

A review of progress against all performance measures should be undertaken annually during the period 2017-2021 to help prioritise available resources.

***Recommendation 25: Review progress against all performance measures identified in the Implementation Plan annually.***

## 16 FUTURE PRIORITIES

A review of the *Canopus-Centauri Bushland Reserve Activity Plan 2017-2021* should be undertaken in 2021. The purpose of this review should be to:



- assess progress towards achieving the objectives of the *Canopus-Centauri Bushland Reserve Activity Plan 2017-2021*;
- assess progress against all performance measures;
- analyse photo point data and all completed flora and fauna assessments to determine trends and implications for ongoing vegetation management; and
- determine ongoing management priorities for the Reserve for the next five years.

***Recommendation 26: Review the Canopus-Centauri Bushland Reserve Activity Plan 2017-2021 in 2021 to assess progress and determine ongoing management priorities for the Reserve.***

**Table 2:** Implementation Plan for undertaking recommended management activities within the Reserve.

Priority	Rec. No.	Action	Seasonal timing	Performance measure	Responsibility	Estimated funding <sup>13</sup>
<b>Weed control</b>						
1	R2	Control Spanish heath and vipers bugloss at 20 Canopus Road with communication/coordination with surrounding landholders to be undertaken by Council's Weeds Planning Officer	Spring – summer for spot spraying; all year round for other techniques	Spanish heath and vipers bugloss eradicated from 20 Canopus Road and adjacent properties	Council or contractor	\$2,000
2,3	R3	Undertake a sweep of the bushland area of 20 Canopus Road and control all declared and environmental woody weeds encountered	Spring – summer for spot spraying; all year round for other techniques	All declared and environmental woody weeds eradicated from 20 Canopus Road	Council or contractor	\$3,000 per annum
2,3	R4	Control dense infestations of thistles in the bushland area of 20 Canopus Road to facilitate natural regeneration	Spring – summer for spot spraying; all year round for other techniques		Council or contractor	
1	R5	Remove the mature melaleuca tree growing near CD1	N/A	Melaleuca tree near CD1 removed.	Council	N/A
1,2,3	R6	Undertake an annual sweep of the Reserve to remove germinants of declared and environmental weeds	Spring – summer for spot spraying; all year round for other techniques		Council, contractor and/or volunteer groups	\$2,000 per annum
3	R8	Undertake follow-up GPS mapping of all weeds	Spring - summer	Weed maps and Council database are updated within 5 years	Council, contractor and/or volunteer groups	\$800 (N/A if performed by Council staff)

<sup>13</sup> Funding estimate is based on total costs required to undertake all recommended activities over the period 2017-18 to 2021-22.

Priority	Rec. No.	Action	Seasonal timing	Performance measure	Responsibility	Estimated funding <sup>13</sup>
<b>Fauna habitat management</b>						
2	R12	Clear weeds and debris from the drainage line near GR1 and install two small rock bioremediation retention basins	N/A	Drainage line remediated	Council	
<b>Vegetation and fauna monitoring</b>						
3	R13	Undertake a follow-up Vegetation Condition Assessment (VCA) in the Reserve in 2021	In season (e.g. for annuals)	VCA completed in 2021	Council or contractor	\$1,000 (N/A if performed by Council staff)
1,2,3	R14	Monitor photo points within the VCA zone annually to facilitate monitoring of vegetation condition	Spring	Annual photos taken	Contractor	\$700 per annum (N/A if performed by Council staff)
1,3	R15	Undertake fauna surveys in 2021 to assess species diversity and further inform on ground management activities	N/A	Fauna and bird surveys completed 2021	Contractor and/or BirdLife Tasmania and/or University of Tasmania	\$3,000
<b>Reserve entrances</b>						
1	R17	Install Reserve entrance signs at GR1, GR2 and CR2	N/A	Reserve entrance signs installed at GR1, GR2 and CR2	Council	\$1,500
1	R17	Prune branches overhanging the sign at CR1	N/A	Reserve entrance sign at CR1 clearly visible	Council	N/A
3	R17	Assess the demand for more formal car parking at CR1 and GR2 following completion of the proposed new walking track circuit and, if deemed required, evaluate the best option to create car parking spaces	N/A	Car park study completed	Council	N/A



Priority	Rec. No.	Action	Seasonal timing	Performance measure	Responsibility	Estimated funding <sup>13</sup>
2	R17	Undertake landscaping at CR1 as per concept landscape plan detailed in Appendix 8	N/A	Landscaping completed at CR1	Council or contractor	\$3,000
2	R17	Install two panels of split log and rail fencing at GR1 (consistent with the thematic entrance fencing elsewhere along the Tangara Trail)	N/A	Tangara Trail thematic fencing entrance installed at GR1	Council or contractor	\$1,500
<b>Tracks and trails</b>						
1	R18	Assess the feasibility of creating a walking track circuit encompassing 20 Canopus Road and 52 Grahams Road, including improving the condition of existing tracks, creating new walking track linkages and installing track signage	N/A	Feasibility study completed	Council or contractor	\$3,000
1,2,3	R19	Undertake track management activities as detailed in the Reserve's bushfire management plan	N/A	Fire trails maintained to required standard as detailed in the Reserve's bushfire management plan	Council	N/A
<b>Infrastructure</b>						
3	R20	Review the infrastructure requirements of the Reserve in 2021	N/A	Infrastructure review completed in 2021	Council	N/A
1	R21	Engage with Council's Historic Heritage Officer regarding the restoration of the historic stone bridge near GR1	N/A	Wooden rails on top of stone bridge restored	Council	N/A
<b>Community participation and awareness</b>						
2	R23	Install an interpretation sign regarding the Reserve's natural values and Mt Rumney Landcare Group Inc. activities at Reserve entrance CR1	N/A	Interpretation signage installed	Council, contractor or volunteers	\$1,500
2	R24	Install an interpretation sign regarding the historic stone bridge near GR1 in consultation with Council's Historic Heritage Officer.	N/A	Interpretation signage installed	Council, contractor or volunteers	\$800

Priority	Rec. No.	Action	Seasonal timing	Performance measure	Responsibility	Estimated funding <sup>13</sup>
<b>Implementation plan</b>						
1,2&3	R25	Undertake annual review against all performance measures	N/A	Review of all performance measures completed annually	Council	N/A
3	R26	Review the <i>Canopus-Centauri Bushland Reserve Activity Plan 2017-2021</i> in 2021 to assess progress and determine ongoing management priorities for the Reserve	N/A	<i>Canopus-Centauri Bushland Reserve Activity Plan 2017-2021</i> reviewed within 5 years	Council and/or contractor	\$10,000

## APPENDIX 1: CONSERVATION SIGNIFICANCE OF THE RESERVE'S NATIVE FLORA AND FAUNA

The native vegetation communities occurring within the Canopus-Centauri Bushland Reserve are summarised in Table A1.1. Of these, *Eucalyptus ovata* forest and woodland and *Eucalypt globulus* dry forest and woodland are listed as threatened native vegetation communities under the Tasmanian *Nature Conservation Act 2002*.

**Table A1.1:** Conservation status of native vegetation communities occurring within the Reserve.

Community name	TASVEG code	Description	Conservation status
<i>Eucalyptus globulus</i> dry forest and woodland	DGL	Dry sclerophyll community dominated by <i>E. globulus</i> . The ground layer is dominated by grasses. Small patch of this community at 52 Grahams Road.	Threatened
<i>Eucalyptus ovata</i> forest and woodland	DOV	<i>E. ovata</i> woodland with a grassy/sedgy understorey, with sedges becoming more dominant closer to the drainage line. Occurs in the eastern section of 20 Canopus Road.	Threatened
<i>Eucalyptus amygdalina</i> forest on mudstone	DAM	Community dominated by <i>E. amygdalina</i> (black peppermint) with a grassy understorey. Occurs in the western section of 20 Canopus Road along the pipeline reserve.	Not threatened

Four flora species listed under the Tasmanian *Threatened Species Protection Act 1995* (the TSP Act) and/or the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (the EPBC Act) have been previously recorded within the Reserve at 20 Canopus Drive.<sup>14</sup> These include:

- *Carex tasmanica* (curly sedge), which is listed as vulnerable under the EPBC Act; and
- *Haloragis heterophylla* (variable raspwort), *Juncus amabilis* (gentle rush) and *Rytidosperma indutum* (tall wallaby grass), which are all listed as rare under the TSP Act.

The Reserve contains potential habitat for the endangered swift parrot (*Lathamus discolor*), and the eastern barred bandicoot (*Perameles gunnii*) was recorded in

<sup>14</sup> AVK Environmental Management (2015). *Draft Canopus-Centauri Bushfire Management Plan*. Unpublished report for Clarence City Council.



the Reserve in November 2016 (Paul Grey, NRM Facilitator for Sorell Council, pers. comm. November 2016). The conservation status and habitat of these species is summarised in Table A1.2.

**Table A1.2:** Fauna species of conservation significance for which suitable habitat exists within the Reserve.

<b>Fauna species</b>	<b>Common name</b>	<b>Conservation status<sup>15</sup></b>	<b>Habitat / Comments</b>
<i>Lathamus discolor</i>	swift parrot	Endangered ENDANGERED	Nesting habitat is hollows in mature eucalypts with stem diameter >70cm at breast height. Forages in mature <i>Eucalyptus globulus</i> and <i>E. ovata</i> trees. Potential nesting and foraging habitat exists within the Reserve.
<i>Perameles gunnii</i>	eastern barred bandicoot	VULNERABLE	Inhabits grassy woodlands, native grasslands and mosaics of pasture and shrubby ground cover. Potential nesting and foraging habitat exists within the Reserve.

<sup>15</sup> Lower case = TSP Act; UPPER CASE = EPBC Act

## APPENDIX 2: VEGETATION CONDITION ASSESSMENT OF THE RESERVE

### VEGETATION CONDITION ASSESSMENT SUMMARY REPORT CANOPUS-CENTAURI BUSHLAND RESERVE

#### SITE DETAILS

Location: **Canopus Centauri** Zone no.: **Zone 1**

Monitoring Point: Easting: 534767 mE Northing: 5256543 mN

Date of assessment: 3 Mar. 2017 Assessor(s): Kerri Spicer

Vegetation type: ***Eucalyptus ovata* forest and woodland (DOV) – woodland variant**

#### VEGETATION CONDITION ASSESSMENT SUMMARY

[taken from the field-collected data on the Vegetation Condition Assessment form – see scanned field sheets]

Element	Component (possible score)	Score 2015	% of habitat component remaining from "benchmark" condition based on current habitat condition scores
Site condition	<b>Large trees</b> (10)	2	
	<b>Tree canopy cover</b> (5)	5	
	<b>Lack of weeds</b> (15)	6	
	<b>Understorey</b> (25)	15	
	<b>Recruitment</b> (10)	10	
	<b>Organic litter</b> (5)	5	
	<b>Logs</b> (5)	0	
<b>Sub-total Site Condition</b> (75)		<b>43</b>	
Landscape context	<b>Patch size</b> (10)	8	
	<b>Neighbourhood</b> (10)	3	
	<b>Distance to core area</b> (5)	4	
<b>Sub-total Landscape Context</b> (25)		<b>15</b>	
<b>TOTAL</b> (100)		<b>58</b>	

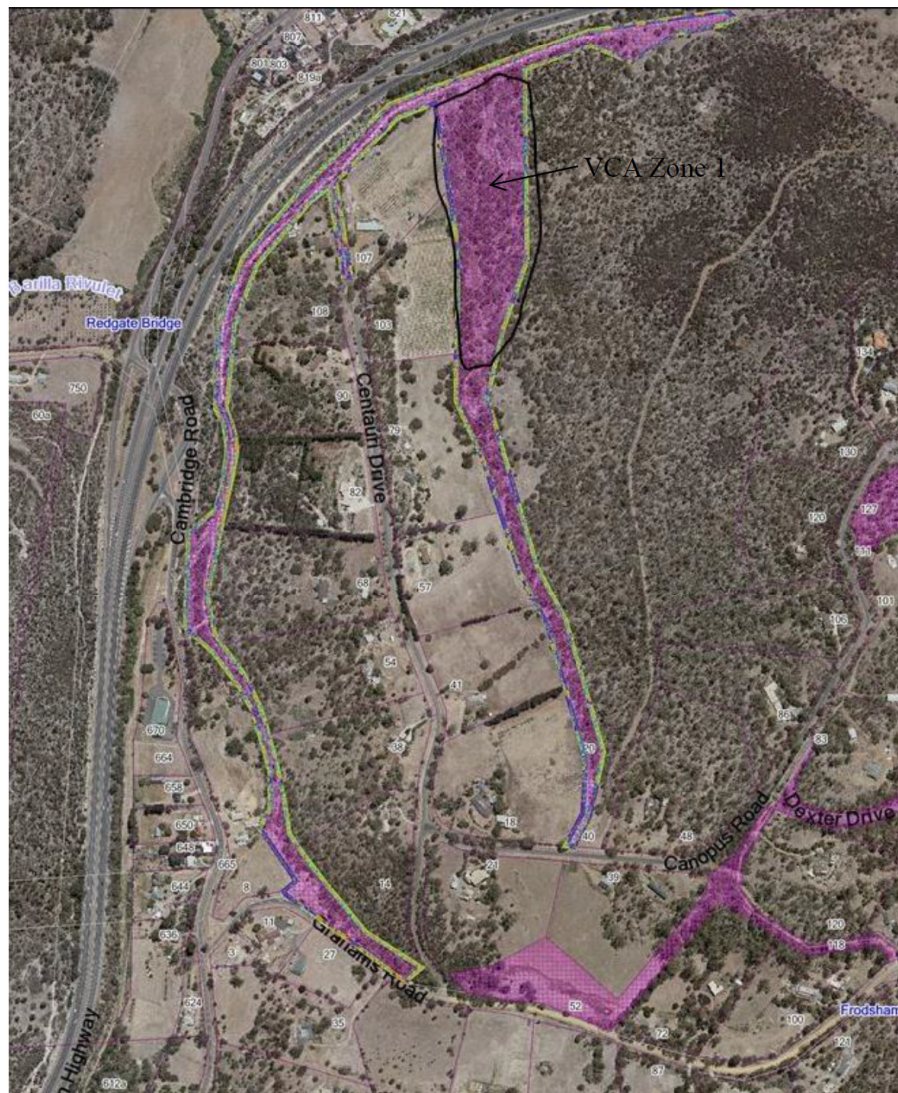
The Canopus-Centauri bushland reserve is a long, narrow reserve that follows a drainage line but adjoins a larger forested area to the west ensuring a reasonable landscape context score for this reserve (15/25). The VCA Zone was undertaken in the northern section, at its widest location, which represents the best vegetation condition within the Canopus-Centauri bushland reserve (Figure 1). A greater weed cover from exotic grasses is present in the southern section of the reserve along with a lower eucalypt canopy cover, due a lower density of eucalypts, which would result in a slightly lower VCA score for the southern section of the reserve.

Weed cover, a lack of coarse woody debris and the younger age structure of the *Eucalyptus ovata* woodland (DOV) in the north of the reserve are the predominant reasons for the reduction in the vegetation condition score (58/100). The woodland consists mostly of small regrowth trees but does contain the odd larger tree (3/ha vs benchmark 15/ha) that provide important habitat values. A reasonable quantity of weeds are present (20% weed cover), reflecting the disturbance history of this site. The weed cover consists predominantly of exotic grasses and herbs, although small patches of the more high threat woody weeds *Rubus* spp. (blackberry) and *Rosa rubiginosa* (sweet

briar) are present. Very little coarse woody debris was present (log length 2 m in 0.1 ha vs benchmark 40 m).

This *E. ovata* woodland has a grassy/sedgy understorey with sedges becoming more dominant closer to the drainage line. The VCA benchmark for DOV assumes a shrubby understorey and doesn't account for the great variation in understorey that can occur within this vegetation community. The reduction in the understorey score (15/25) is mostly a reflection of this factor - a reasonable understorey diversity is present and, despite the prevalence of exotic grasses, a good cover of native grasses exists. Good eucalypt regeneration was present, a real asset for a small reserve that has had a significant disturbance history. Evidence of small patch burns was present at the time of this assessment.

The main issue for maintaining the condition of this forest will be ensuring the weed cover is contained and doesn't increase. Otherwise, the condition of this woodland will improve as it matures.



**Figure 1.** Canopus-Centauri Bushland Reserve and VCA Zone location



**PHOTO-POINT**

Easting: 534767 mE Northing: 5256543 mN

Images taken at eye-level and angled upwards (approx. 45°) at cardinal compass points of north, east, south and west.

**NORTH**



**EAST**



**SOUTH**



WEST



### APPENDIX 3: BIRD SURVEY OF THE RESERVE

#### CANOPUS-CENTAURI RESERVE – BIRD SURVEY

**Observer: Denis Abbott**

From the bottom, or highway end of the gully, past two dams to the paddock lined with *Pinus radiata*, nor far from Canopus Road.

Date: 16<sup>th</sup> February, 2017, 10.45-11.20

Birds seen/heard:

Dusky Robin  
Eastern Rosella  
European Goldfinch  
Forest Raven  
Green rosella  
Grey Butcherbird  
Kookaburra  
Noisy Miner – most numerous  
Spotted Pardalote  
Superb Fairy Wren  
Yellow-throated Honeyeater  
Yellow-rumped Thornbill – a flock



**APPENDIX 4: UNANTICIPATED DISCOVERY PLAN**

## Unanticipated Discovery Plan

### For proponents and consultants dealing with Aboriginal Heritage in Tasmania

This paper provides a Plan that should be followed when dealing with unanticipated discoveries of Aboriginal Cultural Heritage such as sites and objects. The plan provides guidance to project personnel so that they may meet their obligations with respect to Aboriginal heritage in accordance with the *Aboriginal Relics Act 1975* and the *Coroners Act 1995*.

The Unanticipated Discovery Plan is in two sections. The first section primarily explains mitigation strategies that should be employed when any Aboriginal Cultural Heritage sites or items are discovered excluding skeletal remains (burials), while the second process deals specifically with skeletal remains (burials).

#### Discovery of Cultural Heritage Items

Step 1: Any person who believes they have uncovered Aboriginal Cultural Heritage material should notify all employees or contractors that are working in the immediate area that all earth disturbance works must cease immediately.

Step 2: A temporary 'no-go' or buffer zone of at least 10m x 10m should be implemented to protect the suspected Aboriginal Cultural Heritage site or relics. No unauthorised entry or works will be allowed within this 'no-go' zone until the suspected Aboriginal Cultural Heritage relics have been assessed by a recognised Aboriginal Heritage Officer or Archaeologist.

Step 3: Aboriginal Heritage Tasmania (AHT) in Hobart (ph 6233 6613) needs to be notified and consulted as soon as possible and informed of the discovery. AHT will then provide further advice in accordance with the *Aboriginal Relics Act 1975*.

#### Discovery of Skeletal Material


Step 1: Call the Police immediately. Under no circumstances should the suspected skeletal remains be touched or disturbed. The area must now be considered a crime scene. It is a criminal offence to interfere with a crime scene.

Step 2: Any person who believes they have uncovered skeletal material should notify all employees or contractors that are working in the immediate area that all earth disturbance works must cease immediately.

Step 3: A temporary 'no-go' or buffer zone of at least 50m x 50m should be implemented to protect the suspected skeletal remains. No unauthorised entry or works will be allowed within this no-go' zone until the suspected skeletal remains have been assessed by the Police and or Coroner.

Step 4: Should the skeletal remains be determined to be of Aboriginal origin, the Coroner will contact the Tasmanian Aboriginal Land and Sea Council (TALSC) to arrange for repatriation of the remains, as per the *Coroners Act 1995*.

Aboriginal Heritage Tasmania  
Department of Primary Industries, Parks, Water and Environment





## Unanticipated Discovery Plan

**Guide to the most common sites of Aboriginal Significance****Stone Artefact Scatters**

Stone artefacts are the tangible evidence found in regard to past Aboriginal lifeways. Stone artefacts indicate areas that were used by Aboriginal People, either for camping, hunting or other activities such as the manufacture of stone tools. Archaeologists can also determine the duration a site may have been occupied, the amount of times that the site may have been occupied, and the number of people that the area may have supported at any given time.

Some stone artefacts are the result of Aboriginal People fracturing or 'flaking' fine-grained rocks to produce sharp cutting or scraping implements. These were then used, for example, for cutting up animals and then scraping the hides. Volcanic rocks such as basalt were flaked and then ground down to form axes for a number of chopping and cutting tasks. The results of such activities can be seen in the archaeological record (i.e. scatters) in the form of modified stones such as cores, retouched flakes, hammerstones and flaked pieces. From these scatters, by understanding site density and frequency patterns, inferences can be made in relation to past Aboriginal lifeways.

**Shell Middens**

Shell middens by definition are prehistoric refuse pits. They are the leftover waste of resources exploited which formed the basis of Aboriginal diet. Midden sites can range in size from large mounds to small scatters of shell. Middens usually also contain as well as shell, the remains of animals exploited for food as well as artefacts of stone, bone and shell. These sites are usually found near waterways and coastal areas.

**Rockshelters**

Rockshelters can either be shelters which contain archaeological deposits from living floors or art rock shelters, and may occur in any area of rocky terrain. Sediments on the floor of the rockshelter can contain preserved stratified deposits of archaeological material. Art types found in rockshelters can vary greatly. It can be in the form of painting, stencils of body parts, tools and equipment, or engravings. Style variations in painting can cover animal or human figurines, supernatural beings, and geometric patterns. Engravings can have similar variations as they can depict tools, humans, human parts, animals and birds and their tracks, geometric patterns and supernatural beings. Pecking is also a form of engraving.

**Quarries or Stone Procurement Sites**

Quarry sites occur where outliers of suitable tool-making stone appear. A quarry can be generally recognised by evidence of human manipulation and extraction of suitable material and the debris left by the processing of the suitable material. Some quarries can cover vast areas with extremely high amounts of lithic discard. Ochre or pigment was also quarried.

**Burials**

Burials can occur anywhere, though they are generally found close to areas where there was a high population concentration. Burials can occur where there are soft sediments such as sand hills, they can be found in caves and rockshelters and sometimes they can be associated with hollow trees.

## APPENDIX 5: SUMMARY OF STAKEHOLDER CONSULTATION

During November-December 2016, identified stakeholders were invited to provide comments relevant to the development of the *Canopus-Centauri Bushland Reserve Activity Plan 2017-2021*.

A public meeting and community 'walk and talk' session was facilitated by Council and Tasflora on 27 November 2016 and attended by 10 local residents, including members of the Mount Rumney Landcare Group. The purpose of the session was to seek input on the values and management issues associated with the Reserve.

Key issues raised during the walk and talk included:

- general agreement that minimal changes should be made to the Reserve;
- habitat preservation is important;
- 52 Grahams Road should be recognised as a Council Reserve and not private property, although minimise the development of the 20 metre right of way;
- Council should mow the grass and fix the fences at 52 Grahams Road;
- need to improve the walking track surface from CR1 down the hill;
- preference for dogs to be kept on lead, and dog infrastructure could be considered;
- support for creating a walking track circuit encompassing 20 Canopus Road and 52 Grahams Road; and
- continue to permit horse walking through the Reserve.

A feedback form seeking input to the *Canopus-Centauri Bushland Reserve Activity Plan 2017-2021* was also mailed to local residents and relevant stakeholders. A written response was received from one stakeholder, as summarised in Table A5.1.

**Table A5.1:** Summary of written responses received during initial stakeholder consultation on the *Canopus-Centauri Bushland Reserve Activity Plan 2017-2021*.

Management issue	Response
Continue serrated tussock control along the pipeline route	Weed control recommendations in this plan primarily focus on the bushland area in the eastern section of 20 Canopus Road where the threatened <i>Eucalyptus ovata</i> community occurs. Serrated tussock along the pipeline route will continue to be monitored and controlled under the <i>Mt Rumney Vegetation Management Plan 2013-18</i> .
Increase rabbit eradication program at	Not considered a priority due to the number of neighbouring private properties with likely existing rabbit populations that cannot be simultaneously eradicated.

Management issue	Response
20 Canopus Road as they are in plague proportions	
Increase gravel pathways to prevent erosion	Upgrading the track network through 20 Canopus Road is addressed in section 11.

The draft *Canopus-Centauri Bushland Reserve Activity Plan 2017-2021* was released for community consultation in April - May 2017. Seven submissions on the draft plan were received during the consultation period. A summary of the issues raised in these submissions are provided in Table A5.2.

**Table A5.2:** Summary of written responses received on the draft *Canopus-Centauri Bushland Reserve Activity Plan 2017-2021*.

Issue	Comment
<b>Weed management</b>	
1 The growth in thistles following the burn off last year is a concern, as is the infestations of blackberry and Spanish heath. The Landcare group has been working on dealing with weeds but needs help and support.	No change recommended. Section 6.2 identifies these weeds and recommends that consideration should be given to engaging a contractor to undertake the initial sweep to remove all weeds encountered.
2 There needs to be a requirement that if council burns off, they return in (say) 6 months and remove any opportunistic weeds that grew due the fire.	No change recommended. Action 7 of the Reserve's Bushfire Management Plan recommends that follow up weeding be undertaken following fires.
<b>Regeneration and revegetation</b>	
3 Maintenance of planted trees at the top end of the Reserve is required.	Section 7.2 states that these plantings need to be maintained as per class 3 fire trail standards as outlined in MP1 of <i>Bushfire Management Strategy - Best Management Practice Guidelines</i> . Additional commentary could be added to state that general ongoing maintenance of these plants should be undertaken.
<b>Fauna habitat management</b>	
4 Maintain wildlife corridor and habitat for the swift parrot and rare vegetation.	No change recommended. These issues are addressed in Section 4.5 and Section 8.

Issue	Comment
5 Many wallabies are killed on the roads adjacent to the reserve....[need] motorists' warning signs perhaps.	Section 8 could include a recommendation to install wildlife warning signs along Canopus Road.
6 I don't think the plan has captured residents' concerns about feral cats sufficiently. The reference seems to be very much in passing and a motherhood statement.	Cat management, including Mt Rumney residents' concerns, is currently discussed more broadly in Section 8. Consistent with other RAPs developed, a recommendation could be included regarding distribution of a responsible cat management brochure to Mt Rumney residents.
7 [The Reserve] could be an ideal location for a pilot cat control exercise.	Refer response to issue 6.
8 Work to actively reduce cat predation in the area.	Refer response to issue 6.
9 I don't think the plan has captured residents' concerns about feral cats sufficiently. The reference seems to be very mush in passing and a motherhood statement.	Refer response to issue 6.
<b>Tracks and trails</b>	
10 Maintain track surfaces and facilitate a circuit walk with signage, but not trail bikes.	No change recommended. These issues are addressed in Section 11.
11 Put in a MTB track to link the Acton area with the Meehan Range MTB tracks.	No change recommended. The reuse pipeline already serves as a MTB track linking Acton to the MTB Park via Belbins Rd.
12 Little maintenance has been undertaken, particularly to the constructed path which is now mostly overgrown.	No change recommended. Track maintenance is addressed in Section 11.
13 Promotion of the walkway is recommended.	New signage is proposed in section 11.
14 I am concerned that R18 and R21 are not priority 1, as I believe the reserve's walking tracks are in very poor condition and urgently need upgrading. The pipeline track is no longer traversable (or in fact clear).	R18 and R21 are currently priority 2 recommendations (i.e. medium term - to be undertaken in the next 1-3 years). Their priority could changed to priority 1 (short term – to be undertaken in the next 6-12 months) if deemed achievable by Council.



Issue	Comment
<b>Community participation and awareness</b>	
15 The proposals for directional and interpretative signage should be high on the priority list.	Directional signage is included within R18 – refer response to issue 14 above. R23 and R24 relate to interpretation signage and are currently priority 2 recommendations (i.e. medium term - to be undertaken in the next 1-3 years). Their priority could be changed to priority 1 (short term – to be undertaken in the next 6-12 months) if deemed achievable by Council.
<b>Other issues outside the scope of the plan</b>	
16 Council should acquire the 31.7 hectare parcel of vacant land at number 40 Canopus Road and adhere it to the existing reserve.	No change recommended. However this issue should be noted by Council.
17 Management in relation to fire threat is important.	No change recommended. A Bushfire Management Plan already exists for the Reserve.
18 There are many fallen trees and together with other dead limbs/branches makes the area very volatile to fire risk.	No change recommended. A Bushfire Management Plan already exists for the Reserve.
19 Any possibilities to link the reserve with other reserves or walkways that may arise in the future should be taken advantage of. We would appreciate a walking link between Mt Rumney Rd and Grahams Road for example.	No change recommended. However this issue should be noted by Council.

A Canopus-Centauri Bushland Reserve Activity Plan Report Card was developed as a key tool in encouraging stakeholder feedback on the draft plan and was mailed out to residents and other interested stakeholders. The content of the Report Card is provided overleaf.

Where possible, all relevant community feedback has been considered in the development of the draft *Canopus-Centauri Bushland Reserve Activity Plan 2017-2021*. However some issues identified during the consultation process are beyond the scope of this plan or pertain to management issues outside the Reserves. These issues have been noted by Council and will be addressed through other processes where feasible.

### THE DRAFT CANOPUS-CENTAURI BUSHLAND RESERVE ACTIVITY PLAN RECOMMENDS:

- >> Investigating a walking track circuit linking 20 Canopus Drive with 52 Grahams Road
- >> Improving existing track surfaces at 20 Canopus Drive
- >> Installing track signage at appropriate locations
- >> Undertaking weed control activities
- >> Periodic monitoring of birds, bats and vegetation conditions
- >> Assisting natural regeneration following recent bushfire in reserve
- >> Actively supporting the Mt. Rumney Landcare Group
- >> Improving awareness of habitat values of the remnant bushland reserves

### STAY WITH US...

Council invites your comments on the draft Plan. The Plan will guide the community and Council as we work together to improve the management of the Reserves. You can find the draft plan at [www.ccc.tas.gov.au/consultation](http://www.ccc.tas.gov.au/consultation)

### USE THE ONLINE FORM OR CONTACT

BY 15th MAY 2017

Corinna Woolford | 0427 902 970  
tasflora@bigpond.com

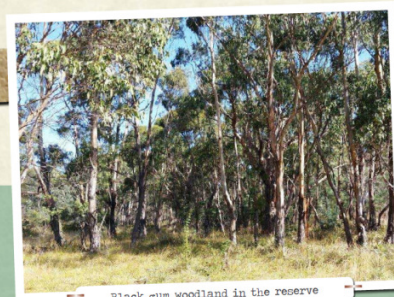
Phil Watson 6245 8619  
pwatson@ccc.tas.gov.au



Eastern Barred Bandicoot  
(now extinct in the wild in mainland Australia)

*"I think the Reserves are  
great because of  
their environment and  
freshwater ponds."*

Local resident



Black gum woodland in the reserve

## CANOPUS-CENTAURI BUSHLAND RESERVE

## REPORT CARD



Swift Parrot

Your Community and Council  
working together to care  
for our Reserves

*In the spring of 2016, Clarence City Council asked the community about the Canopus-Centauri Bushland Reserve ...these are the results.*

	EVALUATION				DESCRIPTION	COMMUNITY COMMENTS
	OUTSTANDING	VERY GOOD	PASS	CAN DO BETTER	CANOPUS-CENTAURI BUSHLAND RESERVE	
LOCATION					11 Hectares of bushland, grassy pipeline reserve and open pasture nestled on north-eastern side of Mt Rumney.	<i>Create a walking track circuit via 52 Grahams Road</i>
CULTURAL HERITAGE					Originally occupied by the Mumirimina clan of Oyster Bay Nation.	
VEGETATION					Consists of rare black gum woodland rare plants including the curly sedge.	
ANIMALS AND BIRDS					Home to wildlife and birds. Forms an important wildlife corridor outside of private property.	
LANDSCAPE					Attractive setting for locals to traverse Mt Rumney's natural bushland environment away from road verges and traffic.	<i>Natural setting valued by locals</i>
ACCESS AND USAGE					Popular with locals for walking, dog exercise, cycling and horse exercise.	<i>Improve track surfaces</i>
THREATS					Weed infestations, cat predation, wildfire, trail bikes and littering.	<i>Continue weed control efforts</i>






Stay with us on the journey of caring for the Canopus-Centauri Bushland Reserve. Your comments are highly valued!  
Go to <http://www.ccc.tas.gov.au/consultation> to comment.



Sorell Railway bridge in Reserve

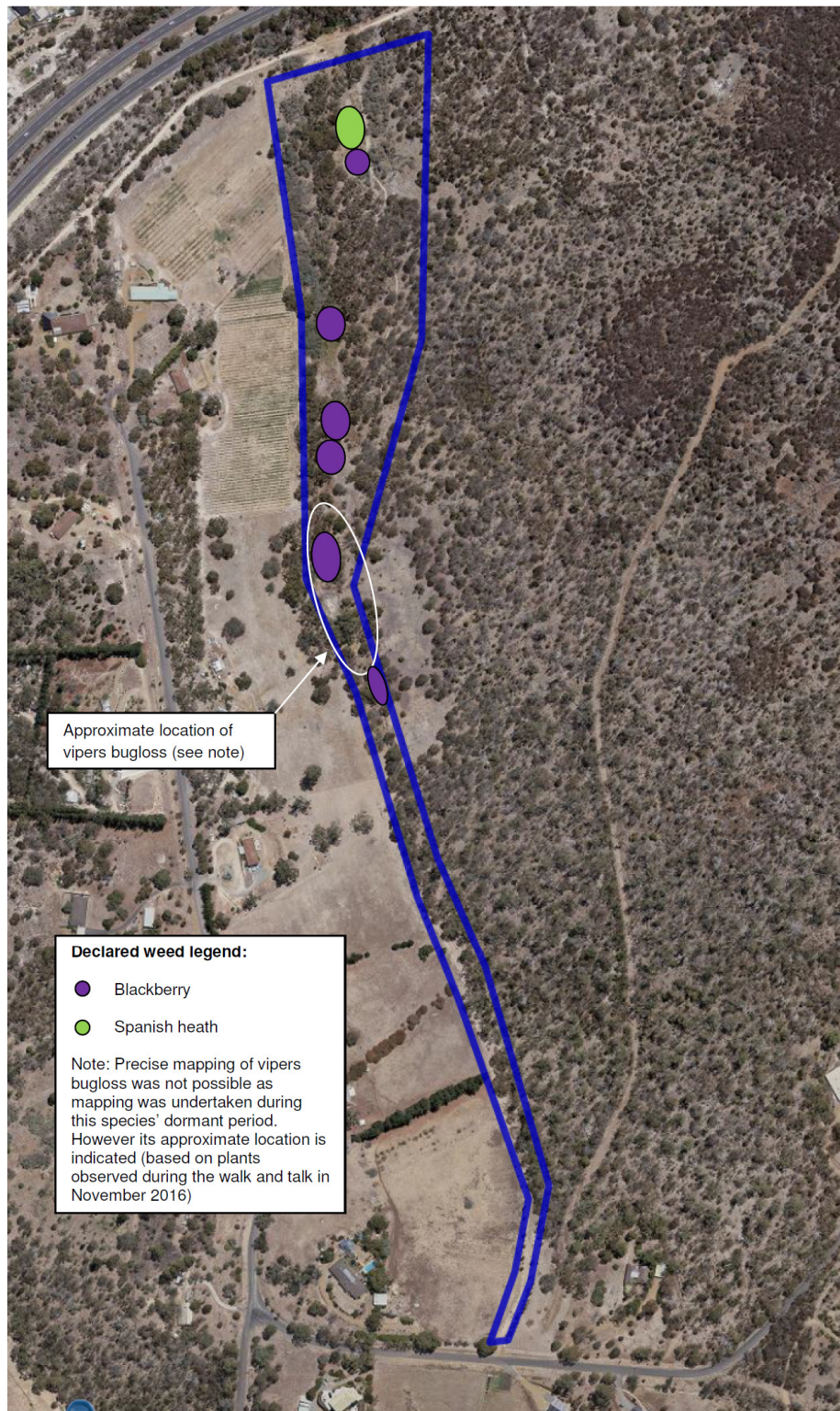


**APPENDIX 6: WEED SPECIES AND RECOMMENDED CONTROL TECHNIQUES**

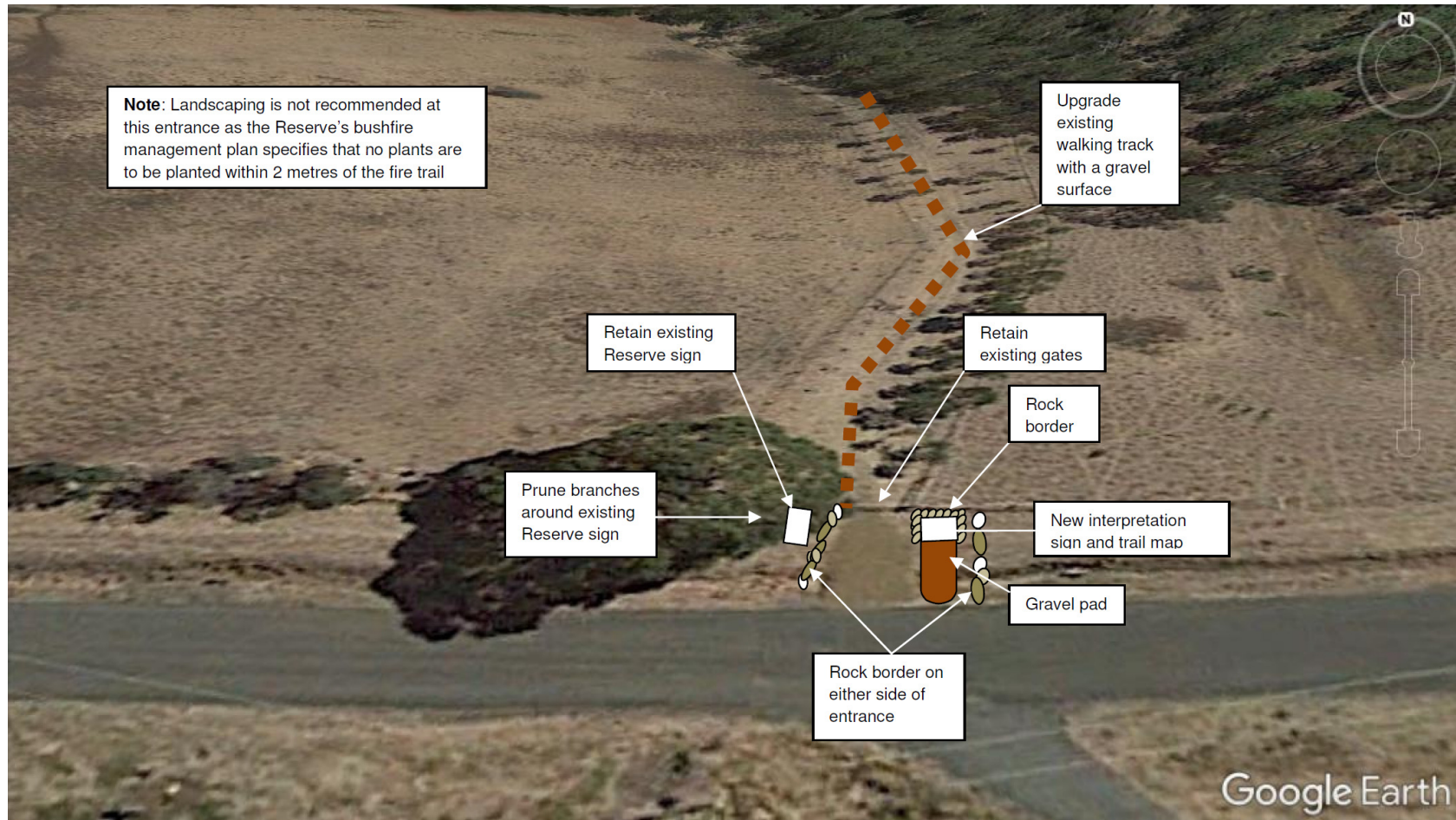
Common name	Species	Status	Picture	Recommended control technique
<u>DECLARED WEEDS</u>				
Blackberry	<i>Rubus fruticosus</i> aggregate	Declared WONS		Large stands - spot spray larger using an appropriate herbicide (as per the DPIPWE Control Guide) in non-fruiting periods Isolated patches - spot spray or cut and paste
Spanish heath	<i>Erica lusitanica</i>	Declared		Hand pull, cut and paste or spot spray using an appropriate herbicide (as per the DPIPWE Control Guide)
Vipers bugloss	<i>Echium vulgare</i>	Declared		Hand dig or spot spray using an appropriate herbicide (as per the DPIPWE Control Guide)  (Image sourced from DPIPWE Control Guide)



Common name	Species	Status	Picture	Recommended control technique
<u>OTHER ENVIRONMENTAL WEEDS</u>				
Hawthorn	<i>Crataegus monogyna</i>			Hand pull seedlings or cut and paste larger plants
Sweet briar	<i>Rosa rubiginosa</i>			Cut and paste or spot spray

**APPENDIX 7: LOCATION OF DECLARED WEEDS IN THE BUSHLAND SECTION OF 20 CANOPUS ROAD**



**APPENDIX 8: CONCEPT LANDSCAPE PLAN FOR RESERVE ENTRANCE CR1**

Note: Base map sourced from Google Earth

## APPENDIX 9: SUMMARY OF ON GROUND MANAGEMENT RECOMMENDATIONS

<b>Weed management</b>	
R1	Priority should be given to controlling weeds occurring in the threatened <i>Eucalyptus ovata</i> forest and woodland community at 20 Canopus Road.
R2	Control Spanish heath and vipers bugloss at 20 Canopus Road as an immediate priority, with communication/coordination with surrounding landholders to be undertaken by Council's Weeds Planning Officer.
R3	Undertake a sweep of the bushland area of 20 Canopus Road and control all declared and environmental woody weeds encountered.
R4	Control dense infestations of thistles in the bushland area of 20 Canopus Road to facilitate natural regeneration.
R5	Remove the mature melaleuca tree growing near CD1.
R6	Undertake an annual sweep of the Reserve to remove germinants of declared and environmental weeds.
R7	Undertake control of exotic grasses and broadleaf weeds only in revegetation areas and where necessary as part of a general Reserve maintenance program.
R8	Undertake GPS mapping of all weeds in the Reserve after five years to monitor progress and inform future weed control priorities.
<b>Regeneration and revegetation</b>	
R9	Revegetation should only be considered a priority in bare areas that may be created following weed control.
R10	Any future planting of trees must be undertaken in accordance with section 3.7 of the Reserve's bushfire management plan.
R11	New revegetation and landscaping activities should not be committed to unless sufficient resources are available to undertake ongoing regular maintenance of newly planted areas.
<b>Fauna habitat management</b>	
R12A	Clear weeds and debris from the drainage line near GR1 and install two small rock bioremediation retention basins.
R12B	Distribute 'Responsible Cat Ownership' brochure to Mt Rumney residents.
<b>Vegetation and fauna monitoring</b>	
R13	Undertake a follow-up Vegetation Condition Assessment (VCA) in the Reserve in 2021.
R14	Monitor photo points within the VCA zone annually to facilitate monitoring of vegetation condition.
R15	Undertake fauna surveys in 2021 to assess species diversity and further inform on ground management activities.
R16	Undertake an analysis of all photo points, VCAs and fauna surveys in 2021 to determine trends and inform future management activities.
<b>Reserve Entrances</b>	
R17	Improve Reserve entrances by installing additional signage and improving accessibility.



<b>Tracks and trails</b>	
R18	Assess the feasibility of creating a walking track circuit encompassing 20 Canopus Road and 52 Grahams Road, including improving the condition of existing tracks, creating new walking track linkages and installing track signage.
R19	Undertake track management activities as detailed in the Reserve's Bushfire Management Plan.
<b>Infrastructure</b>	
R20	Undertake a review of the infrastructure requirements of the Reserve in 2021.
R21	Engage with Council's Historic Heritage Officer regarding the restoration of the historic stone bridge near GR1.
<b>Community participation and awareness</b>	
R22	Continue to actively support the Mt Rumney Landcare Group Inc.
R23	Install an interpretation sign regarding the Reserve's natural values and Mt Rumney Landcare Group Inc. activities at Reserve entrance CR1.
R24	Install an interpretation sign regarding the historic stone bridge near GR1 in consultation with Council's Historic Heritage Officer.
<b>Implementation Plan</b>	
R25	Review progress against all performance measures identified in the Implementation Plan annually.
R26	Review the <i>Canopus-Centauri Bushland Reserve Activity Plan 2017-2021</i> in 2021 to assess progress and determine ongoing management priorities for the Reserve.