

Reserve Activity Plan

2013 - 2018

RISDON VALE CREEK AND GRASSTREE HILL RIVULET



ADVICE PREPARED BY TASFLORA FOR CLARENCE CITY COUNCIL JANUARY 2014 © Tasflora 2014.

This work is copyright. Apart from any use permitted under the Commonwealth Copyright Act 1968, no part (including the format, structure and style) may be reproduced by any process, nor may any other exclusive right be exercised, without prior written permission from Tasflora.



PO Box 420 Sandy Bay 7006 Mobile: 0438 391 121 Email: tasflora@bigpond.com

CONTENTS

1	BACKGROUND5
2	OBJECTIVES5
3	SITE DESCRIPTION6
4	SITE VALUES7
4.1	Native flora7
4.2	Native fauna7
4.3	Cultural heritage9
4.4	Recreational values9
4.5	Education values9
4.6	Landscape setting and connectivity10
5	BUSHFIRE RISK 10
6	STAKEHOLDER CONSULTATION11
7	WEED MANAGEMENT11
7.1	Weed species present11
7.2	Recommendations for primary weed control work12
7.3	Non-priority weed species14
7.4	Maintenance of weed control work14
8	REGENERATION AND REVEGETATION15
8.1	Regeneration15
8.2	Bushfire risk reduction15
8.3	Revegetation activities16
9	FAUNA HABITAT MANAGEMENT16
10	VEGETATION AND FAUNA MONITORING19

11 RESERVE ENTRANCES 19
12 TRACKS AND TRAILS21
13 INFRASTRUCTURE21
14 COMMUNITY PARTICIPATION AND AWARENESS23
15 IMPLEMENTATION PLAN25
16 FUTURE PRIORITIES31
17 REFERENCES31
APPENDIX 1: CONSERVATION SIGNIFICANCE OF THE RESERVE'S NATIVE FLORA AND FAUNA33
APPENDIX 2: UNANTICIPATED DISCOVERY PLAN35
APPENDIX 3: SUMMARY OF STAKEHOLDER CONSULTATION37
APPENDIX 4: WEED SPECIES PRESENT AND RECOMMENDED CONTROL TECHNIQUES40
APPENDIX 5: LOCATION OF DECLARED WEEDS44
APPENDIX 6: LOCATION OF NON-DECLARED ENVIRONMENTAL WEEDS 45
APPENDIX 7: SIGNAGE PLAN46
APPENDIX 8: CONCEPT LANDSCAPE PLAN FOR RESERVE ENTRANCE E647
APPENDIX 9: CONCEPT LANDSCAPE PLANS FOR ANN HARRISON ENTRANCE (RESERVE ENTRANCE E7)48
APPENDIX 10: RISDON VALE BIKE PARKS PROJECT PROPOSAL50
APPENDIX 11: SAFE WORK METHOD STATEMENT FOR CUT AND PASTE WORK BY VOLUNTEERS55
APPENDIX 12: SUMMARY OF ON GROUND MANAGEMENT RECOMMENDATIONS61

1 BACKGROUND

Risdon Vale Creek and Grasstree Hill Rivulet emanate from the Meehan range and flow through the suburb of Risdon Vale on Hobart's eastern shore, before joining together near Kerria Road and flowing on to the Derwent River near Risdon Cove.

The riparian areas surrounding these waterways in Risdon Vale are owned and managed by Clarence City Council (Council). This section of the waterways provides a natural backdrop for a large number of homes in Risdon Vale and is valued by locals for their natural setting and recreational track network.

A Rivercare Plan encompassing Risdon Vale Creek and Grasstree Hill Rivulet was prepared in 2002, with a vision of maintaining these and other local waterways as "...a clean, free flowing, accessible environment with sustainable biological systems via strategic, integrated activities and education of land managers and community members" (Sinclair Knight Merz 2002). A key recommendation of this plan was to undertake weed control along the Council owned sections of the waterways, and in 2007 a Weed Management Plan was prepared for Risdon Vale Creek (Tasflora 2007). Over the last 10 years, major weed infestations have been removed and new tracks constructed to facilitate community usage and enjoyment of the native riparian environment.

Tasflora has now been engaged by Council to develop a five year Reserve Activity Plan for the Council owned riparian sections of Risdon Vale Creek and Grasstree Hill Rivulet (hereafter referred to as "the Reserve"), including the development of an implementation plan identifying immediate and ongoing management priorities to be undertaken during the period 2013-2018.¹

The recommendations contained within this *Risdon Vale Creek and Grasstree Hill Rivulet Reserve Activity Plan 2013-2018* 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 Risdon Vale Creek and Grasstree Hill Rivulet Reserve Activity Plan 2013-2018 are to:

- ensure the Reserve is sustainably managed to preserve and enhance its 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 2013-2018;

-

¹ The Risdon Vale Creek and Grasstree Hill Rivulet Reserve Activity Plan 2013-2018 falls under Council's Clarence Bushland and Coastal Strategy, which summarises plans and strategies relevant to Reserves within the Clarence municipality.

- ensure that adequate fuel modified buffer zones, fuel breaks and emergency vehicle access are maintained to reduce the bushfire risk to adjoining properties and to enable the Tasmania Fire Service (TFS) to control bushfires in the Reserve; and
- encourage community engagement through raising awareness of the Reserve's values and encourage participation in activities to minimise threats to these values.

3 SITE DESCRIPTION

The riparian area covered by the *Risdon Vale Creek and Grasstree Hill Rivulet Reserve Activity Plan 2013-2018* is illustrated in Figure 1. The Reserve is zoned as Recreation under the *Clarence Planning Scheme 2007* (Clarence City Council 2011).

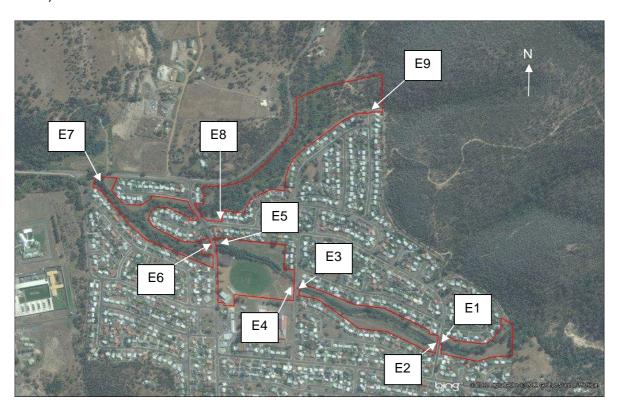


Figure 1: Area covered by the *Risdon Vale Creek and Grasstree Hill Rivulet Reserve Activity Plan 2013-2018,* including existing Reserve entrances E1-9 (aerial photograph provided by Clarence City Council).

The Risdon Vale Creek section of the Reserve emerges from the Meehan Range Conservation Area and flows through Risdon Vale until its confluence with Grasstree Hill Rivulet near Kerria Road. The main channel of Risdon Vale Creek was mechanically cleared in 1993 following floods (North Barker & Associates – Ecosystem Services 2002), and several weir structures have been constructed along its length. Over the last 15 years, the Friends of Risdon Vale Rivulet Group, the Risdon Vale Landcare Group, Council and contractors have removed significant weed infestations along the length of the waterway and undertaken selective planting of natives along the creek banks. The riparian environment is now comprised of a waterway surrounded by emergent natives and an exotic

grassy understorey. A walking track follows the length of the creek, which is bounded by residential dwellings, road reserves, and Risdon Vale Oval.

The Grasstree Hill Rivulet section of the Reserve also emerges from the Meehan Range Conservation area, and flows adjacent to Grasstree Hill Road to Kerria Road bridge. Much of this section of the Reserve is bounded by residential dwellings, and several tracks traverse the bush in the upper section of the rivulet. The upper section of the waterway is surrounded by native vegetation, while the section west of Sugarloaf Road is comprised of an exotic grassy understorey with a few emergent natives. Significant work has been undertaken to remove willows and other weeds from this section of the Reserve.

4 SITE VALUES

4.1 Native flora

Typical native vegetation in the Reserve is illustrated in Figures 2-3. The upper reaches of Grasstree Hill Rivulet flows through *Eucalyptus viminalis* (white gum) shrubby forest (North Barker & Associates – Ecosystem Services 2002), which is not listed as a threatened vegetation community under the Tasmanian *Nature Conservation Act 2002*. The remaining riparian environments along both waterways are comprised of an exotic grassy understorey with varying densities of emergent native trees, predominantly silver wattle (*Acacia dealbata*) and emergent eucalypts such as black gum (*Eucalyptus ovata*), white gum (*E. viminalis*) and blue gum (*E. globulus*).

Two plants occurring in the Reserve are of high conservation value, including shade peppercress (*Lepidium pseudotasmanicum*) and coast houndstongue (*Cynoglossum australe*). Further information on these threatened species is provided at Appendix 1.

4.2 Native fauna

The native vegetation within the Reserve provides habitat for a range of native wildlife, including mammals, birds, reptiles and invertebrates. Importantly, there is habitat to support several threatened fauna species, as summarised in Appendix 1.

The upper section of Grasstree Hill Rivulet is likely to support the highest diversity of wildlife in the Reserve due to its intact native vegetation. A variety of canopy layers, dead trees and hollow logs provide nesting and foraging habitat for birds and mammals, and fallen timber and leaf litter provide important habitat for reptiles and invertebrates. Fire-protected sites along the forested creek line have been identified as important habitat for localised invertebrate populations (Sinclair Knight Merz 2002).

Mature gum trees with hollows along both waterways provide potential habitat for a number of birds and animals, including the endangered swift parrot (*Lathamus discolor*) and Tasmanian masked owl (*Tyto novaehollandiae* subsp. *castanops*). Remnant trees in the lower reaches of the waterways play a particularly important habitat role in areas where land clearing and weed control have created a highly modified urban grassland environment. Increasing habitat diversity in these

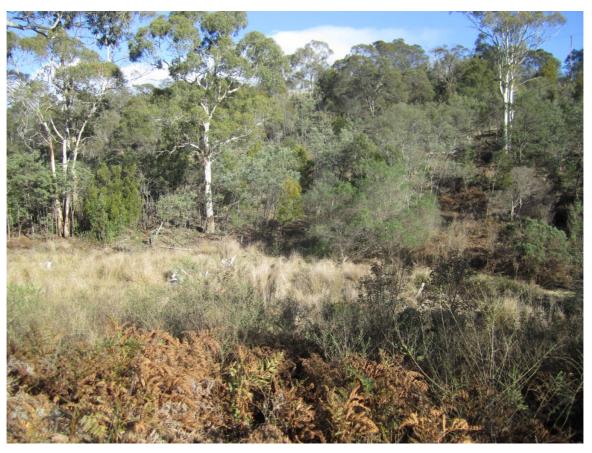


Figure 2: Typical native vegetation along Grasstree Hill Rivulet.



Figure 3: Regenerating vegetation along Risdon Vale Creek.

grassland areas along the length of both waterways has been identified as long term management issue for the Reserve.

The immediate environment of the waterways provides a distinct and localised habitat for aquatic fauna, including fish, frogs and aquatic invertebrates, and a platypus has been historically recorded in Risdon Vale Creek. Many of these species are sensitive to changes to their riparian environment such as habitat loss, changing water flows, contaminants, erosion, in-stream barriers and weed infestations. Management of this riparian environment has been identified as an important ongoing issue for both waterways.

4.3 Cultural heritage

No important Aboriginal heritage sites have been previously recorded within the Reserve. However, the absence of previously recorded sites cannot be taken as an indication that there are no Aboriginal sites present as the area has never been surveyed. A number of Aboriginal sites are known from the surrounding area, and it is considered that there is a high probability of Aboriginal heritage being present (Adam Marshall, Aboriginal Heritage Tasmania, pers. comm. 2013).

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 important to ensure that no 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 2) and the items reported to Aboriginal Heritage Tasmania for advice.

4.4 Recreational values

The Reserve is used for a range of recreational activities by local residents and visitors, including walking, jogging and dog exercise. The section of Grasstree Hill Rivulet east of Sugarloaf Road is currently a designated off-lead dog exercise area under Council's Dog Management Policy, although dogs must remain under effective control. The Risdon Vale Creek track is used as a thoroughfare by locals (eg to shops, school etc). Open grassy areas along both waterways provide space for children to play games, and play equipment and a BMX track near Risdon Vale Primary School provide further outdoor recreation opportunities.

4.5 Education values

There is a history of community commitment and enthusiasm for caring for the Reserve through the Risdon Vale Landcare Group (run through the Risdon Vale Neighbourhood Centre) and the Friends of Risdon Vale Rivulet Group. Activities of these groups have included weeding, revegetation, mulching and removing rubbish and provide an opportunity to share knowledge and promote community education of the Reserve's natural values and potential threats to these.

The Risdon Vale Primary School has been actively involved in caring for the section of the Risdon Vale Creek between Heather Road and Sugarloaf Road.

This has provided an opportunity to educate children about riparian values as well as promoting ownership of their natural environment.

A recent partnership between Council, the Tasmanian Prison Service and the Risdon Vale community has established a program under which a team of Risdon prison inmates have been working along Risdon Vale Creek to undertake weed control, revegetation activities, track construction and rubbish removal. The program has many positive benefits, including providing meaningful work for inmates and helping them obtain new skills.

4.6 Landscape setting and connectivity

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 linked directly to the Meehan Range State Recreation Area and indirectly to Grass Tree Hill via native vegetation on private land which provides an important connection for the movement of flora and fauna. Following the convergence of both waterways near Kerria Road, Grasstree Hill Rivulet continues on to merge with Risdon Brook, providing an important riparian linkage with Risdon Cove and the Derwent River.

The Reserve also provides a significant bushland and riparian backdrop to many houses in Risdon Vale, and is valued by locals for this landscape setting. Maintaining and enhancing this setting is important for ongoing visual amenity in Risdon Vale.

This landscape setting and connectivity is important for the long term viability of Clarence's bushland areas and ongoing visual amenity in the municipality. It is important that these linkages be preserved and strengthened though strategic land use planning.

5 BUSHFIRE RISK

A Bushfire Management Plan does not currently exist for the Reserve. Figure 4a of the *Strategic Fire Management Plan for the Meehan Range Region* (AVK Environmental Management 2007) shows a relatively high incidence of bushfire ignitions in the Reserve based on TFS vegetation fire data. In addition to the risk from bushfires started within the Reserve, the Reserve is connected to extensive areas of bushland to the north and east of Risdon Vale. The Reserve can therefore function as a conduit for bushfires to penetrate into the urban area of Risdon Vale and threaten properties adjoining the Reserve. Wind blown burning embers from bushfires in surrounding areas may also start spot fires in the Reserve. Even with adequate access and fuel reduction measures, bushfires that occur in the Reserve during period of severe or higher bushfire danger could be uncontrollable.

Currently the main bushfire fuel in the Reserve is grass. Grass fuels go through an annual cycle of rapid growth in spring followed by a period of curing (drying out) through summer, and are not considered to present a significant bushfire hazard until they are about 60% cured. The time this occurs will vary from year to year.

Fires burning in grass fuels can spread much faster than fires in forest or scrub fuels, but usually produce less embers that can attack nearby buildings. Although past woody weed control programs have substantially reduced the bushfire hazard in the Reserve, there are still sufficient trees and shrubs to produce embers that may threaten nearby buildings and spread fires to other parts of the Reserve and adjoining properties.

The most effective way to reduce the bushfire hazard from grass fuels is through slashing and mowing. Even if the cut grass is not removed the flame height will be substantially reduced and the fire much easier to control. Burning grass fuels is not considered efficient as further growth can quickly re-establish the hazard. As well, burning can generally only be undertaken when the grass has cured and is already a bushfire risk. The exception is where there the grassland consists of perennial native tussock species (*Themeda, Poa, Stipa* etc.)

6 STAKEHOLDER CONSULTATION

A public meeting and community 'walk and talk' session was facilitated by Council and Tasflora on 18 August 2013. The purpose of the session was to seek input from local residents and other relevant stakeholders on values and management issues associated with the Reserve. A survey seeking comments on the *Risdon Vale Creek and Grasstree Hill Rivulet Reserve Activity Plan 2013-2018* was also provided to identified stakeholders. A summary of issues raised during this initial stakeholder consultation is provided at Appendix 3.

The draft *Risdon Vale Creek and Grasstree Hill Rivulet Reserve Activity Plan 2013-2018* was released for community consultation in December 2013. A Risdon Vale Creek and Grasstree Hill Rivulet Reserve 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. One public submission on the draft plan was received during the consultation period.

Where possible, all relevant community feedback received during this process has been considered in the development of the draft plan. However some issues identified during the consultation process are beyond the scope of the 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.

7 WEED MANAGEMENT

7.1 Weed species present

Much work has been undertaken to eradicate declared and environmental weeds from the Reserve. Over the past 15 years, the Friends of Risdon Vale Rivulet Group, the Risdon Vale Landcare Group, Council, Risdon Prison volunteers and contractors have removed significant weed infestations along the length of both waterways, including dense infestations of willow, blackberry, canary broom and cumbungi, as illustrated in Figures 4-6.

It is envisaged that all declared weeds and most other environmental weeds could be eradicated from the Reserve within the next five years if sufficient resources are available to implement an ongoing maintenance program over several years.

A list of environmental weed species occurring in the Reserve, including their status and recommended control methods, is provided at Appendix 4.² To assist with identification, a picture of each weed species is also provided. Several weed species found in the Reserve are classified as declared weeds under the Tasmanian *Weed Management Act 1999* (the Weed Management Act) and/or Weeds of National Significance (WONS). Where possible, these weeds should be targeted as a priority to prevent their further spread. The distribution of declared and other environmental weed species is illustrated in Appendices 5-6.

Spot spraying of weeds should not be undertaken by volunteers. All spot spraying should be undertaken by certified operators (eg Council staff, contractors). The possibility of incorporating spot spraying work into a programme with the Risdon Prison inmates as a mean of assisting them gain their accreditation could also be investigated.

7.2 Recommendations for primary weed control work

Primary weed control work within the Reserve should focus on controlling declared weeds (to fulfil Council's obligations under the Weed Management Act) and other environmental weeds whose distribution is currently limited.

Initial priority should be given to controlling pampas grass, boxthorn and fennel due to their presently limited distribution. There is also limited penetration by several non-declared woody weeds (including cotoneaster, hawthorn, mirror bush, prunus, radiata pine, periwinkle and umbrella sedge) and these should also be controlled as a priority to prevent their further establishment in the Reserve. An annual sweep of both waterways is recommended as the best means of targeting these isolated weeds.

Recommendation 1: Priority should be given to controlling pampas grass, boxthorn and isolated non-declared woody weeds.

Significant primary work has previously been undertaken by volunteers, Council and contractors to reduce large infestations of canary broom and blackberry in Risdon Vale Creek and the lower reaches of Grasstree Hill Rivulet. Ongoing annual sweeps of areas already targeted should be undertaken prior to undertaking new primary control (refer Section 7.4) to ensure seedlings do not reestablish in these areas. Any new primary blackberry and canary broom control in Grasstree Hill Rivulet should aim to control isolated populations of these weeds before targeting larger infestations.

Recommendation 2: Ongoing annual sweeps of areas already targeted for blackberry and canary broom should be undertaken prior to undertaking new primary control of these weeds.

² A general overview of weed control techniques is available at: http://www.nrmsouth.org.au/uploaded/287/15130842 66weedsbookletfinalweb.pdf



Figure 4: Risdon Vale Creek (a) before and (b) after blackberry and canary broom control.



Figure 5: Risdon Vale Creek (a) before and (b) after cumbungi and canary broom control.



Figure 6: Risdon Vale Creek (a) before and (b) after willow and blackberry control.

Significant work has been undertaken to control cumbungi in the Reserve's waterways, with dense infestations having been successfully removed (refer Figure 5). Total eradication of this weed is likely to take many years due to the ability of this species to regenerate following primary control. Ongoing annual maintenance of this weed along the length of both waterways is recommended to prevent dense infestations from reforming.

Recommendation 3: Ongoing annual sweeps of both waterways should be undertaken to control cumbungi regrowth.

7.3 Non-priority weed species

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).

Recommendation 4: Control of exotic grasses and broadleaf weeds is only required in revegetation areas and where necessary as part of a general Reserve maintenance program.

7.4 Maintenance of weed control work

Regeneration of weeds in the Reserve is likely to continue for many years due to the existing seed bank in the soil and the fact that some weed species have an inherent ability to resprout following primary control. Weed control activities will not be successful unless a commitment is made to undertaking ongoing follow-up maintenance activities.

Maintenance of primary weed control work should be undertaken annually, preferably in spring and summer when plants are least likely to be dormant. This can be achieved by performing an annual sweep to remove all new germinants of previously targeted weeds and undertake follow-up control on any plants that may have resprouted. Ongoing annual follow-up will be required until the soil seed bank is exhausted.

Recommendation 5: An annual sweep and follow-up control of all previously targeted weeds should be undertaken.

GPS weed mapping of all environmental weeds occurring within the Reserve has been undertaken during the development of this plan. 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 provided to Council to enable its database to be updated.

Recommendation 6: Follow-up GPS mapping of all weeds in the Reserve should be undertaken after five years to monitor progress and inform future weed control priorities.

8 REGENERATION AND REVEGETATION

8.1 Regeneration

Except in areas to be slashed or mown for bushfire hazard management (refer Section 8.2), natural regeneration should be encouraged within the Reserve as the most cost effective and natural means of restoring the Reserve's 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.

In recent years, dense infestations of canary broom has been controlled along Risdon Vale Creek between Heather Road and Sycamore Road. This has resulted in dense silver wattle regrowth, and selective clearing of some areas of regrowth has been undertaken to prevent these shrubs from outcompeting other species. While the principle behind this activity is sound, it is noted that in some areas wattle stems have been cut significantly above ground level and many are reshooting. This is visually unappealing, creates a significant trip hazard and will require ongoing follow-up to prevent prolific regrowth of cut stems. It is recommended that:

- where possible, previously cut wattle stems should be recut at ground level and painted with herbicide to prevent reshooting; and
- personnel should be trained to cut plants to ground level and immediately paint with herbicide when undertaking future shrub regrowth control activities.

Recommendation 7: When undertaking manual control of silver wattle regrowth, stems should be cut at ground level and stems immediately painted with herbicide.

8.2 Bushfire risk reduction

To reduce Reserve's bushfire risk and assist the TFS control fires that do occur, all Reserve boundaries with residential properties require a fuel modified buffer zone (FMBZ) to complement the building protection zone on the lot and allow access along the boundary for fire fighters. The FMBZ along the Reserve's boundary with houses along Linden Road, Spinifex Road, Sycamore Road and Sugarloaf Road (northern boundary of Risdon Vale) should be 30 m from the adjoining dwelling or 15 m whichever is the greater. In other parts of the Reserve, the minimum width should be 10 m where possible, increasing to 20 m where houses are closer than 10 m to the reserve.

Areas of grassland outside these FMBZs that are currently slashed or mown should be maintained as such throughout the bushfire danger period. Regular slashing or mowing will also help control the spread of weeds in the reserve.

Recommendation 8: Fuel modified buffer zones should be maintained along the Reserve boundary with residential properties and other areas that are currently mown or slashed maintained.

8.3 Revegetation activities

The primary purpose of undertaking new revegetation activities in the Reserve 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. However, revegetation activities are resource intensive, and should only be undertaken if there are resources available for ongoing maintenance (eg weeding, watering) of revegetation sites.

Revegetation activities should also not substantially increase the bushfire hazard or restrict fire brigade access within the Reserve. With this in mind, revegetation activities should be restricted to steeper slopes and riparian areas away from houses that can't be easily mown or slashed.

Recommendation 9: Revegetation activities should not be undertaken in fuel modified buffer zones, in currently mown areas or where it will impede access for the Tasmania Fire Service.

Selective revegetation activities have previously been undertaken at various locations along Risdon Vale Creek over the last 15 years. Ongoing maintenance of many of these sites has resulted in the successful establishment of native plants following large scale weed control activities. Further large scale revegetation activities are not considered necessary in the Reserve as primary weed control activities (outlined in Section 7) are unlikely to create significant bare areas. However, some limited native planting is recommended as indicated in Table 1.

Where possible, plants should be grown from the seed or cuttings of plants local to the area to ensure local variants of plants are planted.³

Recommendation 10: Revegetation is recommended at several locations to enhance species diversity, provide habitat for native birds and animals, and improve visual amenity.

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.

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.

9 FAUNA HABITAT MANAGEMENT

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

³ An overview of best practice revegetation and regeneration techniques has been produced by Greening Australia Victoria (2003) and is available at http://live.greeningaustralia.org.au/nativevegetation/pages/pdf/Authors%20C/13 Corr.pdf

Table 1: Recommended revegetation activities to be undertaken within the Reserve.

Activity	Purpose	Recommended locations	Priority
Maintain existing revegetation sites	Ensure existing revegetation sites are established and regularly maintained	Various locations along Risdon Vale Creek	To be undertaken in conjunction with other activities as resources become available
Landscape Reserve entrances	Improve visual amenity	Refer Section 11	As resources become available
Canopy and understorey planting	Improve visual amenity and create habitat in areas where natural regeneration is considered unlikely to occur or requires enhancement	Amongst silver wattle regrowth along Risdon Vale Creek following thinning activities (eg between Heather Road and Sycamore Road) Edges of grassy open area between Heather Road and Sycamore Road Along Grasstree Hill Rivulet between Sugarloaf Road and its confluence with Risdon Vale Creek	To be undertaken in conjunction with other activities as resources become available
Bioremediation planting	Water sensitive design to improve water quality in areas requiring management of seepage	Stormwater channels near Grasstree Hill Rivulet (behind houses in Sycamore Road, Spinifex Road and Lynden Road) Refer Section 9	As resources become available
Revegetation following weed control	May be required if bare patches are created following primary weed control	To be assessed following primary weed control activities. Only to be undertaken if natural regeneration is considered unlikely to occur.	Immediately following weed control activities

and invertebrates. Native revegetation activities proposed in Section 8 will play a role in enhancing the habitat values of the Reserve.

The waterways themselves provide important habitat for aquatic fauna, including fish, frogs and aquatic invertebrates. Many of these species are sensitive to changes to their riparian environment such as contaminants, erosion, in-stream barriers and weed infestations. In particular, stormwater runoff has the potential to negatively impact on waterway health and species diversity. Water sensitive urban design (WSUD) work has recently been undertaken in two stormwater drainage

channels behind houses in Sycamore Road, Spinifex Road and Lynden Road to manage seepage and improve water quality. This has included the creation of drop structures and settlement basins, and revegetation with native plant species suitable for bioremediation (refer Figure 7).



Figure 7: Water sensitive urban design work undertaken behind houses in Sycamore Road and Spinifex Road.

There are a number of significant piped catchments discharging into Risdon Vale Creek, and the potential for using WSUD to improve the quality of water flowing into this waterway should be investigated. As well, upstream passage by native fish species is impeded in Risdon Vale Creek by the weir structures along its length, which not only create a physical barrier but may also create excessive water turbulence or flow rates greater than those which fish can swim against. Installation of fish ladders or replacement of these structures with rock chutes or stepped drop structures should be investigated and designed as a means of encouraging fish flow along the length of the waterway. Culverts under Sugarloaf Road, Heather Road and Sycamore Road could also pose barriers to fish passage.

Recommendation 12: Investigate and assess options to improve water quality and aquatic habitat in a Stormwater Management Plan for the Risdon Vale Creek and Grasstree Hill Rivulet catchment.

Uncontrolled domestic dogs and cats have the potential to harass or kill native wildlife. Part of the Reserve is currently a designated off-lead exercise area (with dogs to remain under effective control) under Council's Dog Management Policy.

Appropriate information should be included on signs at main entrances (refer Section 11) to inform users of their responsibilities when walking dogs within the Reserve to help prevent harassment of native wildlife. 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).

10 VEGETATION AND FAUNA MONITORING

It is recommended that photo points be established at several locations within the Reserve to facilitate monitoring of vegetation condition and annual regeneration growth, particularly in areas where native regeneration is occurring following weed control activities.

Recommendation 13: Photo points should be established at several locations within the Reserve to facilitate monitoring of annual regeneration growth.

The Reserve contains habitat for a range of wildlife species, and it is expected that species diversity could increase with appropriate vegetation management practices and effective control of cats and dogs by local residents and dog walkers. Fauna surveys (including mammal, bird,⁴ reptile and invertebrate surveys) and habitat assessments to confirm the species present in the Reserve are recommended to be undertaken now and at the end of the plan (ie 2014 and 2018) as a basis for monitoring species diversity over time. In particular, aquatic surveys of fish and invertebrate species could be used as a baseline for measuring any changes resulting from improved river care.

Recommendation 14: Fauna surveys, including aquatic surveys, should be undertaken in 2014 and 2018 to measure changes arising from improved river care and to further inform on ground management activities.

An analysis of all completed surveys should be undertaken in 2018 to determine trends and implications for ongoing vegetation and waterway management in the Reserve. This should be undertaken in conjunction with a review of the *Risdon Vale Creek and Grasstree Hill Rivulet Reserve Activity Plan 2013-2018* scheduled for 2018 (refer Section 16).

Recommendation 15: An analysis of all photo points and fauna surveys should be undertaken in 2018 to determine trends and inform future management activities.

11 RESERVE ENTRANCES

There are currently nine main entrances to the Reserve managed by Council, as illustrated in Figure 1. Key management issues identified for the Reserve's entrance points are summarised in Table 2. All entrances are located adjacent to

_

⁴ Bird surveys should be undertaken in conjunction with BirdLife Tasmania using standard BirdLife Australia monitoring techniques.

Issue	Description	Recommendation
Signage	Low key, clear signage is needed at each main Reserve entrance, including: • the name of the track • directional arrows • information on dog walking • no trail bike signs	Implement Signage Plan (refer Section 12 and Appendix 7) Reserve entrance E7 should be named in recognition of Ann Harrison - a long term community legend and supporter/carer of public open space in Risdon Vale through her role at the Risdon Vale Neighbourhood Centre.
Emergency and maintenance vehicle access	Access for fire brigade and maintenance vehicles needs to be maintained	All Reserve entrances shown in Figure 1 should be gated and wide enough to allow access by at least a category 5 fire tanker. Vehicle access points should be kept clear of fuel so they can be accessed safely during a bushfire.
Disabled access	The Reserve is not accessible to wheelchairs or mobility scooters due to existing trail bike exclusion gates	Investigate a gate design that promotes disabled access while excluding trail bikes Trial a wheelchair friendly zone between Sugarloaf Road and Heather Road, with a single wheelchair accessible point off E5 (to discourage use of the route as a thoroughfare by trail bikes)
Unauthorised vehicle and trail bike access	Trail bikes and unauthorised vehicles are an ongoing problem	Install a solid metal gate at E8 (similar to that at E9) Install bollards or large boulders around grassy areas at: • the Junction of Sugarloaf Road and Sycamore Road • near E7 along Grasstree Hill Road Fix hole in fence at 89 Gardenia Road (vacant land)
Visual amenity	Some entrances would benefit from landscaping activities and/or regular maintenance	Enhance the Reserve's existing maintenance program to ensure regular weeding and slashing is undertaken at all Reserve entrances Undertake landscaping with native plants as per concept landscape plans detailed in Appendices 8-9. Engage a landscape architect to develop a thematic landscaped entrance design for E4, incorporating the existing play equipment, a new rotunda and creating opportunities for further exploration by children of the riparian environment (eg bridges, rock structures etc). To be developed in consultation with the Risdon Vale Primary School.

public streets and creation of formal parking areas is not considered necessary within the next five years. No closure of existing entrances is proposed.

Recommendation 16: Reserve entrances should be improved by installing signage, trialling a wheelchair friendly gate at one entrance, undertaking native landscaping and preventing unauthorised access by vehicles and trail bikes.

12 TRACKS AND TRAILS

Key management issues identified with the Reserve's tracks and trails are summarised in Table 3.

Recommendation 17: The Reserve's track network should be improved by installing directional signage, improving track condition and constructing some new tracks. Tracks along the Reserve boundary should be wide enough to allow access by TFS vehicles.

An opportunity has been identified to enhance existing tracks in the Reserve for BMX and mountain bike riders as follows:

- upgrade the existing BMX track near Risdon Vale Primary School (which is currently underutilised as it offers minimal challenge); and
- design and construct a new mountain bike skills park sensitive to the area's
 natural values, consisting of a trail winding through the native vegetation
 with small areas of challenge and skill improvement along the way. Existing
 tracks in this area should be utilised where possible.

A summary of the proposal, including its community benefits and proposed location is provided at Appendix 10.

Recommendation 18: A proposal to upgrade the existing BMX track and create a mountain bike skills park in the Reserve sensitive to the area's natural values should be implemented.

13 INFRASTRUCTURE

There is currently limited community infrastructure within the Reserve, and the Reserve's natural environment would be preserved through minimising additional infrastructure installation.

While it is desirable to limit the number of signs in the Reserve, some signage is considered necessary to help direct visitors who are unfamiliar with the Reserve. With this in mind, a Signage Plan has been developed for the Reserve by Council (refer Appendix 7).

Recommendation 19: The Risdon Vale Creek and Grasstree Hill Rivulet Signage Plan should be implemented.

The Reserve is a popular destination for dog walkers, and installation of dog waste bins and bag dispensers is recommended at some entrances. As vandalism is a

Table 3: Track management issues identified within the Reserve.

Issue	Description	Recommendation
Signage	There is no directional signage at track junctions or maps of the Reserve's track network	Implement Signage Plan (refer Appendix 7) which identifies proposed location of signs
Track condition	Weeds and grasses are encroaching the edges of some sections of the Risdon Vale Creek track	Enhance the Reserve's existing maintenance program to ensure regular spot spraying of track edges is undertaken
	Sight lines are poor along some sections of track	Prune lower branches to 3 m off trees adjacent to Risdon Vale Creek track
Drainage issues are emerging in Address drainage issues and some areas along Risdon Vale track where necessary Creek walking track		Address drainage issues and resurface track where necessary
	Fire trail behind Linden Road is in poor condition	Upgrade fire trail behind Linden Road to the required standard for access by fire management vehicles
Reserve access	There is no formal track along the section of Grasstree Hill Rivulet between Sugarloaf Road and Risdon Vale Creek	Construct a new track along Grasstree Hill Rivulet between Sugarloaf Road and Risdon Vale Creek (refer proposed Grasstree Hill Rivulet Track at Appendix 7)
A loop track along the lower section of Risdon Vale Creek would increase the recreational value of this area		Construct a new track on the southern side of Risdon Vale Creek between Kerria Road and Sugarloaf Road (refer Appendix 7)
Disabled access The Reserve is not accessible to wheelchairs or mobility scooters due to existing trail bike exclusion gates and track design		Trial a wheelchair friendly zone between Sugarloaf Road and Heather Road to provide and promote a discrete area for disabled users to enjoy the riparian environment. Install a single wheelchair accessible point off E5 (to discourage use of the route as a thoroughfare by trail bikes).
	Gravel slopes near the stone bridge are difficult for disabled or elderly users	Widen track and install a handrail on steeper section of track near the stone bridge

potential issue, a trial installation of bins and bag dispensers at E4 and E6 is recommended to encourage responsible behaviour by dog owners. If this trial is successful, then additional bins could be installed at other entrances.

Recommendation 20: Dog waste bag dispensers and bins should be trialled at Reserve entrances E4 and E6.

There is currently limited seating within the Reserve for recreational walkers using the track network. It is recommended that new outdoor seats be installed at

strategic positions within the Reserve to encourage contemplation of the riparian environment. Depending on the level of funding available, the following initial locations are suggested:

- in an open area near the large blue gum at the top of Risdon Vale Creek;
- in an open area near the large pine tree along Risdon Vale Creek between Heather Road and Sycamore Road;
- in the cleared area just north of reserve entrance E8 near Grasstree Hill Rivulet; and
- overlooking the riparian environment along upper Grasstree Hill Rivulet near Reserve entrance E9.

Vandal-proof bench seats, such as those already used in the Reserve, should be coloured to blend in with the environment (ie seat painted green) and set into a concrete foundation with a hardened under surface (eg compacted gravel) extending in front of the seat. Alternatively, seats could be constructed from natural stone to deter vandalism.

Recommendation 21: New outdoor seats should be installed at several locations in the Reserve.

Council has indicated a desire to erect a shade structure or rotunda in the Reserve in a location where it will not act as a hub for undesirable behaviour. The BMX park near Reserve entrance E4 has been identified as a potentially suitable location, and will be included for consultation in the thematic landscaped entrance design to be developed at E4 (refer Section 11).

Any installation of new infrastructure will be subject to funding. With this in mind, no additional infrastructure beyond that discussed above is recommended within the next five years unless significant funding becomes available. A further review of the infrastructure requirements of the Reserve should be undertaken in 2018.

Recommendation 22: A review of the infrastructure requirements of the Reserve should be undertaken in 2018.

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. The Risdon Vale community has played an active role in the improvements already made to the Risdon Vale Creek environment. However, education of some residents living adjacent to the Reserve is desirable to foster behavioural change and encourage community ownership and appreciation of the Reserve's values.

Recommendation 23: Community education should be undertaken to facilitate behavioural change and encourage ownership and appreciation of the values of the Reserve.

Key issues requiring community awareness are summarised in Table 4. A letterbox drop to adjacent landowners with information on each of these issues is recommended as a first step to achieving community awareness and

Table 4: Management issues requiring community education and awareness within the Reserve.

Issue	Description
Garden waste dumping	Dumping of garden waste in the Reserve encourages the spread of weeds and is visually unattractive for all users.
Removal of native vegetation	Removal of native vegetation in the Reserve (eg to improve views, reduce bushfire risk, collect fire wood) is illegal. It encourages the establishment of weeds and reduces species diversity and animal habitat. Seed collection should only be undertaken with Council approval.
Environmental weeds	Weeds in adjacent gardens pose a threat to existing native vegetation within the Reserve.
Wildlife	Trapping and relocation of native wildlife is not permitted
Cats and dogs	Cats and dogs can kill native wildlife. Cats should be microchipped, desexed and kept indoors at night. Dogs should remain under effective control at all times.

understanding of these issues. However, engagement with individual property owners may be required in instances of ongoing inappropriate activity (eg to manage encroachment).

Interpretation signs provide an important opportunity to display information on the Reserve's natural values and the impact inappropriate activities can have on these.⁵ An interpretation sign is proposed at entrance E7 to display a trail map of the Reserve and provide information on flora and fauna values, inappropriate activities, and opportunities for community involvement in managing the Reserve (eg through Landcare Group activities).

Recommendation 24: An interpretation sign should be installed at Reserve entrance E7 to facilitate visitor interpretation.

Risdon Vale Primary School, the Risdon Vale Landcare Group, the Risdon Vale Neighbourhood Centre and the Tasmanian Prison Service have been actively involved in caring for the Reserve (in particular Risdon Vale Creek) over many years. Ongoing engagement with these groups should continue to encourage ongoing participation in Reserve management activities when appropriate.

Recommendation 25: Actively engage with the Risdon Vale Primary School, the Risdon Vale Landcare Group, the Risdon Vale Neighbourhood Centre and the Tasmanian Prison Service to encourage ongoing participation in future Reserve activities.

Under the Tasmanian *Work Health and Safety Act 2012*, volunteers are considered 'workers' when working for Council on Council owned land. Council therefore has

_

⁵ An example of the recommended standard of interpretation sign is located at the main entrance to Cremorne Beach, where the Pipe Clay Lagoon Coastcare Group has displayed information about the Reserve and their Group's current and planned activities.

a duty of care to provide a safe workplace for volunteer workers.

- 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 Council Reserves, including cut and paste work, brushcutting and spreading of mulch. These are available from Council's Natural Areas Volunteer Coordinator (Chris Johns, phone 6245 8773 or email cjohns@ccc.tas.gov.au). An example SWMS for volunteer cut and paste work is provided at Appendix 11.

15 IMPLEMENTATION PLAN

A map illustrating the location of on ground management activities recommended within the Reserve is provided at Figure 8. This is based on the key recommendations contained within this plan, which are summarised in detail at Appendix 12.

Based on these recommendations, an Implementation Plan with associated performance measures has been developed and is provided at Table 5. It identifies three stages of management activities to be undertaken within the Reserve:

- 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 2013-2018 if sufficient resources are available. The Implementation Plan provides an indication of the level of funding required to achieve these outcomes. While it would be desirable to undertake all the recommended activities, it is acknowledged that this may not be possible due to 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.

_

⁶ 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.

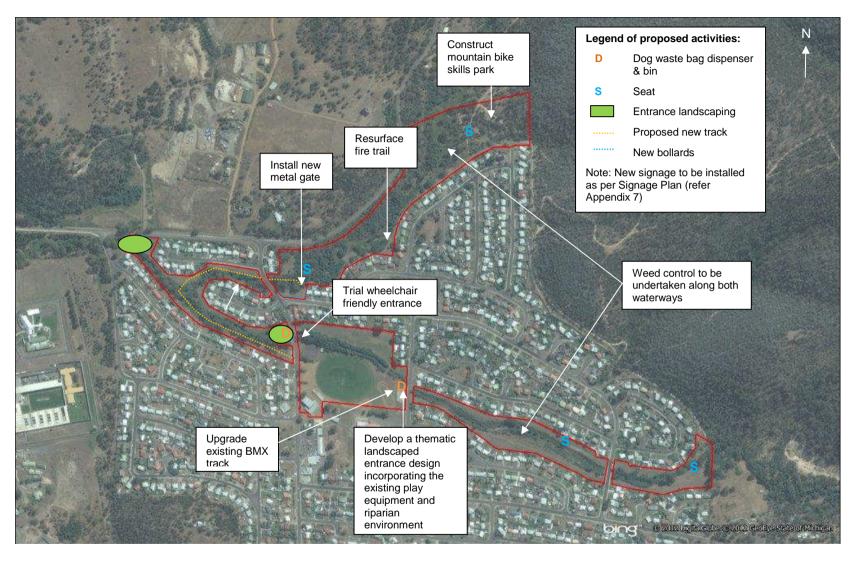


Figure 8: Overview of key proposed on ground management activities (base image provided by Clarence City Council)

Table 5: Implementation Plan for undertaking recommended management activities within the Reserve.

Priority	Rec. No.	Action	Seasonal timing	Performance measure	Responsibility	Estimated funding ⁷
Weed co	ontrol					
1	R1	Control pampas grass, boxthorn and fennel	Spring – summer for spot spraying; all year round for other techniques	Primary control of pampas grass, boxthorn and completed	Council, contractor and/or volunteer groups	\$3,000
1	R1	Undertake primary control of isolated non-declared woody weeds	Spring – summer for spot spraying; all year round for other techniques	Primary control of non- declared woody weeds completed	Council, contractor and/or volunteer groups	
1,2&3	R2,R3, R4	Undertake annual sweep and follow-up control of all previously targeted weeds	Ongoing on an annual basis	All targeted weeds are eradicated from the Reserve	Council, contractor and/or volunteer groups	\$3,000 per annum
3	R6	Undertake follow-up GPS mapping of all weeds	Spring - summer	Weed maps and Council database are updated within five years	Council, contractor and/or volunteer groups	\$600
Regener	ration and r	evegetation				
1,2&3	R10,R11	Undertake revegetation as detailed in Section 8	Autumn – winter	Revegetation sites established and maintained for 5 years	Council, contractor or volunteers	\$1,500 per annum
Fauna h	abitat mana	agement				
2	R12	Investigate and assess options to improve water quality and aquatic habitat in a Stormwater Management Plan for the Risdon Vale Creek and Grasstree Hill Rivulet catchment.	N/A	Stormwater Management Plan developed and implemented.	Council	N/A

⁷ Funding estimate is based on total costs required to undertake all recommended activities over the period 2013-14 to 2017-18.

Priority	Rec. No.	Action	Seasonal timing	Performance measure	Responsibility	Estimated funding ⁷
Vegetati	on and fau	na monitoring				
1	R13	Establish photo points at several locations within the Reserve	N/A	Photo points established and annual photos taken	Council, contractor or volunteers	\$600
1,3	R14	Undertake surveys to update the fauna record of the Reserve		Terrestrial and aquatic fauna surveys completed 2014 & 2018	Council, contractor and/or BirdLife Tasmania	\$6,000
				Bird survey completed in 2018	and/or University of Tasmania	
Reserve	entrances					
1	R16	Undertake native landscaping at Reserve entrances as per Appendices 8-9	Autumn - winter	Landscaping completed at Reserve entrances as per Appendices 8-9	Council, contractor or volunteers	Up to \$2,500 per entrance
1	R16	Fix hole in fence at 89 Gardenia Road (vacant land)	N/A	Hole in fence at 89 Gardenia Road repaired	Council or contractor	\$600
3	R16	Engage a landscape architect to develop a thematic landscaped entrance design for E4	N/A	Concept design completed and costed, and timeframe for implementation established	Council or contractor	\$3,000
2	R16	Trial new wheelchair friendly gate at E5	N/A	Budget and timetable developed	Council or contractor	\$1,500
2	R16	Install a solid metal gate at E8 (similar to that at E9)	N/A	New gate installed at E4	Council or contractor	\$3,000
2	R16	Install bollards or large boulders around grassy area at the Junction of Sugarloaf Road and Sycamore Road	N/A	No vehicles or trail bikes accessing grass area	Council or contractor	\$5,000
3	R16	Install bollards or large boulders around grassy area near E1 along Grasstree Hill Road	N/A	No vehicles or trail bikes accessing grass area	Council or contractor	\$5,000

Priority	Rec. No.	Action	Seasonal timing	Performance measure	Responsibility	Estimated funding ⁷
1,2&3	R11,R16	Undertake regular maintenance of all landscaped sites	Ongoing	Maintenance of all existing landscaped sites undertaken within the last six months	Council, contractor and/or volunteers	\$1,000 per annum
Tracks a	ind trails					
1,2 &3	R17	Undertake regular spot spraying of walking track edges along Risdon Vale Creek	N/A	Spot spraying of walking track edges along Risdon Vale Creek undertaken within the last six months	Council or contractor	\$1,500 per annum
1,2&3	R17	Prune lower branches to 3 m off trees adjacent to Risdon Vale Creek track	N/A	Sight lines maintained along Risdon Vale Creek Track	Council or contractor	\$600 per annum
1	R17	Address drainage issues along sections of the Risdon Vale Creek track and resurface where necessary	N/A	No areas of pooling water along Risdon Vale Creek track	Council or contractor	\$1,500
2	R17	Construct a new track along the lower section of Grasstree Hill Rivulet (refer Appendix 7)	N/A	New track constructed along the lower section of Grasstree Hill Rivulet	Council or contractor	To be determined
2	R17	Upgrade BMX track and construct new mountain bike skills park	N/A	Proposal developed and implemented	Council, contractor and/or volunteers	To be determined by proponent
3	R17	Construct a new track on the southern side of Risdon Vale Creek from E6 to the stone bridge (refer Appendix 7)	NA	New track constructed on the southern side of Risdon Vale Creek from E6 to the stone bridge	Council or contractor	To be determined
3	R17	Upgrade fire trail behind Linden Road to the required standard for access by fire management vehicles	N/A	Flagstaff Gully Trail completed	Council	To be determined
Infrastru	cture					
1	R19	Implement Signage Plan	N/A	Signs erected as per Signage Plan	Council or contractor	ТВА

Priority	Rec. No.	Action	Seasonal timing	Performance measure	Responsibility	Estimated funding ⁷
1	R20	Install dog waste bag dispensers and bins at E4 and E6	N/A	Dog waste bag dispensers and bins installed at E4 and E6 (to be removed if recurring vandalism occurs)	Council or contractor	\$1200
2	R21	Install four bench seats at various location in the Reserve	N/A	Four bench seats installed	Council or contractor	\$2,000
3	R22	Review the infrastructure requirements of the Reserve in 2018	N/A	Infrastructure review completed in 2018	Council	N/A
Commu	nity particip	pation and awareness				
1	R23	Undertake letterbox drops to local residents with information on inappropriate Reserve activities	N/A	Significant reduction in garden dumpings reported	Council	N/A
1	R24	Install interpretation signs at E7	N/A	Interpretation sign installed at E7	Council or contractor	\$1,000
Impleme	ntation pla	n				
1,2&3	R26	Undertake annual review against all performance measures	N/A	Review of all performance measures completed annually	Council	N/A
3	R27	Undertake a full review of the Risdon Vale Creek and Grasstree Hill Rivulet Reserve Activity Plan 2013-2018	N/A	Risdon Vale Creek and Grasstree Hill Rivulet Reserve Activity Plan 2013-2018 reviewed within five years	Council and/or contractor	\$10,000

A review of progress against all performance measures should be undertaken annually during the period 2013-2018 to help prioritise available resources.

Recommendation 26: Progress against all performance measures identified in the Implementation Plan should be reviewed annually.

16 FUTURE PRIORITIES

A review of the *Risdon Vale Creek and Grasstree Hill Rivulet Reserve Activity Plan 2013-2018* should be undertaken in 2018. The purpose of this review should be to:

- assess progress towards achieving the objectives of the Risdon Vale Creek and Grasstree Hill Rivulet Reserve Activity Plan 2013-2018;
- assess progress against all performance measures;
- analyse photo point data and all completed 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 27: The Risdon Vale Creek and Grasstree Hill Rivulet Reserve Activity Plan 2013-2018 should be reviewed in 2018 to assess progress and determine ongoing management priorities for the Reserve.

17 REFERENCES

AVK Environmental Management (2007) Strategic Fire Management Plan for the Meehan Range Region Revision 1. Unpublished report for Clarence City Council, Tasmania Fire Service and Tasmania Parks and Wildlife Service.

Clarence City Council (2011). Clarence Planning Scheme 2007. Clarence City Council, Tasmania.

Department of Primary Industries, Parks, Water and Environment (2013). *Natural values report 59182*. Unpublished report for Tasflora.

Greening Australia Victoria (2003). *Revegetation techniques*. Greening Australia Victoria, Horsham.

North Barker & Associates – Ecosystem Services (2002). *Grasstree Hill Rivulet and Risdon Vale Creek Rivercare Plan Vegetation Management Guidelines*. Unpublished report for Sinclair Knight Merz.

NRM South and the Southern Tasmanian Councils Authority (2010). Weeds of southern Tasmania: a guide to environmental and agricultural weeds of southern Tasmania. NRM South and the Southern Tasmanian Councils Authority, Tasmania.

Sinclar Knight Merz (2002). *Rivercare Plan for Risdon Vale Creek & Grasstree Hill Rivulet*. Unpublished report for Clarence Land & Coastcare Network.

Tasflora (2007). Weed Management Plan: Risdon Vale Creek, Risdon Vale. Unpublished report for Clarence City Council.

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

Two flora species occurring in the Reserve are listed as threatened species under the Tasmanian *Threatened Species Protection Act 1995* (the TSP Act) and/or Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (the EPBC Act). These are summarised in Table A1.1.

Table A1.1: Flora species of conservation significance recorded within the Reserve.

Flora species	Common name	Conservation status TSP Act EPBC Act		Habitat / Comments
Cynoglossum australe	coast houndstongue	Rare	-	Isolated individual recorded along Risdon Vale Creek
Lepidium pseudotasmanicum	shade peppercress	Rare	-	Isolated populations along both waterways

The Reserve contains suitable habitat for several threatened fauna species listed under the TSP and/or EPBC Acts, including several endangered species (refer Table A1.2).

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

Fauna species	Common name	Conservation TSP Act EP	status BC Act	Habitat / Comments
Lathamus discolor	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. Known to breed in the neighbouring Meehan Range.
Sarcophilus harrisii	Tasmanian devil	Endangered	Endangered	Previously recorded within 500m of the Reserve. Nests in hollow logs, caves, dense vegetation, dens or burrows. Suitable native vegetation occurs in the upper section of Grasstree Hill Rivulet.

Fauna species	Common name	Conservation status TSP Act EPBC Act		Habitat / Comments
Tyto novaehollandiae subsp. castanops	masked owl (Tasmanian)	Endangered	-	Inhabits dry eucalypt forest and woodland with old growth eucalypts containing hollows.
Perameles gunnii	eastern barred bandicoot	-	Vulnerable	Inhabits grassy woodlands, native grasslands and mosaics of pasture and shrubby ground cover.

APPENDIX 2: 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 I: 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 I: 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.

Aboriginal Heritage Tasmania

Department of Primary Industries, Parks, Water and Environment



APPENDIX 3: SUMMARY OF STAKEHOLDER CONSULTATION

During August - September 2013, identified stakeholders were invited to provide comments relevant to the development of the *Risdon Vale Creek and Grasstree Hill Rivulet Reserve Activity Plan 2013-2018.*

A public meeting and community 'walk and talk' session was facilitated by Council and Tasflora on 18 August 2013. The purpose of the session was to seek input from local residents and other relevant stakeholders on values and management issues associated with the Reserve. Thirteen stakeholders attended the meeting.

Key issues raised during the walk and talk included:

- wheelchair access is not possible through gates and along some walking tracks;
- bollards / barriers are needed in some locations to prevent illegal access by cars and trail bikes;
- the fire trail behind Linden Road requires upgrading;
- pedestrian access via footpaths to Reserve entrance E7 is difficult.

A feedback form seeking input to the *Risdon Vale Creek and Grasstree Hill Rivulet Reserve Activity Plan 2013-2018* was also mailed to stakeholders. Written responses were received from five stakeholders, which are summarised in Table A3.1.

Where possible, all relevant community feedback has been considered in the development of the *Risdon Vale Creek and Grasstree Hill Rivulet Reserve Activity Plan 2013-2018*. 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.

Table A3.1: Summary of written responses received during stakeholder consultation on the *Risdon Vale Creek and Grasstree Hill Rivulet Reserve Activity Plan 2013-2018.*

Management issue	Number of respondents
Weed management	
Undertake weed control	1
Regularly weed revegetation areas	1
Advise cumbungi control methods	1
Regeneration and revegetation	
Undertake revegetation along both waterways	1
Don't plant eucalypts or silver wattles near houses	2
Plant wattles and other plants with flowers and perfume	1
Thin out silver wattles between Sugarloaf Road and Heather Road and plant more riparian species	1
Revegetate in high densities to allow for plant death	1
Invite Risdon Vale Primary School to participate in revegetation activities	1
Reserve entrances	
Entrances along Risdon Vale Creek should be accessible by wheelchairs, mobility scooters, prams and bikes	3
Install directional signs	1
Tracks and trails	
The track is too steep for wheelchair access near the stone bridge	1
Improve drainage of track at E7	1
Regularly maintain walking track surface	1
Infrastructure	
Install more seats	1
Install barriers around grassed areas at E7 and E8 to prevent access by trail bikes and vehicles	1
Install interpretation signage	1
Community awareness and education	
Regularly update residents with progress	1
Stop people throwing rubbish over back fences	2
Other Reserve management issues	
Regular litter collection required	1
Address stormwater spillage at the end of Lantana Road	1

Tasflora, January 2014

Management issue	Number of respondents
Address erosion next to 64 Lantana Road	1
Stop trail bikes and illegal vehicles	4
Undertake water sampling and monitoring in conjunction with schools and community groups	1
Management issues outside the Reserve's boundary	
Install a dedicated pathway on both sides of the vehicle bridge at Kerria Road to enable safe pedestrian access from Risdon Vale to E7	1

APPENDIX 4: WEED SPECIES PRESENT AND RECOMMENDED CONTROL TECHNIQUES

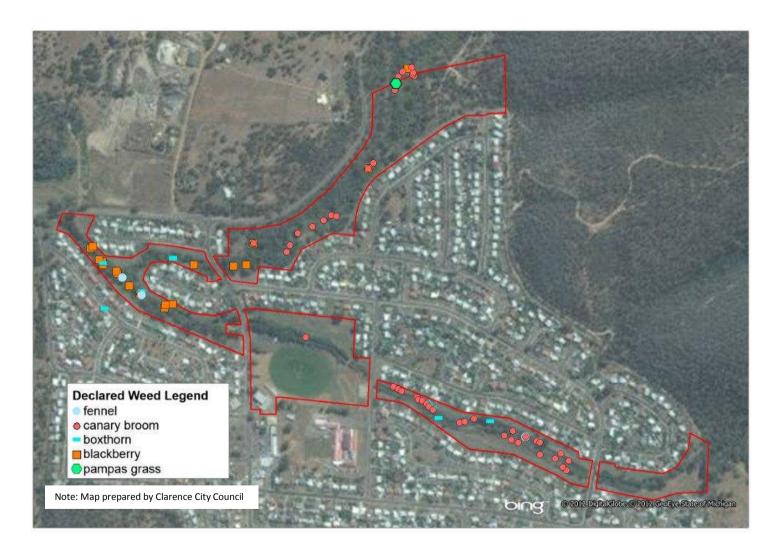
Common name	Species	Status	Picture	Recommended control technique
DECLARED WEEDS				
African boxthorn	Lycium ferocissimum	Declared WONS		Cut and paste or spot spray. Care should be taken to avoid the spines on this species as they can produce painful puncture wounds and/or an allergic reaction.
Blackberry	Rubus fruticosus 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
Canary (Montpellier) broom	Genista monspessulana	Declared WONS		Hand pull seedlings. Cut and paste larger plants. Spot spraying may be appropriate for larger infestations.

Common name	Species	Status	Picture	Recommended control technique
Fennel	Foeniculum vulgare	Declared		Cut and paste or spot spray.
Pampas grass	<i>Cortaderia</i> sp.	Declared		Spot spray in spring, ensuring complete coverage of foliage with herbicide
OTHER ENVIRONME	NTAL WEEDS			
Blue periwinkle	Vinca major			Brushcut followed by spot spraying. Repeated follow-up spot spraying required.

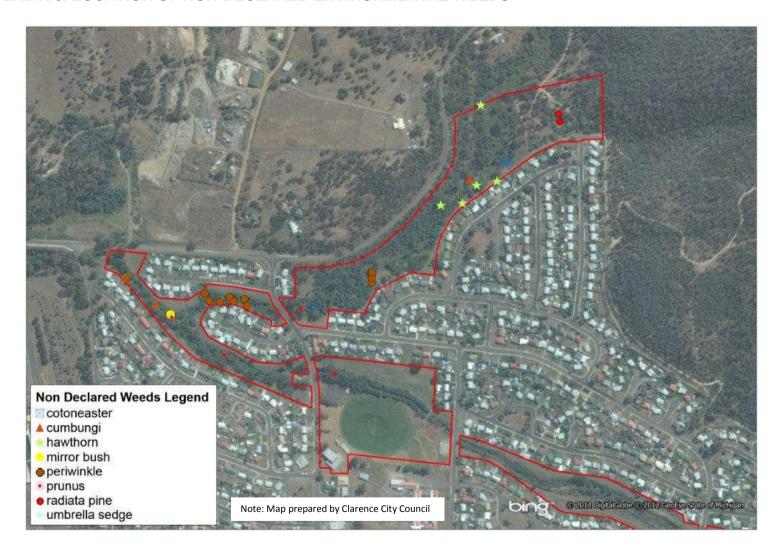
Common name	Species	Status	Picture	Recommended control technique
Cotoneaster	Cotoneaster sp.			Hand pull seedlings. Cut and paste larger plants.
Cumbungi	<i>Typha</i> sp.			Hand pull and remove all the rhizome. If infestations become larger, sections could be removed with an excavator.
Hawthorn	Crataegus monogyna			Hand pull small plants. Cut and paste larger plants.

Common name	Species	Status	Picture	Recommended control technique
Mirror bush	Coprosma repens			Hand pull seedlings. Cut and paste larger plants.
Radiata pine	Pinus radiata			Hand pull small plants. Cut and paste larger plants (mature trees should be removed by a qualified arborist).

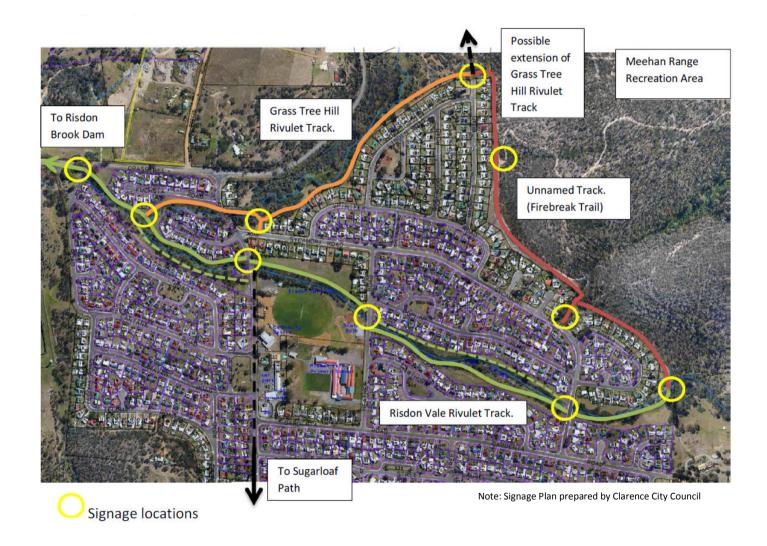
APPENDIX 5: LOCATION OF DECLARED WEEDS



APPENDIX 6: LOCATION OF NON-DECLARED ENVIRONMENTAL WEEDS



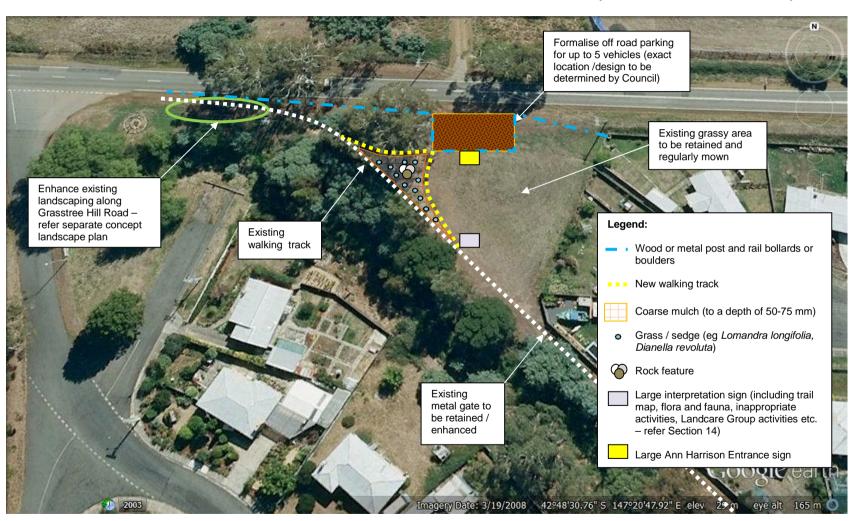
APPENDIX 7: SIGNAGE PLAN



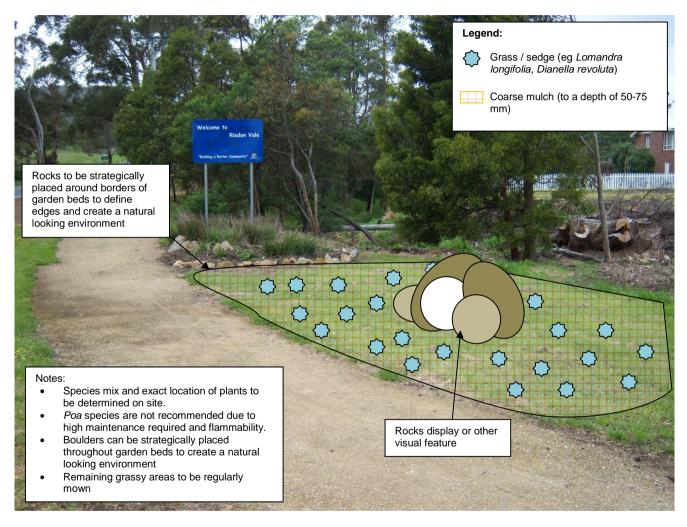
APPENDIX 8: CONCEPT LANDSCAPE PLAN FOR RESERVE ENTRANCE E6



APPENDIX 9: CONCEPT LANDSCAPE PLANS FOR ANN HARRISON ENTRANCE (RESERVE ENTRANCE E7)



Detail of proposed enhancement to landscaping along Grasstree Hill Road



APPENDIX 10: RISDON VALE BIKE PARKS PROJECT PROPOSAL



Tuesday, 21 January 2014

RISDON VALE BIKES and TRAILS (to be re-named)

The Risdon Vale Bikes and Trails Project is a multi-faceted project designed to empower young people to create their own places of social interaction and healthy recreation along with developing work readiness skills through the bike scene.

With nearly every young person in Risdon Vale owning a bike the project will build on this existing hobby enabling the development of a sustainable, healthy and engaging culture. It will work with youth aged 10 to 18 years from the local area to design, build and maintain new bike riding hubs, establish a community workshop and a 2nd hand bicycle business while helping youth transition between school and work life.

Young people will work with professional consultants to design, build and maintain 3 new riding areas in Risdon Vale (see attached map). These will act as riding hubs where youth can share a passion for riding, as well as develop skills, be physically active and contribute to their community. The areas will also offer potential for community events to encourage greater participation and challenge in the sport.

The community workshop will be a fun, relational space, where youth can come and learn from others about bike maintenance. They will be able to bring in their own bikes and be assisted to do their own repairs. The 2nd hand bike business will also use the community workshop working with youth to refurbish donated bikes and parts to sell. This will providing affordable bikes to the community, job skills for the young people and serve to provide some income for the community workshop.

The Earn-A-Bike program will see youth volunteer their time with the project to earn credits towards a refurbished bike or part. This will be formalised with a signed agreement requiring a level of commitment and a substantial number of hours undertaken towards developing the riding areas or working in the 2nd hand bike business. This will be an incentive for young people to be involved in the project and a way to encourage youth to see the benefits of working for something rather than just getting a hand out. As an additional incentive an annual bike camp will be offered to those who take part in the Earn-A-Bike program.

All these different aspects encourage young people in Risdon Vale to work together towards improving their access to recreation and social spaces while increasing employability. They will learn to collaborate and work with each other, the local community and professional consultants. Trained to manage and look after a resource in their community, adhere to workplace, health and safety standards, to commit and persist at a long term project, setting goals and problem solving along the way. They will learn business concepts, customer service and retail skills. All this will develop work readiness skills and attitudes which in turn allow youth to transition more effectively between school and work environments.

03 6234 8487 [] 0438 554 957 INFO@THIRDPLACECOMMUNITIES.COM WWW.THIRDPLACECOMMUNITIES.COM PO BOX 4632 BATHURST ST, HOBART TAS 7000 ABM 68 160 698 962



Why is the project needed?

This project is responding to the lack of social, recreational and job opportunities for youth in Risdon Vale. It will help address anti-social and illegal activities that come from the lack of such opportunities. This includes encouraging a legal hobby/activity for youth to take risks, offering skills and programs to empower youth to be contributors to their community while reducing conflict as it unites young people together around a shared passion and goal. With the closing of the local high school the community needs to be even more proactive in providing other ways in which young people can interact, building familiarity and commonality.

In a culture were young people spend hours indoors on screens isolated from face to face relationships this project will offer an alternative that is active, outdoors and relational while also contributing to the community. As nearly every young person in Risdon Vale owns a bike this project is accessible, builds on a culture which already exists and vastly increases the places to ride along with the skills to maintain both trails and bikes.

The work-trade agreement will encourage youth away from a handout mentality as they will have to earn their way to gaining shop credits along with the personal satisfaction gained from being part of the process and completion of a substantial development in their community.

At the time of the 2011 Census, Risdon Vale had an unemployment rate of 9.4% compared to 6.4% for Tasmania. Also the Socio-Economic Indexes for Areas (SEIFA), which ranks areas in Australia according to relative socio-economic advantage and disadvantage, show Risdon Vale as the second most disadvantaged SA2 in the Greater Hobart region. This project will help to increase work readiness and encourage job skills which as shown, are much needed in Risdon Vale.

How, when and where will the project be implemented?

The project will be overseen by Third Place Communities (TPC), a faith based non-profit organisation in Hobart. The project will be managed by Anthony Edler who has been a youth and community worker for TPC in Risdon Vale for 10 years. During this time he has established excellent rapport and extensive networks with youth in the area, implementing numerous programs to assist the community. His work resulted in the Community Bikes Program which over the past 6 years has assisted 200 young people and resulted in over 900 restored bikes being given away. He is a local resident and has received much praise for his role in the community along with support from many local community groups, businesses and politicians.

From October 2013, TPC has been negotiating with a private land owner and the Clarence City Council to gain access and permission to use their land for the riding areas. The project was submitted to Council as part of a broader Activity Reserve Plan (RAP) for Risdon Vale

03 6234 B4B7 /// 043B 554 957
INFO@THIRDPLACECOMMUNITIES.COM
WWW.THIROPEACECOMMINITIES.COM
PO BOX 4632 BATHURST ST, HOBART TAS 7000
ABN 68 160 698 962



and is now under final assessment. The private land owner has agreed to the use of their land.

The Risdon Vale Neighbourhood Centre and Risdon Vale Primary School are highly supportive of this project and have offered workshop space in the local Men's Shed and Community Centre as well as land nearby for storage containers.

Mtn. Trails have been approached as the professional consultants for the project as they have extensive experience working with disadvantaged youth in similar projects such as Green Corps and Work for the Dole programs.

The project aims to formally begin in July 2014, starting with both the re-development of the old BMX track in Risdon Vale and the establishment of the 2nd hand bike shop. This will also allow the work trade program to be instigated early on. Once the BMX Park has been completed the project will move to the design and development of trails in the bush land areas as well as the setting up of maintenance programs for all riding areas. The project will be completed over a 2 year period, finishing by June 2016.

With effective management there is also the potential of the Community Workshop, 2nd hand bike business and Earn-A-Bike program to continuing for a much longer period. Another possibility post this project is for the Risdon Vale trails to be extended further into the Meehan Range potentially linking up with areas such as the Clarence Mountain Bike Park and Belbins Road/Stringy Bark Gully Reserve. For example the Meehan Range Strategic Trail Plan proposed by Dirt Art could see the integration of these trails.

Adding to the strength and potential success of the project is the huge amount of community support it has already received through the use of land, workshop space and through tens of thousands of dollars of pledged in-kind support.

Additional Notes on the Riding Areas (please refer to the attached map)

Riding Area 1 (Existing BMX track in Risdon Vale) - The project will see this area upgraded with youth working alongside Mtn Trails to design and build a new bike skills park.

Riding Area 2 (C.C.C. managed bushland along the Grasstree Hill Rivulet) - This area would be designed and built as a trail network winding through vegetation with small areas of challenge and skill improvement along the way.

Riding Area 3 (Cleared land belonging to the Christian Family Centre) - This land would be used as another open bike skills area.

Riding Area 4 (Bush land belonging to the Christian Family Centre) – This would be another area designed as a trail network winding through vegetation with small areas of challenge and skill improvement along the way.

03 6234 B487 /// D438 554 957
INFO@THIRDPLACECOMMUNITIES.COM
WWW.THIRDPLACECOMMUNITIES.COM
PO BOX 4632 BATHURST ST, HOBART TAS 7000
ABM 6B 160 698 962



RISDON VALE BIKES and TRAILS BUDGET July 2014 - June 2016

FUNDING FOR C.C.C. TO CONSIDER

ITEM/SERVICE	AMOUNT
Professional Trail Consultants - Bike Park (Area 1)	\$30,000
Professional Trail Consultants - Bush Trails (Area 2)	\$3,000
Gravel, Dirt and Clean Fill (estimated)	\$7,000
Council Permits for Shipping Containers & Shed	\$3,000
TOTAL	\$43,000

OTHER FUNDING REQUIRED

ITEM/SERVICE	AMOUNT
Project Coordinator (0.6 FTE for 2 years at Social & Community Services Employee level 7, pay point 1)	\$68,241
Associated Wage Costs (Super, Workers Comp, Travel)	\$10,189
Professional Trail Consultants - Bush Trails (Areas 3 & 4)	\$12,000
Insurances	\$2,000
Trail Building Hand Tools & Safety Equipment	\$5,000
Trail Building Materials	\$5,000
Community Bike Workshop Tools, Parts & Accessories	\$5,000
Revenue Raised by the Sale of 2nd Hand Bikes	-\$5,000
2 Bike Camps	\$6,000
Relocation of Shipping Containers	\$600
Design & printing of flyers, posters & promotional material	\$4,100
TOTAL	\$113,130

IN-KIND SUPPORT FOR PROJECT

FUNDING SOURCE	ITEM/SERVICE	AMOUNT
Mark and Tom Design	Design of Logo, Flyers & Posters	\$2,500
Andrew Turnock Web Design	Website Design & Build	\$2,000
Third Place Communities	2 Shipping Containers & 4x4m Shed	\$10,000
Third Place Communities	Bike Trailer	\$3,500
Third Place Communities	Computer, Office Equipment & Stationary	\$5,300
Hobart City Church of Christ	Office Space & Power	\$20,800
Third Place Communities	Bike Tools, Parts & Accessories	\$3,000
Third Place Communities	BMX & Mountain Bikes (15 in total)	\$3,000
Risdon Vale Neighbourhood Centre	Workshop Space	\$5,000
Volunteer Bike Mechanics	Time Assisting with Instructing & Mentoring	400 hours
Wider Hobart Community	Donated Bikes (200 p/yr on past average) at \$20 p/bike average	\$8,000
	TOTAL	\$63,100

03 6234 8487 [// 0438 554 957 INFO@THROPLACECOMMUNITIES.COM WWW.THROPLACECOMMUNITIES.COM PO BOX 4632 BATHURST ST, HOBART TAS 7000 ABN 683 698 962.



Risdon Vale Riding Areas



www.thelist.tas.gov.au

© COPYRIGHT AND DISCLAIMER. Map data is compiled from a variety of sources and hence its accuracy is variable. If you wish to make decisions based on this data you should consult with the relevant authorities. Apart from any use permitted under the Copyright Act 1968, no part of the report may be copied without the permission of the General Manager; Information and Land Services, Department of Primary Industries, Parks, Water and Environment. GPO Box 44 Hobart 7001.



APPENDIX 11: SAFE WORK METHOD STATEMENT FOR CUT AND PASTE WORK BY VOLUNTEERS



Safe Work Method Statement

9-29-700-0-40-00-0-000		Developed By:	Chris Johns	Chris Johns			
Business Unit:	PARKS and COMMUNITY FACILITIES	Approved By:					
pproved Date:		Review Date:		Version: 1			
Activity Details:							
Activity Name:	Herbicide Application Volunteers: Cut and Paint (Gl	yphosate, "Round Up Bi Active") Woody	weeds				
Activity Location:	All sites						
Additional Details:	Impervious Chemical Gloves Required Wet Conditions DO NOT PROCEED 20 litre water bung with tap, filled Eye wash bottle required						

Page 1 of 11

Clarence City Council - 38 Bligh Street - ROSNY PARK 7018 ABN: 35264265198



Safe Work Method Statement

RISK MATRIX					
	CONSEQUENCES				
LIKELIHOOD	Insignificant / Minor (Potential to cause minor injury / require first aid treatment.)	Moderate (Potential to cause serious injury / require medical treatment / outpotient hospitalisation.)	Major / Catastrophic (Potential to cause serious ill health / extensive injuries / disability / death,)		
Rare (May occur only in exceptional circumstances.)	LOW	MODERATE	нідн		
Unlikely (Could occur at some time.)	LOW	MODERATE	нідн		
Moderate (Might occur at some time.)	MODERATE	нібн	нівн		
Likely / Almost Certain (Will probably occur in most circumstances.)	HIGH	HIGH	нідн		

HIERARCHY of CONTROL

Elimination Most Effective

Substitution

Isolation

Engineering

Administrative

Personal
Protective
Equipment

Least Effective

Page 2 of 11



lte m	List the Steps Involved in the Work Task	Hazards	Risk Rating	Standard Controls	Risk Controls to be Applied By WHO	Risk Controls to be Applied By - WHEN	Controlled Risk Rating	Safe to Proceed OK?
1	Pre start check and load vehicle with appropriate equipment Check herbicide applicators Check chemical containers	Manual handling Mazardous substances (glyposate, Round Up Bi Active, marker dye) Chemical leaks	MOD	Adopt good manual handling techniques Safety Data Sheets PPE - chemical gloves PPE - Safety glasses Chemical and applicators in own shared lidded container Applicators labled Spill kit and wash down with water if nessessyry First aid kit	Volunteer work crew	Prior to leaving	LOW	YES
2	Travel to site Place/ position signage Review SWMS to ensure all hazards covered	Treffic Pedestrians Manual handling Signs in windy conditions	HIGH	Timing of travel Travel route PPE - Hi Vis clothing Adopt good manual handling technique Secure signage	Volunteer work crew	On arrival Ongoing	MOD	YES
3	Walk through site and inspect Identify target weeds location	Slips/trips/falls Insect animal bites	MOD	PPE - sturdy boots, laces tied securely First aid kit available Discuss how to proceed with all participants Notify leader of any allergies and management plan	Volunteer work crew	Prior to works then ongoing	MOD	YES



Safe Work Method Statement

ite m	List the Steps Involved in the Work Task	Hazards	Risk Rating	Standard Controls	Risk Controls to be Applied By WHO	Risk Controls to be Applied By - WHEN	Controlled Risk Rating	Safe to Proceed OK?
4	Treat weeds; general	Slips/trips/falls Sharps Falling branches Eye injuries	HIGH	Do not weed slippery or steep areas Work across slopes Keep at least 5 meters from drop offs Check for trip hazards, communicate between workers as required PPE - arafety glasses PPE H Vis clothing PPE - Heavy duty gloves PPE - Chemical gloves Use sharps proceedure Avoid high wind conditions First aid kit available	Volunteer work crew	During work	MOD	YES

Page 4 of 11



lte m	List the Steps Involved in the Work Task	Hazards	Risk Rating	Standard Controls	Risk Controls to be Applied By WHO	Risk Controls to be Applied By - WHEN	Controlled Risk Rating	Sufe to Proceed OK?
5	Treat weeds: cut and paint	Herbicide leaks Damaged applicator tops Chemical glove tear/puncture Skin/eye contamination Eye damage	MOD	Replace damaged tops SDS PPE - chemical gloves PPE - Safety glasses Wear long paints long sleeved shirt boots Stop and change glove if compromised Work in pairs; one cut one paint Water to wash hands available Eye wash bottle available First aid kit available	Volunteer work crew	During work	LOW	YES

Page 5 of 11

Clarence City Council - 38 Bligh Street - ROSNY PARK 7018 ABN: 35264265198



Safe Work Method Statement

lte m	List the Steps Involved in the Work Task	Hazards	Risk Rating	Standard Controls	Risk Controls to be Applied By WHO	Risk Controls to be Applied By - WHEN	Controlled Risk Rating	Safe to Proceed OK?
6	Treat weeds: hand tools (loppers, secateurs, foldable saw, etc)	Cuts Gashes Abrasions Eye damage Manual handling	нісн	Work in pairs, one to cut one to paint Remove obstacles around weed before cut and paint Work at safe distance from other workers; 2 metres minimum PPE - heavy dury gloves PPE - Safety glasses Maintain tools in good condition Use tools only for purpose intended for Share task Adopt good manual handling techniques First aid kit svailable	Volunteer work crew	During work	MOD	YES

Page 6 of 11



ite m	List the Steps Involved in the Work Task	Hazards	Risk Rating	Standard Controls	Risk Controls to be Applied By WHO	Risk Controls to be Applied By - WHEN	Controlled Risk Reting	Safe to Proceed OK?
7	Treat weeds: Environmental exposure	Sun Wind Cold Heat Insect/animal bites	МОО	Meet CCC sunsafe policy If wind conditions change to unsafe level STOP WORK and leave site Wear appropriate clothing, (not shorts, short sleeves) Regular breaks, re hydrate Walk heavily Increase visibility of work site as nessessary Be alert for insect nests and communicate to co workers Notify leader of any allergies and management plan First aid kit available	Volunteer work crew	During work	LOW	YES
8	Treat weeds: moving to new site within work area	As for steps 3 to 7	HIGH	As for steps 3 to 7	Volunteer work crew	During work	MOD	YES



Safe Work Method Statement

lte m	List the Steps Involved in the Work Task	Hezerds	Risk Rating	Standard Controls	Risk Controls to be Applied By WHO	Risk Controls to be Applied By - WHEN	Controlled Risk Rating	Safe to Proceed OK?
9	Clean up equipment Collect signage Load up vehicle	Slips/trips/falls Chemical handling (glyphosate) Manual handling	нібн	Spacial awereness peoplie/objects Wash down applicators/tools ON BARE SOIL USING CHEMICAL GLOVES as required Put chemical, applicators in correct container THEN WASH GLOVES and store Wash hands Adopt good manual handling techniques SDS First aid kit available Eye wash bottle available	Volunteer work crew	Prior to departure	MOD	YES
10	End of working bee ensure all documentation complete		LOW		Volunteer work crew		LOW	YES

Page 8 of 11



PERSON RESPONSIBLE FOR ENSURING COMPLIANCE WITH SAFE WORK METHOD STATEMENTS:

Page 9 of 11

Clarence City Council - 38 Bligh Street - ROSNY PARK 7018

ABN: 35264265198



Safe Work Method Statement

Lacknow	rledge that:	Name:
	I am responsible for ensuring implementation, monitoring and compliance with all Safe Work Method Statements relevant to this work site; and	Position:
	review of the measures outlined must be carried out during the course of the works to ensure that they are adequate to deal with the hazards and risks identified or any additional risk which may become apparent during or before commencement of the works; and	
	if I believe measures are imadequate or that additional risks are posed by the works, I am to contact Council's Contract Supervisor or Work Health and Safety Officer and take all reasonable steps to avoid hazards and risks arising from the works, including stopping work (if necessary) until agreement is reached as to how such risks and hazards are to be dealt with.	Signature: Date:

Page 10 of 11



rint Names:	Signatures:	Dates:
	i	
	- L	

Page 11 of 11

APPENDIX 12: SUMMARY OF ON GROUND MANAGEMENT RECOMMENDATIONS

Weed management

- R1 Priority should be given to controlling pampas grass, boxthorn and isolated non-declared woody weeds.
- R2 Ongoing annual sweeps of areas already targeted for blackberry and canary broom should be undertaken prior to undertaking new primary control of these weeds.
- R3 Ongoing annual sweeps of both waterways should be undertaken to control cumbungi regrowth.
- Control of exotic grasses and broadleaf weeds is only required in revegetation areas and where necessary as part of a general Reserve maintenance program.
- An annual sweep and follow-up control of all targeted weeds should be undertaken.
- R5
 R6
 Follow-up GPS mapping of all weeds in the Reserve should be undertaken after five years to monitor progress and inform future weed control priorities.

Revegetation and regeneration

- R7 When undertaking manual control of silver wattle regrowth, stems should be cut at ground level and stems immediately painted with herbicide.
- R8 Fuel modified buffer zones should be maintained along the Reserve boundary with residential properties and other areas that are currently mown or slashed.
- R9 Revegetation activities should not be undertaken in fuel modified buffer zones, in currently mown areas or where it will impede access for the Tasmania Fire Service.
- R10 Revegetation is recommended at several locations to enhance species diversity, provide habitat for native birds and animals, and improve visual amenity
- R11 New revegetation and native landscaping activities should not be committed to unless sufficient resources are available to undertake ongoing regular maintenance of newly planted areas.

Fauna habitat management

R12 Investigate and assess options to improve water quality and aquatic habitat in a Stormwater Management Plan for the Risdon Vale Creek and Grasstree Hill Rivulet catchment.

Vegetation and fauna monitoring

- R13 Photo points should be established at several locations within the Reserve to facilitate monitoring of annual regeneration growth.
- R14 Fauna surveys, including aquatic surveys, should be undertaken in 2014 and 2018 to measure changes arising from improved river care and to further inform on ground management activities.
- An analysis of all photo points and fauna surveys should be undertaken in 2018 to determine trends and inform future management activities.

Reserve Entrances

R16 Reserve entrances should be improved by installing signage, trialling a wheelchair friendly gate at one entrance, undertaking native landscaping and preventing unauthorised access by vehicles and trail bikes.

Tracks and trails

- R17 The Reserve's track network should be improved by installing directional signage, improving track condition and constructing some new tracks. Tracks along the Reserve boundary should be wide enough to allow access by TFS vehicles.
- R₁₈ A proposal to upgrade the existing BMX track and create a mountain bike skills park in the Reserve sensitive to the area's natural values should be implemented.

Infrastructure

- R19 The Risdon Vale Creek and Grasstree Hill Rivulet Signage Plan should be implemented.
- R20 Dog waste bag dispensers and bins should be trialled at Reserve entrances E4 and E6.
- R21 New outdoor seats should be installed at several locations in the Reserve.
- R22 A review of the infrastructure requirements of the Reserve should be undertaken in 2018

Community participation and awareness

- R23 Community education should be undertaken to facilitate behavioural change and encourage ownership and appreciation of the values of the Reserve.
- R24 An interpretation signs should be installed at Reserve entrance E7 to facilitate visitor interpretation.
- R25 Actively engage with the Risdon Vale Primary School, the Risdon Vale Landcare Group, the Risdon Vale Neighbourhood Centre and the Tasmanian Prison Service to encourage ongoing participation in future Reserve activities.

Implementation Plan

- R26 Progress against all performance measures identified in the Implementation Plan should be reviewed annually.
- R27 The Risdon Vale Creek and Grasstree Hill Rivulet Reserve Activity Plan 2013-2018 should be reviewed in 2018 to assess progress and determine ongoing management priorities for the Reserve.