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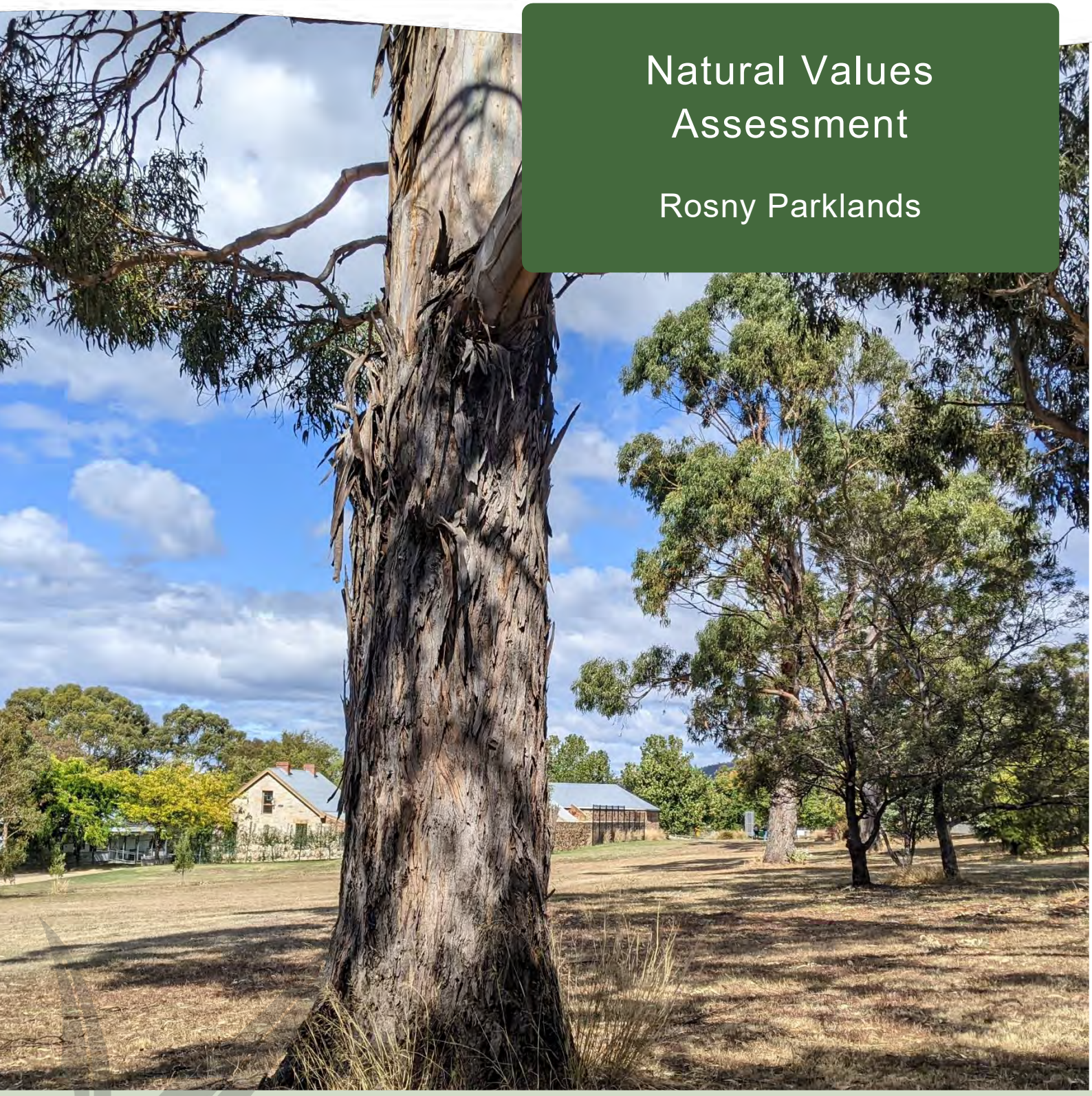
Natural Values Assessment

Rosny Parklands



Client: Clarence City Council

[redacted]

April 2023

Contents

1 Introduction

This Natural Values Report has been prepared to inform development of public open space – Rosny Parklands – on the site of the former Rosny Park Golf Course.

[redacted] has been contracted to undertake this natural values assessment on behalf of Clarence City Council. This initial assessment identifies the natural values of the site including the type and extent of vegetation communities, presence of threatened species and threatened fauna habitat. It also maps major weed infestations.

The report provides recommendations for management actions and further biodiversity surveys. Potential impacts on biodiversity and opportunities for protection and restoration of natural values are outlined.

2 Background

2.1 Site Description

Rosny Parklands occupies two land titles totalling 17.7 hectares and owned by Clarence City Council. The survey area (Figure 1) was expanded to cover small areas of Crown Land and Council land on the margins of the former golf course (e.g. along Kangaroo Bay Rivulet and beside the Tasman Highway), which may be relevant to planning and development of the site.

The 19.8 ha survey area is bounded by the Tasman Highway to the north, Rosny Hill Road to the west and Eastlands Shopping Centre, Cr Barnard Drive and Gordons Hill Road to the east. The surrounding landscape is mostly urbanised, however remnant bushland occurs on Gordons Hill Nature Recreation Area (NRA), separated from the site by the Tasman Highway, and Rosny Hill NRA, 330 m west of the site.

The site is gently sloping on the eastern side, becoming moderately sloping in the west and northwest. Elevation ranges from under 10 m asl at the southern end of the site to 40 m asl at the northern end. Kangaroo Bay Rivulet flows southward along the eastern boundary before entering a culvert which diverts the final segment of the watercourse underground to Kangaroo Bay.

The upper slopes are Jurassic dolerite, with Permian/Triassic sedimentary rocks forming the lower slopes in the south and east and some Pleistocene alluvial deposits along Kangaroo Bay Rivulet.

The former golf course occupies almost the entire site and features extensive terracing and landscaping to form fairways and greens. Relatively unmanaged land occurs on the margins of

the former golf course, such as the road embankments, and includes a patch of remnant native vegetation on the northern boundary. At the southern end of the site is the clubhouse and the Rosny Barn complex of buildings with associated carpark. A public walking track follows the eastern boundary of the site.

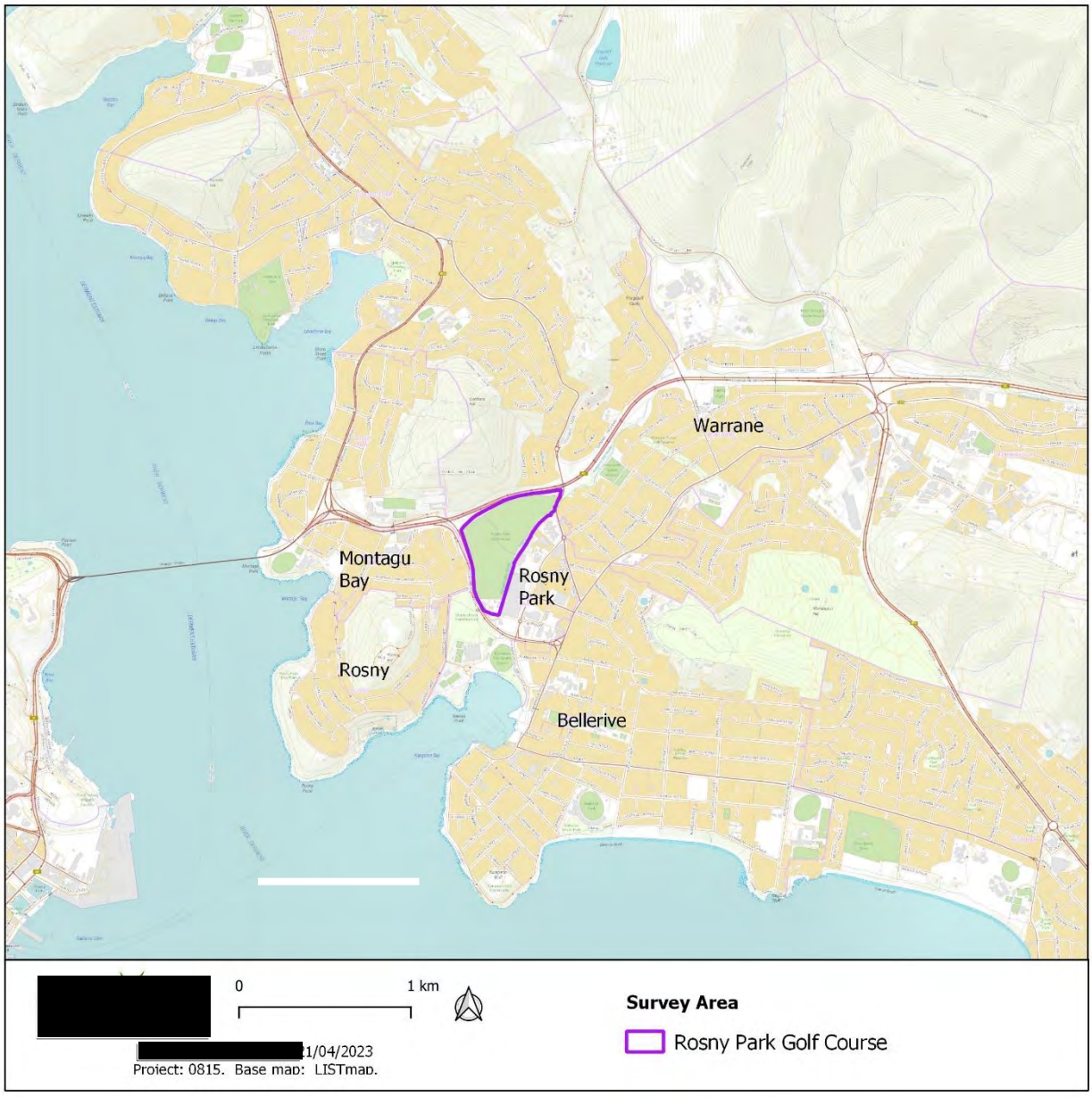


Figure 1. Site location.

2.2 **Development Proposal**

A concept is being developed to transform the Rosny Parklands as a key component of the proposed Open Space Network in Rosny Park. The draft master plan for the site identifies opportunities to utilise the existing open space, remnant bushland and rivulet to create new public open spaces. Development of the site might include playgrounds, gardens, walking trails, events spaces, seating and pavilions.

3 Methods

The natural values assessment was undertaken in two stages; desktop analysis and field survey.

3.1 Desktop analysis

The desktop analysis involved extracting data from a variety of sources, including:

- Natural Values Atlas report, generated 6h April 2023 (NRE 2023)
- LISTmap

3.2 Field survey

The field survey was undertaken on 24th March 2023. Vegetation on the site was assessed and classified according to TASVEG 4.0. Native vascular plant species were recorded. Major weed species, such as woody weeds and declared weeds, were recorded. The numerous exotic grasses and planted trees and shrubs across the site were generally not identified and recorded, apart from some prominent or potentially invasive species.

Searches for potential threatened fauna habitat e.g. tree hollows and den sites, and other evidence e.g. scats, diggings and tracks were also undertaken. No detailed fauna surveys were conducted.

Locations of threatened flora, fauna habitat and significant weeds were mapped with the Gaia GPS app and population data was captured e.g. numbers of individuals, area occupied etc.

Taxonomic nomenclature for flora follows the latest Census of Vascular Plants of Tasmania (Baker & de Salas 2022). Classification of vegetation communities is in accordance with Kitchener and Harris (2013) and TASVEG 4.0.

3.3 Limitations of the survey

Whilst every effort was made to compile a complete list of native vascular plants and significant weeds for the site, a single survey is unlikely to detect all species present, particularly outside the ideal timing of spring/early summer. Some plants could not be identified to a species level and some species may have been overlooked due to a lack of fertile material. It is likely that additional species are present but were dormant at the time of survey e.g. annuals, ephemerals.

4 Natural Values Assessment

This section outlines the findings of the desktop analysis and field survey, including a description of the vegetation communities, threatened flora, fauna habitat values and weeds (Figure 2).

4.1 Vegetation Communities

Two native and two modified vegetation communities were mapped during the field survey, as per the TASVEG 4.0 classification system.

- *Bursaria – Acacia* woodland (NBA)
- *Themeda triandra* grassland (GTL)
- Regenerating cleared land (FRG)
- Urban (FUR)

***Bursaria - Acacia* woodland (NBA)**

Remnant native vegetation occupies just under 1 ha in the northeast of the site. This community is distinguished by large shrubs and small trees of *Acacia mearnsii, Bursaria spinosa* and *Allocasuarina verticillata* (Photo 1). The canopy is dense in the centre of this patch, where *A. verticillata* is dominant and the vegetation is close to *A. verticillata* forest (NAV) but has a more grassy understorey and more diverse tall shrub layer than is typical of NAV. The fringes of this vegetation mostly have a sparser shrub layer with *B. spinosa* more prominent.

A few small *E. viminalis* and *E. globulus* trees are present, indicating that this community has been derived from eucalypt forest by historical removal of trees. Some eucalypt regeneration (small saplings) is evident.

The groundcover layer features dense grass cover. Exotic grasses, notably *Dactylis glomerata* (cocksfoot) and *Piptatherum miliaceum* (rice millet), are dominant on the fringes. A diverse mix of native grasses make up 50% or more of the grass cover in the less disturbed centre of the remnant. Other native groundcover species present include *Lepidosperma laterale, Lomandra longifolia and Lissanthe strigosa*. The diversity of native flora is reasonably high considering the small size of the remnant, the disturbance history and abundance of exotic grasses.

***Themeda triandra* grassland (GTL)**

Native grassland dominated by *Themeda triandra* (kangaroo grass) occupies a 0.3 ha patch in the northern part of the former golf course that has not been subject to the intense management which has converted most of the site into more manicured exotic grasses. This vegetation features dense cover of grasses, particularly kangaroo grass and exotic cocksfoot, with scattered shrubs, notably *Allocasuarina verticillata* (Photo 2). The small size (< 1 ha) of

this patch and high proportion of exotic species mean this patch does not meet the criteria for classification as Lowland Native Grasslands of Tasmania under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBCA). The native grassland patch is also unlikely to meet the minimum native species richness for the EPBCA-listed community. While this native grassland is relatively small and somewhat degraded it does contain a threatened flora species (*Dianella amoena)* and its persistence indicates a resilience and capacity for restoration.

Urban (FUR)

The FUR mapping unit has been used to classify most of the site, in keeping with the surrounding urbanised landscape. The site is significantly modified but retains some elements of native flora. The survey area is largely comprised of the golf greens and fairways, which feature a groundcover of exotic grasses. Trees are present throughout the site, including a number of large old *Eucalyptus globulus* (blue gum) (Photo 3). These trees appear to be relicts of the original native vegetation of the site, which was likely a grassy *E. globulus* forest. Native trees, shrubs and grasses are common along the northern margin of the site, intermixed with exotic grasses and planted conifers.

Several mainland Australian species of *Acacia, Eucalyptus* and *Melaleuca* have been planted on the former golf course, particularly at the western end. Exotic conifers are common along the western and northern margins of the site. Garden beds featuring Australian and Tasmanian native species are located on the eastern and southern margins of the golf course.

Photo 1. *Bursaria - Acacia* woodland with grassy understorey and immature blue gum trees.

Photo 2. Native *Themeda* grassland. Photo: A. Hazeldine.

Photo 3. Fairway of mown exotic grasses fringed by blue gum trees.

Photo 4. Pond on Kangaroo Bay Rivulet with fringing riparian vegetation containing native and exotic elements.

Regenerating cleared land (FRG)

Areas of mixed native and exotic vegetation along the northern and southern edges of the site have been mapped as this community in recognition of the significant proportion of native flora and the capacity for regeneration to native vegetation. These are sites that have been mostly cleared or disturbed historically but have not been fully converted to lawns or gardens. Native trees or shrubs which have survived or recolonised these sites make up the majority of woody vegetation, although exotic trees and shrubs are sometimes prominent. The groundcover layer is typically dominated by exotic species, particularly grasses, but with a reasonable diversity of native herbs and grasses also present.

Riparian and aquatic vegetation along Kangaroo Bay Rivulet is a mix of native and weedy flora (Photo 4). The tree canopy comprises *Eucalyptus ovata, Acacia dealbata* and *A. melanoxylon*. The shrub layer includes natural *A. dealbata* regeneration along with some revegetation plantings of Tasmanian natives. The groundcover is dominated by exotic grasses. Aquatic and semi-aquatic flora includes a mix of native and introduced sedges, rushes and herbs such as *Cyperus eragrostis*, *Juncus pallidus* and *Schoenoplectus pungens*. The native tree canopy and presence of native aquatic plants provide significant biodiversity value, which is unusual in such an urbanised site. However, overall riparian vegetation condition is poor due to the narrow and fragmented extent of native flora and the abundance of exotic plants.

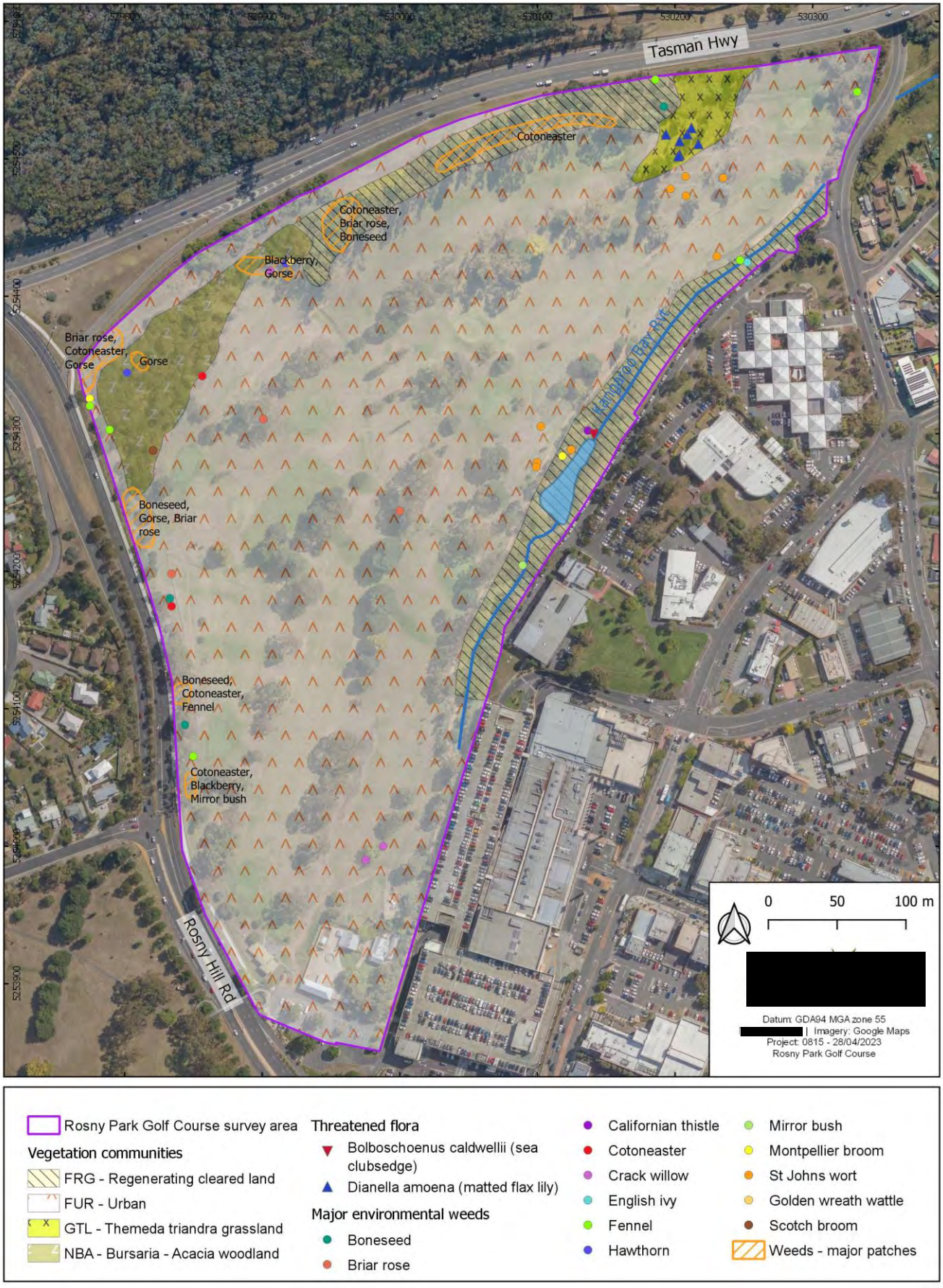


Figure 2. Vegetation, threatened flora and weeds in survey area.

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4.2 Flora

A total of 42 Tasmanian native vascular plant species were recorded during the survey. Most of these are naturally occurring, although *Eucalyptus risdonii* and *Allocasuarina littoralis* appear to have been planted. Several additional native species occur as revegetation or amenity plantings and have not been recorded here.

Additional flora species are likely to occur within the site and some plants could have been overlooked due to the inherent limitations of the survey e.g. seasonal timing, timed meander method. For the full list of flora species recorded during the survey see Appendix 1.

4.2.1 Threatened Flora

Four threatened flora species listed under the *Threatened Species Protection Act 1995* (TSPA) are known to occur on the site, one of which is in cultivation. One species – *Dianella amoena* – is also listed on the *Environment Protection and Biodiversity Conservation Act 1999* (EPBCA).

Bolboschoenus caldwellii

Listed as rare under the TSPA.

Bolboschoenus caldwellii (sea clubsedge) occurs on the margins of a pond on Kangaroo Bay Rivulet (Photo 5). Approximately 20 individuals of this tall sedge were found in a single patch during the March 2023 survey. There may be other occurrences of the species along the rivulet.

Dianella amoena

Listed as rare under the TSPA and endangered under the EPBCA.

Dianella amoena (grassland flaxlily) occurs in native grassland in the east of the site (Photo 6). The site features a mix of kangaroo grass (*Themeda triandra*) and exotic grasses with scattered she-oaks. The flaxlily population might exceed 100 plants. A survey in spring or summer, when plants are flowering, is recommended to determine extent and total population.

Austrostipa bigeniculata

Listed as rare under the TSPA.

Austrostipa bigeniculata (doublejointed speargrass) is a tall grass typically occurring in open woodlands and grasslands in southeast Tasmania. Three species of *Austrostipa* were collected during the March survey. One of these was subsequently identified as *A. bigeniculata* but further surveys are needed to confirm the distribution and abundance. Ideal survey timing is throughout December, January and February.

Eucalyptus risdonii

Listed as rare under the TSPA.

Eucalyptus risdonii (risdon peppermint) is a small tree native to the Clarence LGA (Meehan Range and Government Hills). Four trees occur in a planting in the southwest of the site. Because these plants are in cultivation and not naturally occurring, they are not subject to the TSPA.

Due to the high intensity of surveys and the diversity of environments within a 5 km radius of the site there are numerous other threatened flora species recorded within this radius. A subset of these species, those which may occur on the site, are listed in Table 1. Those with no suitable habitat on site or no conceivable chance of occurring have not been included and are listed in Appendix 2.

Photo 5. *Bolboschoenus caldwellii* (sea clubsedge) growing on bank of rivulet.

Photo 6. *Dianella amoena* (grassland flaxlily) flowering. Photo: A. Hazeldine.

Table 1. Threatened flora species potentially occurring on the site.

Species	Status TSPA	Status EPBCA	Comments
Asperula scoparia subsp. *scoparia* prickly woodruff	r		Occurs in grasslands and grassy woodlands, often on dolerite. Remnant vegetation on the site is potential habitat.
Caladenia caudata tailed spider-orchid	v	VU	Nearest population is at Waverley Flora Park in open grassy forest. Habitat on site is marginal.
Eryngium ovinum blue devil	v		Prefers heavy clay soils on dolerite in grasslands or grassy woodlands. Remnant vegetation on the site is potential habitat.
Haloragis heterophylla variable raspwort	r		Occurs in grasslands and grassy woodlands, often on dolerite. Remnant vegetation on the site is potential habitat.
Lepidium hyssopifolium soft peppercress	e	EN	Occurs in grasslands and grassy woodlands, in bare ground under large trees or shrubs. Also occurs on road verges and under exotic trees in non-native vegetation. Suitable habitat occurs under large eucalypts and conifers as well as road verges. No records within 2 km.
Scleranthus fasciculatus spreading knawel	v		Occurs in grasslands and grassy woodlands, often on dolerite. Remnant vegetation on the site is potential habitat.
Senecio squarrosus leafy fireweed	r		Occurs in grasslands and grassy woodlands, often on dolerite. Tolerates disturbance. Remnant vegetation on the site is potential habitat.
Thelymitra bracteata leafy sun-orchid	e		The key site for this species in Tasmania is Rosny Hill, with the nearest records under 500 m from the survey area. At Rosny Hill it occurs amongst exotic grasses as well as native grasses. The similarity of habitats and proximity suggests the possibility of this species occurring in remnant native vegetation in the survey area. Recommended survey period is October – December.
Vittadinia cuneata var. *cuneata* fuzzy new-holland-daisy	r		Occurs in grasslands and grassy woodlands, including on somewhat disturbed sites. Remnant vegetation on the site is potential habitat.

Vittadinia gracilis woolly new-holland-daisy	r		Occurs in grasslands and grassy woodlands, including on somewhat disturbed sites. Remnant vegetation on the site is potential habitat.
Vittadinia muelleri narrowleaf new-holland-daisy	r		Occurs in grasslands and grassy woodlands, including on somewhat disturbed sites. Remnant vegetation on the site is potential habitat.

(EPBCA) CR = Critically Endangered, EN = Endangered, VU = Vulnerable
(TSPA) e = endangered, v = vulnerable, r= rare

4.2.2 Introduced Plants

Several environmental weeds were recorded at the site, including nine listed as declared weeds under the *Weed Management Act 1999* (WMA) (Table 2, Figure 2). Weeds are mostly confined to the margins of the site and in some cases are well established (Photo 7, 8). The more actively managed former golf course and garden beds are largely free of weeds.

These will need to be managed in accordance with the Act following the best practice prescriptions as laid out in the Weed *and Disease Planning and Hygiene Guidelines - Preventing the spread of weeds and diseases in Tasmania* (DPIPWE, Stewart and Askey-Doran, 2015)

Many other declared weeds have been recorded from within 500 m of the site. Some of these may be present and as yet undetected on the site. These include *Nassella neesiana* (Chilean needlegrass), *N. trichotoma* (serrated tussock) and *Echium plantagineum* (patersons curse). Notably, chilean needlegrass is present on the verges of the Tasman Highway on the northern boundary of the site.

Besides the declared weeds are several additional environmental weeds listed in Table 2. Numerous other exotic plants occur on the site, some with potential to become invasive. For example, *Acacia baileyana, A. pravissima, A. pycnantha* and *A. saligna* are wattle species native to mainland Australia and known to be invasive in Tasmania.

Table 2: Environmental weeds present on site

Species	Comment	WMA	WoNS
Acacia baileyana, A. pravissima, A. pycnantha wattle species	Few individuals planted on golf course, particularly in southwest corner. Potentially invasive in native vegetation. Unlikely to be a problem in current context.		
Acacia saligna Golden wreath wattle	Small patch on edge of native vegetation (NBA) near stormwater drain. Around 5 mature plants. Presence of several saplings suggests this species is invasive.		
Chrysanthemoides monilifera subsp. *monilifera* boneseed	Few occurrences on bank along western and northern edges of site.	YES	YES
Cirsium arvense var. *arvense* Californian thistle	One small patch beside rivulet.	YES	
Cirsium vulgare spear thistle	Few occurrences on bank along western and northern edges of site.		
Coprosma repens mirror bush	Several plants near western edge of site and one on rivulet.		
Cotoneaster glaucophyllus largeleaf cotoneaster	Frequent on bank along western and northern edges of site.		
Cotoneaster pannosus velvet cotoneaster	Single plant on southern edge of native vegetation.		
Crataegus monogyna hawthorn	Few plants in native vegetation remnant.		
Cyperus eragrostis drain flatsedge	Common in rivulet.		
Cytisus scoparius Scotch broom	At edge of native NBA vegetation, 15-20 plants. Site has been sprayed.	YES	YES
Foeniculum vulgare fennel	Widespread on western margin of site and adjacent road verge, particularly in open vegetation on top of bank. Few plants on	YES	

Species	Comment	WMA	WoNS
	northern and western margins and along rivulet.		
Genista monspessulana Montpellier broom	Small patch on western edge of site and another patch near rivulet in the south.	YES	YES
Hedera helix ivy	One plant observed growing on native black gum along rivulet.		
Hypericum perforatum subsp. *veronense* St Johns wort	Occurs mostly in two areas of rough grass on gold course.	YES	
Populus alba poplar	Several trees planted throughout golf course. Potential to spread by suckering, particularly in damp areas.		
Rosa rubiginosa briar rose	Scattered individuals in western half of site.		
Rubus fruticosus agg. blackberry	Localised small patches along western and northern edges of site	YES	YES
Salix × fragilis crack willow	Few trees, possibly planted, on former golf course. Potential to invade riparian areas and drainage lines.	YES	YES
Sambucus nigra black elderberry	Infrequent along rivulet.		
Ulex europaeus gorse	Localised small patches in and around native vegetation (Photo 8).	YES	YES
Zantedeschia aethiopica arum lily	One plant observed on bank of rivulet. Potentially highly invasive in disturbed riparian areas.		

Photo 7. Dense weeds on western edge of site, featuring cotoneaster, mirror bush and blackberry.

Photo 8. Gorse in *Bursaria - Acacia* woodland.

4.3 Fauna

4.3.1 Threatened fauna

No threatened fauna species listed under the *Threatened Species Protection Act 1995* or the *Environment Protection and Biodiversity Conservation Act 1999* were recorded during the survey.

4.3.2 Threatened fauna habitat

Significant habitat for one threatened fauna species is present: potential swift parrot (*Lathamus discolor*) foraging habitat in the form of large old *E. globulus* on the former golf course and, to a lesser extent, *E. ovata* trees along the rivulet. Additionally, there is potential habitat for one species listed under the EPBCA on the site: Eastern barred bandicoot (*Perameles gunnii*). There are no records of either species from the site or the surrounding 500 m.

Additional species

A search of the Natural Values Atlas (NRE database) revealed that 17 threatened fauna species have been recorded within 2 km. Many of these are marine or coastal species with no suitable habitat in the survey area. Those with suitable habitat present on site are addressed in Table 3. Those with no suitable habitat and no conceivable chance of occurring are listed in Appendix 2.

Table 3. Threatened fauna potentially occurring on or utilising the site.

Species	Status TSPA	Status EPBCA	Comment
Aquila audax subsp. *fleayi* Tasmanian wedge-tailed eagle	e	EN	No suitable nesting habitat. Foraging habitat is present across the site.
Dasyurus viverrinus eastern quoll		EN	Species is adaptable to various habitats including peri-urban and agricultural land. Only 1 record from within 2 km of site, suggesting there is no established local population. Potential denning and foraging habitat on site.
Haliaeetus leucogaster white-belled sea-eagle	v		No suitable nesting habitat. Potential but unlikely foraging habitat in the pond on the rivulet.
Lathamus discolor swift parrot	e	CE	During the breeding season, nectar from Tasmanian blue gum (*Eucalyptus globulus*) and black gum (*Eucalyptus ovata*) flowers is the

Species	Status TSPA	Status EPBCA	Comment
			primary food source for the species. Swift parrots breed in tree hollows in mature eucalypts within proximity of a flower source. Potential nesting habitat is likely to be present in large old blue gum trees. Suitable foraging habitat includes large blue gums and smaller black gums.
Litoria raniformis green and gold frog	v	VU	Occurs in wetlands and other waterbodies with emergent aquatic vegetation, including drains and ponds. Suitable habitat is present in vegetated margins of pools on Kangaroo Bay Rivulet. Unlikely to be present given the species was last recorded in the area (within 2 km) in 1985.
Perameles gunnii eastern barred bandicoot		VU	Potential habitat is forests with a grassy understorey, native and exotic open vegetation types including woodlands and open grasslands, particularly in landscapes with a mosaic of agricultural land and remnant bushland. Suitable habitat is present, however species is likely to have been recorded previously if present in the area.
Sarcophilus harrisii Tasmanian devil	e	EN	This species lives in a wide range of habitats across Tasmania. The population has declined by more than 80% since the mid-1990s due to the infectious cancer Devil Facial Tumour Disease (DFTD). Potential foraging habitat on site but species unlikely to be present in such a highly urbanised landscape.
Tyto novaehollandiae; masked owl	e	VU	Suitable foraging habitat. No suitable nesting habitat present. Last recorded within the area (2 km radius) in 1981.

(EPBCA) CR = Critically Endangered, EN = Endangered, VU = Vulnerable

(TSPA) e = endangered, v = vulnerable, r= rare

5 Conclusion and Recommendations

The natural values of the Rosny Parklands were assessed to inform the development process for a new parkland precinct.

The 20 ha site is almost entirely comprised of modified vegetation, with just over 1 ha of remnant native vegetation. However, modified vegetation varies from entirely exotic open grass to degraded semi-native vegetation and includes significant natural values such as remnant old-growth blue gums, threatened flora, riparian vegetation and a variety of fauna habitats.

The native *Bursaria – Acacia* woodland (NBA) is a disturbance induced community and is impacted by exotic grasses and weeds. Similarly, the native *Themeda* grassland (GTL) is probably disturbance induced (i.e. from removal of trees and shrubs). Nevertheless, both communities feature a reasonable diversity of native flora. Recruitment of native trees and shrubs indicate that the woodland is a resilient patch despite its small size.

Both native communities are likely to develop into forest or woodland dominated by one or more of the following tree species: *Eucalyptus globulus, E. viminalis* or *Allocasuarina verticillata.* This would improve the biodiversity value of the present NBA woodland by increasing the structural complexity and fauna habitat. However, it may be desirable to maintain the grassland for biodiversity and this would likely require some intervention (e.g. burning or manual removal of young trees and shrubs).

Based on the present survey and data provided by Council, there are three naturally occurring threatened flora species on the site: *Austrostipa bigeniculata*, *Dianella amoena* and *Bolboschoenus caldwellii*. The threatened tree *Eucalyptus risdonii* is present but is not considered to be naturally occurring at the site.

No threatened fauna are known to occur on the site, however there is potential habitat for swift parrot and eastern barred bandicoot. The site supports non-threatened fauna including brown bandicoots and native hens. The variety of flowering shrubs and trees provide good foraging habitat for birds.

The natural values throughout the site provide an excellent framework for a parkland design that protects and restores biodiversity. The condition of native woodland, native grassland and semi-native vegetation (riparian zone and northern margin) could be improved greatly by controlling weeds in these areas. There is scope to expand existing native vegetation by revegetation with local native plants.

The extensive areas lacking in native vegetation and flora allow for development of parkland features without impacting the existing natural values.

The following general recommendations are provided regarding management of the site and planning of parkland development.

Recommendations

- Retain remnant native vegetation (*Acacia – Bursaria* woodland; *Themeda* grassland) and manage these areas to maintain natural values, including recruitment of trees and shrubs in the woodland and persistence of native groundcover species.
- Retain all blue gum and black gum trees as key features of native vegetation and fauna habitat, including potential foraging value for swift parrots. It may be necessary to map locations of individual trees to make sure they are considered in the planning for the site.
- Manage areas where *Dianella amoena* occurs to ensure persistence of this species. Key management actions are mowing, slashing or burning to maintain grassy vegetation and avoidance of fertilisers.
- Control environmental weeds (particularly declared weeds and woody weeds such as cotoneaster, briar rose and mirror bush), prioritising weed control in native vegetation and riparian areas.
- Liaise with Department of State Growth regarding weed control along Tasman Highway bordering the site to help prevent weed invasion from the road verge onto the site.
- Undertake threatened flora surveys in December targeting grassland/grassy woodland species listed in Table 1 and mapping extent and populations of *Austrostipa bigeniculata* and *Dianella amoena*. This survey should also look for the declared weed *Nassella neesiana* (Chilean needlegrass) along the northern margin of the site.

6 References

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Appendix 1 – Vascular plant species list for Rosny Parklands

Recorder [redacted] Date: 24 March 2023

[redacted]

Dicotyledons

ADOXACEAE			
Sambucus nigra	black elderberry	i	
AIZOACEAE			
Mesembryanthemum cordifolium	heartleaf iceplant	i	
AMARANTHACEAE			
Atriplex cinerea	grey saltbush		
Einadia nutans subsp. nutans	climbing saltbush		
APIACEAE			
Foeniculum vulgare	fennel	i	d
ARALIACEAE			
Hedera helix	ivy	i	
ASTERACEAE			
Cassinia aculeata subsp. aculeata	common dollybush		
Chrysanthemoides monilifera subsp.	boneseed	i	d
Cirsium arvense var. arvense	creeping thistle	i	d
Cirsium vulgare	spear thistle	i	
Senecio linearifolius	fireweed groundsel		
Senecio sp.			
BRASSICACEAE			
Hirschfeldia incana	hoary mustard	i	
Lepidium desvauxii			
CASUARINACEAE			
Allocasuarina littoralis	black sheoak		
Allocasuarina verticillata	drooping sheoak		
CONVOLVULACEAE			
Convolvulus angustissimus subsp.	blushing bindweed		
ERICACEAE			
Lissanthe strigosa subsp. subulata	peachberry heath		
Styphelia humifusa	native cranberry		
FABACEAE			
Acacia baileyana	cootamundra wattle	i	

[redacted]

Acacia dealbata subsp. dealbata	silver wattle		
Acacia leprosa var. graveolens	varnish wattle		
Acacia mearnsii	black wattle		
Acacia melanoxylon	blackwood		
Acacia pravissima	ovens wattle	i	
Acacia pycnantha	golden wattle	i	
Acacia saligna	golden wreath wattle	i	
Cytisus scoparius	scotch broom	i	d
Genista monspessulana	montpellier broom	i	d
Ulex europaeus	gorse	i	d
GOODENIACEAE			
Goodenia ovata	hop native-primrose		
HYPERICACEAE			
Hypericum perforatum subsp. veronense	perforated st johns-wort	i	d
MYRTACEAE			
Eucalyptus globulus subsp. globulus	tasmanian blue gum		
Eucalyptus ovata var. ovata	black gum		
Eucalyptus pulchella	white peppermint	end	
Eucalyptus risdonii	risdon peppermint	end	**r**
Eucalyptus spp.			
Eucalyptus viminalis subsp. viminalis	white gum		
Melaleuca spp.			
PITTOSPORACEAE			
Bursaria spinosa subsp. spinosa	prickly box		
ROSACEAE			
Cotoneaster glaucophyllus	largeleaf cotoneaster	i	
Cotoneaster pannosus	velvet cotoneaster	i	
Crataegus monogyna	hawthorn	i	
Rosa rubiginosa	sweet briar	i	
Rubus fruticosus	blackberry	i	d
Sanguisorba minor	salad burnet	i	
RUBIACEAE			
Coprosma repens	mirrorbush	i	
SALICACEAE			
Populus alba	white poplar	i	
Salix × fragilis nothovar. fragilis	crack willow	i	d

SAPINDACEAE				
Dodonaea viscosa subsp. spatulata	broadleaf hopbush			
SOLANACEAE				
Solanum laciniatum	kangaroo apple			
Gymnosperms				
CUPRESSACEAE				
Cupressus macrocarpa		i		
PINACEAE				
Pinus sp.			i	
Monocotyledons				
ARACEAE				
Zantedeschia aethiopica	arum lily		i	
ASPARAGACEAE				
Lomandra longifolia	sagg			
CYPERACEAE				
Bolboschoenus caldwellii	sea clubsedge			**r**
Carex appressa	tall sedge			
Cyperus eragrostis	drain flatsedge		i	
Ficinia nodosa	knobby clubsedge			
Lepidosperma laterale	variable swordsedge			
Schoenoplectus pungens	sharp clubsedge			
HEMEROCALLIDACEAE				
Dianella amoena	grassland flaxlily			**r EN**
JUNCACEAE				
Juncus pallidus	pale rush			
Juncus pauciflorus	looseflower rush			
JUNCAGINACEAE				
Cycnogeton procerum	greater waterribbons			
POACEAE				
Austrostipa bigeniculata	doublejointed speargrass			**r**
Austrostipa mollis	soft speargrass			
Austrostipa rudis subsp. australis	southern speargrass			
Dactylis glomerata	cocksfoot		i	
Dichelachne crinita	longhair plumegrass			
Piptatherum miliaceum	rice millet		i	
Poa rodwayi	velvet tussockgrass			

Rytidosperma racemosum var.	stiped wallabygrass
Rytidosperma setaceum	bristly wallabygrass
Themeda triandra	kangaroo grass

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end = Tasmanian endemic i = introduced

d = declared weed ~ *Weed Management Act 1999)*

CR = Critically Endangered, EN = Endangered, VU = Vulnerable ~ *Environment Protection and Biodiversity Conservation Act 1999*

e = endangered v = vulnerable r= rare ~ *Threatened Species Protection Act 1995*

[redacted]

[redacted]

[redacted]

[redacted]

Threatened flora within 2000 metres

Verified Records

Species	Common Name	SS	NS	Bio	Observation Count	Last Recorded
Asperula scoparia subsp. scoparia	prickly woodruff	r		n	2	01-Jan-1993
Asperula subsimplex	water woodruff	r		n	2	01-Dec-1891
Austrostipa bigeniculata	doublejointed speargrass	r		n	1	19-Nov-2015
Austrostipa blackii	crested speargrass	r		n	1	21-Dec-2011
Caladenia caudata	tailed spider-orchid	v	VU	e	75	30-Sep-2019
Caladenia filamentosa	daddy longlegs	r		n	6	05-Nov-1950
Calocephalus citreus	lemon beautyheads	r		n	2	03-Feb-1948
Comesperma defoliatum	leafless milkwort	r		n	1	01-Jan-1896
Damasonium minus	starfruit	r		n	1	01-Dec-1890
Dianella amoena	grassland flaxlily	r	EN	n	12	27-Oct-2020
Eryngium ovinum	blue devil	v		n	4	17-Jul-1996
Eucalyptus risdonii	risdon peppermint	r		e	5	01-Jan-1990
Haloragis heterophylla	variable raspwort	r		n	1	01-Jan-2003
Isolepis stellata	star clubsedge	r		n	1	30-Nov-1897
Ranunculus pumilio var. pumilio	ferny buttercup	r		n	1	01-Oct-1914
Scleranthus fasciculatus	spreading knawel	v		n	4	02-Oct-2010
Senecio squarrosus	leafy fireweed	r		n	8	21-Dec-2011
Sirophysalis trinodis	three-node seaweed	r		n	1	01-Jan-2010
Stenopetalum lineare	narrow threadpetal	e		n	4	17-Oct-1942
Thelymitra bracteata	leafy sun-orchid	e		n	36	11-Nov-2016
Velleia paradoxa	spur velleia	v		n	15	05-Jan-2022
Vittadinia cuneata var. cuneata	fuzzy new-holland-daisy	r		n	1	01-Jan-1990
Vittadinia gracilis	woolly new-holland-daisy	r		n	1	11-Oct-2006
Vittadinia muelleri	narrowleaf new-holland-daisy	r		n	25	09-Jul-2019
Vittadinia muelleri (broad sense)	narrow leaf new holland daisy	p		n	18	11-Oct-2006

[redacted]

Verified threatened fauna records within 2 km of the project area; SS = Tasmanian *Threatened Species Protection Act 1995*, NS = Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*

Threatened fauna within 2000 metres

Verified Records

Species	Common Name	SS	NS	Bio	Observation Count	Last Recorded
Aquila audax	wedge-tailed eagle	pe	PEN	n	4	30-Jun-2020
Aquila audax subsp. fleayi	tasmanian wedge-tailed eagle	e	EN	e	2	02-Aug-1938
Arctocephalus forsteri	new zealand fur seal	r		n	1	03-Mar-2018
Arctocephalus forsteri subsp. doriferus	new zealand fur seal	r		n	4	19-Mar-2006
Arctocephalus tropicalis	sub-antarctic fur seal	e	VU	n	1	16-Jun-2021
Brachionichthys hirsutus	spotted handfish	e	CR	e	21	15-May-2022
Dasyurus viverrinus	eastern quoll		EN	n	1	05-Mar-2019
Eubalaena australis	southern right whale	e	EN	m	4	23-Sep-2008
Haliaeetus leucogaster	white-bellied sea-eagle	v		n	2	13-Feb-2017
Hirundapus caudacutus	white-throated needletail		VU	n	2	24-Mar-2018
Lathamus discolor	swift parrot	e	CR	mbe	16	15-Jan-2015
Litoria raniformis	green and gold frog	v	VU	n	3	10-Oct-1985
Megaptera novaeangliae	humpback whale	e		m	3	01-Jul-2014
Mirounga leonina	southern elephant seal	e	VU	n	1	27-Jan-2017
Perameles gunnii	eastern barred bandicoot		VU	n	6	01-Sep-2021
Procellaria cinerea	grey petrel	e		n	1	01-May-1976
Sarcophilus harrisii	tasmanian devil	e	EN	e	6	01-Sep-2016
Thinornis rubricollis	hooded plover		VU	n	1	25-Apr-1915
Tyto novaehollandiae	masked owl	pe	PVU	n	1	07-Oct-1981