

2015

Dodges Ferry Recreation Reserve Management Plan



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Vision:

The Dodges Ferry Recreation Reserve is valued by the Dodges Ferry and broader community as an ecological and culturally significant location.

The management of this reserve aims to preserve and protect the native vegetation and habitat, to rehabilitate the natural vegetation where necessary and to promote the area for passive recreation.

1.0 Introduction

The Dodges Ferry Recreation Reserve (the Reserve) is the largest area of remnant native bushland within Dodges Ferry. The reserve is approximately 9 km south-east of Sorell, 24 km north-east of Hobart and approximately 12.0 ha in size.

In his 1995 survey '*The Dodges Ferry-Carlton Vegetation Map and its Implications for Conservation Planning*' Professor J.B Kirkpatrick identified the Dodges Ferry Recreation Reserve as having 'Extremely High Conservation Significance'.

Map 1: Dodges Ferry Recreation Reserve



The Reserve is bounded by Old Forcett road to the east, the Dodges Ferry Primary School Football Clubrooms and associated oval to the south, private property to the west and Rantons Road to the north. The Tasmania Fire Services (TFS), local Dodges Ferry Unit, building is on the north-east corner of the reserve.

A small un-named seasonal creek flows east/west through the reserve. Its seaward end contains a heavily weed infested small saltmarsh.

Sewerage treatment ponds approximately 0.3ha in area are located approximately 80 meters into the reserve from its southern boundary. The treatment plant only services the adjoining Primary School.

The Reserve, zoned Public Purpose, is owned and managed by the Sorell Council. The Sorell Interim Planning Scheme, endorsed by Council, is yet to be approved by the Minister. This will see the Reserve zoned as Environmental Management, the oval Recreation and the School, Okines House and Fire Station zoned Community Purpose.

Past activities in the reserve included a Pony Club in an area of approximately 0.6ha along Rantons Road and passive recreation including bushwalking and photography.

Illegal activities include off road vehicles, uncontrolled fires, wood cutting and rubbish and garden waste dumping. These activities continue to degrade the remnant flora significantly impacting native fauna and their habitat.

In 2007, with community support, Council obtained a government funded Green Corps team to carry out some remedial works. It was recognised through these works that a strategic management plan was required. This reflected the community's concern for the reserve's ongoing environmental well-being.

Council engaged consultants to prepare a fauna survey, with community input, to establish what animals the reserve supported and how to protect and enhance it into the future.



This plan advocates the prevention of the continued degradation of the bush and the instigation of rehabilitation works. The aim of the works is to enable and support a self-sustaining and healthy ecosystem within the urban environment. The success of this plan requires the joint commitment of Council, relevant stakeholders and the community.

This plan does not include the Dodges Ferry Primary School and football oval areas as they are outside the remnant bushland. However the bushland area must not be viewed in isolation and consideration must be given to impacts from all surrounding areas and the role the reserve plays within the Dodges Ferry landscape.

The plan defines actions required to conserve and rehabilitate the area assisting Council and stakeholders to schedule identified works.

2.0: Environmental Values of the Reserve

The reserve is the largest area of remnant native vegetation retained in council owned land within the Sorell Municipality.

The values of the reserve include the following key areas;

- Threatened species
- Habitat
- Landscape
- Scientific
- Social
- Passive recreation

Environmental values are often considered as an intangible asset to a community. The realisation of the value to the community is apparent when the cost of remedial works is met by the community. The environment associated with the Reserve means different things to members of the community e.g. educational by local schools, recreational as open space along with vegetation and habitat values.

3.0: Community Consultation

Council held a community forum on the 24th September 2008 to seek views on issues identified as part of the development of a draft management plan. Background reports were prepared to engage participants in community discussion.

Revived public interest saw a revised Reserve Management Plan advertised for public comment for a period of 35 days between Monday 17th November and Monday 22nd December 2014. Copies of the plan were made available on Council's website, at the Sorell library and Council Office.

Several meetings were held directly with the Southern Beaches Landcare/Coastcare Group at Okines House, Dodges Ferry. The current draft Management Plan was further developed as a result of these meetings and the overall input from this local environmental group.

Through this process and from community responses the following key criteria was developed to provide the method to enable on-ground actions to be prioritised:

1. **PROTECT** existing habitat
2. **ENHANCE** the reserves bushland to provide healthy habitat for the future
3. **INVOLVE** the local community through on-ground activities and education

4.0: Goals and Key Findings

The goals of this plan are:

- To identify, manage and protect the natural bushland environment
- To identify appropriate areas for managed recreational opportunities
- To provide land managers with a 'working manual' of prioritised actions
- To enable budgeting and allocation of resources for the management of the reserve
- To explore ways of engaging the local community to be involved in caring for and experiencing the reserve

Key actions of the plan include:

- Maintaining and improving the connectivity between the reserve and nearby native bushland especially to the east
- The appropriate use of fire as a management tool that it does not impact flora and fauna populations in the reserve
- Weed control should occur in a staged manner in association with revegetation
- The reduction of rabbits should be in conjunction with feral cat control

- The education of the community about the reserves environmental values and how they can help protect them, including responsible pet ownership
- Further flora and fauna surveys are required over time to gain a greater understanding of the reserves habitat
- To investigate changing the speed limit and erecting warning signs on Old Forcett Road to reduce road kill
- To maintain mid-level understorey shrubs for nesting birds, with revegetation of degraded areas

5.0 Native Flora and Fauna

5.1: Flora:

The flora present within the reserve provides a good example of species that occur in dry eucalypt forest and woodland plant communities.

The state government agency DPIPWE's TASVEG Vegetation Community Codes was used to identify three (3) vegetation communities within the Reserve.

The vegetation communities identified within the reserve include:

FAG - Agricultural land; agricultural, urban and exotic vegetation group (Pony Club)

DVS - *Eucalyptus viminalis* shrubby/heathy woodland, dry eucalypt forest and woodland group.

AWU - Wetland, saltmarsh and wetland group; conservation status listed as a vulnerable vegetation community.

The Reserve bushland area is an example of Ribbon Gum *Eucalyptus viminalis* shrubby/heathy Woodland. The actual plant community comprises of Ribbon Gum *Eucalyptus viminalis* the dominant tree species with some Black Peppermint *Eucalyptus amygdalina* present, particularly in the eastern half of the reserve.

The mid-level understorey contains various Genera including:



- Acacia
- Allocasuarina
- Banksia
- Bursaria
- Dodonea
- Exocarpus

The lower understorey includes:

- Small woody shrubs including Bossiaea, Epacris, Leucopogon
- Grasses e.g. Poa
- Sedges (in damp areas), Lepidosperma, tussocks, Lomandra
- Orchids including: Caladenia, Pterostylis, Corybas, Diuris, Thelymitra, Acianthus and Microtis



The salt marsh area near the old Pony Club area supports salt tolerant plants including:



- Beaded glasswort
- Phragmites australis
- Common Reed

Some areas of the reserve are affected by Bracken Fern *Pteridium esculentum* however this plant does provide dense cover for small marsupials.

These plant communities are growing on low nutrient old sand dunes overlaying dolerite based clay. There are a few small, flat wet areas e.g. the old Pony Club where water collects on top of the clay. This natural feature has been heavily impacted by previous drainage works and soil removal. In an attempt to restore some of these wetland areas the drainage ditches were blocked off by a Green Corps team.

5.2: Fauna:

Council commissioned C. Airey and L. Marino to carry out a vertebrate fauna survey in the Reserve in 2008.

The report identified the Reserve as:

- Supporting a large diversity of mammals. Mammals with smaller home ranges may rely solely on the reserve, but the majority use it in conjunction with adjacent bushland
- The avian fauna in the greater area is diverse and appears abundant. Within the reserve, numbers of less aggressive species may be reduced due to the strong presence of aggressive species. Some species reside within the reserve; others are migrant or visitors from nearby bushland
- A number of rare and endangered species of bird utilised and/or reside within the park



5.3: Threatened Species

Threatened species identified in the local area that may use the Reserve include the Eastern Barred Bandicoot *Perameles gunnii* and Masked Owl *Tyto novaehollandiae*. The Reserve and surrounding bushland is potential habitat for other threatened species including the Swift Parrot *Lathamus discolor* and Sagg Spider Orchid *Caladenia saggiticola*.

6.0: Urban Impact

The bushland area is impacted by activities e.g. illegal trail bike riding, 4x4 access, illegal firewood collection, uncontrolled dogs, feral cats, garden waste dumping, garden escapees, storm water runoff and litter.



Whilst visitors are encouraged to enjoy the reserve there are associated negative impacts on the bushland which can be addressed through appropriate management strategies & actions/education.



7.0: Reserve Name:

It was identified through community consultation, stakeholders and Council that a change in name was desirable. It was agreed that the name should reflect the Reserves environmental values rather than its recreation aspect e.g. Conservation Reserve and Flora and Fauna Reserve.

To change a place name there are legislative requirements that must be met accordance with the Rules for Place Names in Tasmania.

Actions:

- Council to investigate the legislative requirements to change the reserves name
- Council and stakeholders to work in partnership with the Dodges Ferry Community to agree upon an appropriate name.

8.0: Risk Management

The Reserve is owned and managed by Sorell Council with risk management carried out under Council's Risk Management policy.

Points to consider:

How Council's Risk Management Policy relates to:

- General Public
- Contractors
- Volunteer Groups
- Events

Actions:

- Council to work with volunteers, community groups and schools in organising activities and events, attending when possible, e.g. Weed Buster Week
- Council continue to monitor trees within the reserve, in particular adjacent to public walking trails and Skate Park as part of its ongoing maintenance regime.
- Actions recommended by the arborist should be measured against the possible habitat provided by such trees as well as the impact works will have on nearby flora.
- Council will continue to implement and review the Dodges Ferry Recreation Reserve Fire Management Plan 2009

9.0: Pest Plant and Animal Management

9.1 Pest Plant

Flora and fauna and habitat impacts should be incorporated into any pest plant work plans. In particular plans should identify methods to protect any identified threatened species and habitat.

Habitat provided by weeds e.g. Blackberry should be assessed prior to any control actions (Nature Conservation Act 2000 and Threatened Species Act 1995).

The use of an Integrated Pest Plant Management program incorporating chemical, physical and cultural techniques to control weeds is a cost effective option.

9.2 Pest Animal

The use of an Integrated Pest Animal Management program incorporating chemical, physical and cultural techniques to control pest animals should be put in place.

Some of the key threats to the reserve include rabbits, feral cats and uncontrolled dogs.

Rabbits suppress regeneration in indigenous plants; compete with native fauna for food resources while providing a ready food source for feral cats.

Cats are opportunistic predators and are known to feed on 64 mammals, 186 birds, 87 reptiles, at least 10 frog and invertebrate species (Paton 1993). Domestic cats, regardless being fed or not, will prey on native animals. An estimated 32 vertebrate species per year have been estimated to be killed by a single domestic cat (Paton 1991). The EPBC Act lists predation by cats as a Threatening Process.

The House Mouse is known to eat young birds and eggs and the seeds of native vegetation and agricultural crops.

Black Rats are omnivores and opportunistic feeders that utilise a diverse range of food sources to facilitate colonisation of different environments. They prey primarily on birds, eggs, small mammals, lizards, large insects, snails, fungi and plant seeds and seedlings.

Introduced bird species are particularly common in disturbed and developed landscapes. Both the Common Blackbird and Starling are found in cities, towns and gardens, agricultural land, open woodland and scrub. Introduced birds compete with native species for nesting hollows, food resources and shelter sites. However, the effective long-term control of introduced birds is very difficult, and resources may be better spent managing habitat in a way that renders it less suitable for introduced species (e.g. increased planting of indigenous flora, thereby reducing areas of disturbed and weed-dominated habitat).

Points to consider:

The habitat provided in weedy degraded areas for fauna e.g. the cover provided by dense prickly plants such as Blackberry should be assessed prior to any works being undertaken.

Actions:

- Council to work with volunteers/community groups in the rehabilitation of the old pony club area
- Isolated dense weed infestations (e.g. Blackberry) are to be assessed for evidence of native fauna habitation. If present revegetation with appropriate species should be carried out in-conjunction with gradual weed removal using appropriate methods
- Revegetation should consist of tree and understorey species indigenous to the site with open grassy areas left to provide foraging opportunities for native fauna
- A DPIPWE Permit to 'Take Seed/Plant Material' must be obtained when required
- Council to work with interested community groups in seeking funding for facilities and materials required for the propagation and growing of native plants

10.0. Vegetation maintenance

The timing and frequency of vegetation maintenance activities including mowing, slashing or lopping/pruning must take into account the requirements of flora species e.g. flowering times, hollows and spouts etc.

Council's vegetation management practices to date, around the skate park, have encouraged the development of a rich diversity of native orchid species.

Points to consider:

The timing of mowing and slashing activities must allow flora species to flower and set seed for continued species survival.

Actions:

- Council will continue to monitor areas within the reserve to be slashed to ensure that works have minimal impact on the ongoing viability of native grasses etc.

11.0. Threatened Flora and Fauna

Threatened species and communities may require extra resources to manage and protect them.

Points to consider:

Resources may include appropriate fencing, signage, and particular fire regimes and modified slashing regimes (e.g. season, frequency). Council will liaise with DPIWE Threatened Species Unit in relation to potential habitat for threatened fauna (e.g. Eastern Barred Bandicoot) and flora, particularly orchid species, listed under both State and Federal threatened species legislation.

Actions:

- Council to investigate if an integrated feral cat and rabbit control program is required within the reserve
- Council to investigate the requirements for a detailed follow up Fauna Survey within the reserve
- Council to work with interested groups in holding field days with appropriate experts to identify threatened fauna, flora or vegetation communities within the reserve
- Council to work with community groups to identify and map threatened flora species and communities to assist in planning future on ground works
- Council and Stakeholders to investigate a speed limit reduction on Old Forcett Road, adjacent to the reserve, from 80kph to 60kph.
- Council to investigate the placement of animal crossing/warning signs for Old Forcett Road

12.0. Weeds:

Weed infestations in the Reserve are generally confined to the areas of disturbance created by previous land uses. Prime sources of current weeds species include garden waste/escapees from private land and removal and disturbance of bushland. Overall the quantity of weeds is relatively low and it should be possible, over time, to achieve a very high level of control.

Monitoring is required after disturbances such as fire as open ground is very vulnerable to weed incursion. It is therefore critical that a monitoring programme and follow-up work carried out after such events.

Points to consider:

Priority should be given to Weeds of National Significance (WONS) and Declared Weeds in Tasmania (DPIPWE) as well as other relevant legislation i.e. Weed Management Act 1999.

Weed removal is best undertaken from the least affected area to the worst. Consideration should be given to post weed removal revegetation where appropriate. Volunteers may require supervision and/or training in weed control. Education of neighbouring landowners is desirable to prevent garden plant escapees through the dumping of garden wastes and pruning's.

Actions:

- Volunteers are not to use any kind of spray application of herbicides within the reserve without appropriate training and approval
- Volunteers are not to use chainsaws within the reserve without appropriate training and approval

- Council to investigate opportunities for volunteers to be trained in the safe use of herbicides e.g. 'cut and paste' techniques
- Those undertaking weed control works are to consult information contained in the Weed Lifecycle and Control Option sections of this document
- Council will work in partnership with volunteers to remove all isolated weeds located within the reserve, starting at the middle of the reserve and working towards the boundaries
- Council in partnership with volunteers should control WONS and Declared weeds.
- Council will assist, where possible, with weed mapping and monitoring and promote community events e.g. Weed Buster
- Council to investigate funding opportunities to provide information to neighbouring landowners about the negative environmental impacts of dumping garden waste in the reserve

13.0. Integrated Fire Management:

Fire is potentially a useful tool to protect and enhance environmental values of the reserve while reducing the potential negative impact of bushfire on the reserve and neighbouring properties.

The use of fire as a management tool must consider the impact it will have on the ability of the reserve to sustainably support flora and fauna populations. The use of fire should be integrated with nature conservation including weed control, vegetation maintenance and revegetation.

Points to consider:

The use of fire as a management tool must consider the flora and fauna populations within the Reserve.

1. General overview:

- Careful assessment of the actual fire 'threat' versus any perceived 'threat'
- The fear that bushland poses a fire threat often leads to frequent and unnecessary burns
- There is evidence that frequent burns actually increases the fire hazard
- Prescribed burning will not prevent fires occurring
- Poorly planned fires increase weed infestations generally resulting in higher fuel loads
- Areas unburnt for substantial periods favour moisture loving species that are more fire resistant
- "Pockets" of remnant bushland are "significantly" damaged from frequent and high intensity burns
- Controlled burning should only be for legitimate fire management
- Identified fire hazards in small urban bushland areas should incorporate 'selective hand clearing and/or mechanical' removal of fuel loads
- Codes of practice and strategies should be in place to deal with any injured fauna post fire (wildlife carers/rescue)
- No fire should be conducted without follow up inspection, assessment and weed removal.

2. Ecological threats of fire:

Protection and enhancement of remnant bushland vegetation is best achieved by retaining parcels (compartments) in a size and shape which will:

- Maintain biodiversity and ecological integrity
- Protect native flora and fauna including threatened species

- Maintain links and corridors for wildlife
- Maintain soil stability
- Protect features such as watercourses
- Protect archaeological sites/relics
- The greatest negative ecological impact of fire occurs when remnant vegetation is subject to a high fire frequency or short inter-fire intervals
- Regular burning for hazard reduction every 2 to 5 years will lead to changes in ecosystems and may favour a more herbaceous understorey and create rich fuel conditions
- Frequent fires increase the degradation of habitat and simplify the ecosystem that leads to the loss of species and genetic viability

3. Bushfire management planning.

The Dodges ferry Recreation Reserve Fire Management Plan was prepared by AVK Environmental Management in 2009.

Bushfire Management Plans should specify the intended method of bushfire hazard reduction, together with methods to prevent the degradation of bushland and to ensure the restoration of degraded areas. A collaborative approach is to be undertaken identifying key stakeholder responsibilities involving Council and the Tasmania Fire Service input. Equally visitors and nearby residents have a level of responsibility to ensure appropriate fire safety practices.

Factors in planning and managing a fire regime to maintain the ecology and protect property include:

- The appropriate use of controlled fire as a tool to reduce fuel loads that might otherwise add to the intensity of a bushfire
- The use of alternative methods of fuel reduction such as mechanical and hand clearing of weed species
- Timing and frequency of burns

Positive

- Medium to high intensity fire during summer/early autumn (December- March) can encourage the germination of native species and create weed free conditions

Negative

- Inappropriate timing of fuel reduction burns can destroy existing native vegetation before seed production reducing native plant regeneration
- Frequent low intensity fires can encourage weed invasion as a result of native species may not have enough time between fires to regenerate
- Low intensity fire may not reach temperatures required to stimulate native seed to germinate.

4. Recommendation

Council will work with the Fire Service Dodges Ferry Brigade in reviewing the Dodges Ferry Recreation Reserve Fire Management Plan 2009 prepared by AVK Environmental Management.

Actions:

- Council to maintain the current fire break adjacent to private properties directly bordering the reserve. Woody weeds within this zone to be eradicated
- Council will maintain the current fuel modified buffer zone behind the houses adjoining the reserve and adjacent to the Primary School selectively removing small trees and shrubs creating clumps of vegetation rather than continuous bush

- Council as part of the Fire Management Plan review will investigate the appropriate controlled burn intervals between each identified compartments
- Council and the Fire Service Dodges Ferry Brigade will notify the public before any controlled burning commences
- The public should be encouraged to keep to walking trails at all times particularly post fire

14.0. Access Management

There are five (5) access points to the bushland reserve area. Reserve access is to allow public use OF the reserve while protecting its environmental values.

The Reserve track network should be mapped, signed and rationalised with those not required revegetated.

5.5.1. Signage

Signage can be used to inform people of the reserves values while directing movement. Signs should not be intrusive, complicated or so abundant that they dominate the landscape.

Points to consider

The development and installation of signs for such things as dog management, natural area interpretation and track/pathway direction should be investigated. Council should work with the community particularly the local primary school for sign designs.

Actions

- Council to investigate funding opportunities for informational signage regarding dogs on lease areas
- Council to investigate funding opportunities and the need for signage to inform people of prohibited activities e.g. no motorbikes, horses
- Council will work with stakeholders and the community regarding track accessibility and directional signage
- Council to work with the Dodges Ferry Primary School in the sign design and funding opportunities
- Council to work with the community to design and seek funding for interpretive signage to inform and educate locals and visitors about the environmental and recreational values of the reserve
- Council to work with community groups and the school in mapping the walking paths
- Council and the community to investigate funding to prepare a map showing the reserves tracks

15.0. Walking Trails

Walking trails have multiple uses including linking to other areas such as the coast, urban activity nodes and external walking networks.

Points to consider:

Upgrading of existing car parks may be required including the provision of disabled bays. Fire and emergency vehicle access should be included in any park or reserve planning. The installation of associated infrastructure including seating and creek crossings etc should be investigated.

Accessibility is an important component when planning access points, parking and track networks. Track design and accessibility in particular is determined by the terrain including grade and soil type, environmental impacts and the cost of the materials and earthworks required. The Australian Walking Track Grading System will assist in the design and grading of the reserves tracks.

Actions:

- Council to investigate adequate car parking including the provision of disabled bays
- Council to investigate potential funding opportunities to upgrade the reserves tracks
- Council will work with volunteers to rehabilitate tracks no longer required following a tracks audit
- Council to investigate funding opportunities to provide for seats at points identified as part of the tracks audit
- Council to consider the design, location and investigate funding for a suitable culvert creek crossing for pedestrians
- All track material will be designed in-line with the proposed use and be clean of contaminants e.g. weed seed and soil pathogens
- Emergency and maintenance vehicle access will be three (3) meters wide with an overall clearance of four (4) meters and a cleared height clearance of four (4) meters with the appropriate carrying capacity. Confirm as part of the audit
- Council will work with volunteers to slash fire trails when required
- Tracks will be assessed annually for risks and hazards
- Council to investigate funding opportunities for the erection of appropriate fencing and gates etc to prevent unauthorised access
- Council to investigate funding opportunities for appropriate treatment of all tracks/trails
- Council to investigate the need to erect temporary signs to keep people out of areas regenerating after fire

16.0: Dog Control and Management

Previous consultation between the community, stakeholders and Council determined that dog control and management was a major threat to the environmental values of the reserve.

Points to consider:

The reserve **SHOULD NOT** be considered as an appropriate place for an off lead dog exercise area as it poses a significant threat to the native fauna, including threatened species, of the reserve.

More appropriate areas for this activity should be investigated.

Control of dogs might be in the form of leads, a ban on dogs either in parts of or in the whole of the reserve. This will require compliance of dog control by-laws and the education of dog owners.

Actions:

- Dogs should be on a lead at all times within the Reserve
- Council to investigate the inclusion of a leaflet with dog registration to educate owners about how they can enjoy their pet and help protect our environment
- Council to investigate the interest and funding opportunities in holding events such as Dog's Day Out
- Interpretive signage informing and educating the local community and visitors of the reserve could include why it's important to keep dogs out

17.0 Litter Management

The community, stakeholders and Council identified that litter originating from the recycling depot, football oval and school threatens the environmental values of the reserve.

Points to consider:

The operation and management of the recycling depot may need reviewing. Some form of litter trap may be required to help prevent litter blowing into the reserve. Regular litter clean up with community help is desirable.



Actions:

- Council to investigate the operation and management of the recycling depot with consideration given to its location, design and capacity
- Council to investigate if the frequency of household collection of recycling material should be modified in line with demand
- Council to investigate should the frequency of the removal of material from the transfer station be increased based on increases to the volumes being stored
- Council to investigate the resources and interest in organising environmental awareness days e.g. Clean up Australia Day
- Council to investigate funding opportunities for the placement of litter traps in identified areas to prevent litter entering the reserve

18.0. Recreation/Community Activity Nodes

One of the goals of this management plan is to identify appropriate areas for recreational activities. The actual approval for such activities is beyond the scope of this report and up to Council for any implementation however recreation activities exist and have existed within the reserve and offers a bench mark for reviewing the overall reserve use.

The term 'nodes' is used to describe areas where such activities could take place. Skate Park and Picnic Sheds

18.1. Existing Activity Nodes

- Skate arena/park and picnic area including sheds
- Off road trail bike riding (this is an illegal activity that has a negative impact on the reserves environmental and recreational values)
- Dodges Ferry Primary School
- Fire station

18.2. Potential Activities

- Revegetation sites: Environmental Awareness Days e.g. National tree planting day for Dodges Ferry Primary School and community.
- Detailed Flora and Fauna study.
- Art site for environmental art, youth art or sign design

Points to consider:

Inappropriate use by off road trail bikes is of major concern to Council and the local community. Damage is occurring to vegetation and increasing erosion of existing walking trails. The risk to walkers from this activity is very high.

The DFFR provides many sites and opportunities for the community for recreational activities to enjoy and enhance its environmental values. It provides an opportunity for Council to engage positively with the community.

Actions:

- Council and the community to investigate ways to excluded trail bike riders from the reserve
- Council to investigate the value of a BBQ facility near the 'picnic sheds' with consideration given to the location, the risk of vandalism, fire and maintenance.
- Council to investigate the need for and funding opportunities to extend the fence near the creek adjacent to the skate arena to further protect the riparian zone.
- Council to work with the community at Council organised volunteer activities
- Council to encourage and assist interested community members to hold environmental awareness activities such as Tree Planting Days
- Council to assist interested groups to hold field days, with appropriate experts, to identify threatened flora species and vegetation communities
- Council to assist interested community members to work with Okines Community House to develop a local provenance native garden
- Council to consult with stakeholder and the community to see if the DFFR is an appropriate site for an environmental art competition

19.0. Shared Cultural Heritage

The project area includes features of cultural significance of European settlement and Aboriginal cultural Heritage.

Points to consider:

Consultation with the local historical society and Aboriginal Community on how to best preserve cultural features will be required.

Actions:

- Council to investigate funding opportunities for an Aboriginal Heritage Survey in line with State (Aboriginal Lands Act 1995) and Federal Legislation (Ask First; Australian Heritage Commission) to assist in the planning of future works.
- Council will consult with the Southern Beaches Historical Society and Council records in identifying significant features and include them in management decisions.

20.0. Community Support and Resources

Effective management of the reserve will require Council to work closely with other environmental organisations and stakeholders. However, the prime responsibility lies with council as the land owner.

Environmental care groups have limited resources and whilst they are an important asset they can only contribute to the best of their respective volunteers. Additional resources through government environmental funds and educational input (university research) should be investigated.

Points to consider:

Volunteers provide many different levels of expertise as well as time and physical labour. Other volunteer groups and organisations such as university research programs should be identified and encouraged to participate.

Council will continue to support volunteer groups and provide support whenever possible.

Council will consider the following groups as potential participants:

- Southern Beaches Landcare/Coastcare (SBL/C)
- Threatened Species Network WildCare (PWS)
- Dodges Ferry Primary School
- SCAT (Southern Coastcare Association of Tasmania Inc)
- TPT (Threatened Plants Tasmania)
- Extra Hands (Tasmanian Landcare)
- CVA (Conservation Volunteers Australia)
- TAFE (Conservation and Land Management section)
- Sorell School Landcare group

Actions:

- Council to investigate the suitability of the Reserve as a possible Land for Wildlife site
- Council and stakeholders will encourage the formation of a DFRR Landcare group and/or a list of interested local participants
- Council to investigate potential funding to replace Landcare trailer and equipment to be available for community use

21.0. Climate Change

The reserve provides an important habitat and refuge for flora and fauna. The Reserve can be used as a source of seed and as an example or model for reconstructing local remnant vegetation communities for broad scale re-vegetation projects.

It is a relatively large area of coastal reserve which has traditionally been under threat from nearby urban encroachment but now such reserves are under threat from changes to sea levels.

It is beyond the scope of this plan to accurately predict possible impacts of climate change on the landscape.

Points to consider:

Water

Drought or reduced annual rainfall will have an impact on revegetation. Council may be required to undertake the establishment of watering programmes. There may be an increased risk of uncontrolled fire, changes to plant communities including threatened species and changes in ground water levels with diminishing wetlands impacting on amphibians.

Sudden storm events may impact on stream dynamics from the associated runoff from increases to the urban area within the catchment. Potential impacts on infrastructure capacity to cope with increased stream flows as well as debris build-up may result in infrastructure failure. This will result in increased costs associated with infrastructure upgrades and increased maintenance schedules.

Sea level

A rise in sea level could impact the salinity of water contained in vulnerable fresh water wet lands e.g. Okines Wetland/frog pond. Consideration should be given to the feasibility and need for the construction of a frog pond further upstream from the Okines Wetland/frog pond to provide alternative habitat.

Changes in ocean currents may impact the fragile coastal fringe at Okines Beach. It is beyond the scope of this plan to suggest any future remedial works that governments may be required to do. However the location of any walking tracks should be kept well above high water mark.

Actions:

- Council to provide water, when possible, to help establish revegetated areas
- Council will continue to monitor and maintain storm water infrastructure including identifying and mitigating potential pollution
- Council and stakeholders to investigate the feasibility and funding opportunities for the construction of a wetland on Okines Creek upstream from the existing 'frog pond'.

22.0. Landscape

The reserve currently has a significant role in the wider landscape of the southern beaches area, both as green space and as native flora and fauna habitat. Increased population growth and associated changes to the surrounding area combined with possible negative impacts of climate change will apply pressure on the sustainability of local fauna and plant species and communities. The reserve will have a key role to play in the future preservation of the natural environment in the Dodges Ferry and wider Sorell area.

Points to consider:

By itself the reserve is too small to support any large fauna populations. Animals move in and out of the reserve as food sources change seasonally and across the landscape. Links or vegetation corridors that animals can reside in and move through should be developed and maintained between the Reserve and public and private land areas as well as to larger bushland areas to the east. This includes maintaining roadside habitats such as Okines Road.

Actions:

- Council with stakeholders support will investigate the revegetation of the mown road reserve on Old Forcett Road opposite the reserve. Sightlines for motorist's, fire management and native fauna crossings should be included
- Council with stakeholder support will investigate the potential to revegetate the Okines Road roadside
- Council to investigate ways to encourage private landowners to conserve a small amount of vegetation to provide vegetation corridors for native animals to traverse through
- Council will work with the Responsible Authorities for establishing and maintaining vegetation corridors along the Coastal Reserve to link the Reserve to vegetated areas along the Lewisham Foreshore and other reserve areas

23.0. Stakeholders

- Sorell Council
- Southern Beaches Landcare/Coastcare Inc.
- Okines Community Garden
- Okines Community House
- Friends of Lagoon Park
- Immediate neighbours
- Dodges Ferry Football Club
- Dodges Ferry Volunteer Fire Brigade (TFS)
- Dodges Ferry Primary School
- Dodges Ferry School Association

- The Southern Beaches Community
- Youth Group/s including local skateboarders
- Dog Walking Group/s
- Southern Beaches Regional Arts
- Southern Beaches Historical Society
- Local Aboriginal Community
- Lewisham Foreshore Management Association

PART 2

2.0. Assessing the Actions for Priority

The aim of this process is to:

1. Identify actions of highest priority to enable Council to effectively budget and allocate resources
2. Enable Council and stakeholders co-ordinate and plan activities
3. Enable Council and stakeholders to seek external funding opportunities
4. Prioritise actions that best manage and protect the natural bushland environment.

Each action is assessed against the three key criteria identified through community consultation. These are:

1. PROTECT existing habitat
2. ENHANCE the reserve's bushland to provide healthy habitat for the future
3. INVOLVE the local community through on ground activities and education

2.1. Scoring against the criteria:

Each criterion is given a value from very high to low and scored in the following way:

Very High = 4; High = 3; Moderate = 2; Low = 1.

Actions will be ranked from highest to lowest.

- a) The highest possible score is **12**.
- b) A score of **9** and above will rank as high priority.

Scores are indicative only and are subject to change during the draft consultation process. Some actions will have higher priority, even with a lower score, if overriding legislation is indicated, e.g. Aboriginal Relicts Act 1975 or public safety concerns.

Table 2.0: Reserve Name and Vision Statement

Action	Criteria												
	Protect				Enhance				Involve				Score
	VH	H	M	L	VH	H	M	L	VH	H	M	L	
Council to investigate the legislative requirements to change the reserves name				■				■				■	3
Council and stakeholders to work in partnership with the Dodges Ferry Community to agree upon an appropriate name	■				■				■				12

Table 2.1: Risk Management

Action	Criteria												
	Protect				Enhance				Involve				Score
	VH	H	M	L	VH	H	M	L	VH	H	M	L	
Council will work with volunteers, community groups and schools in organising activities and events, attending when possible, e.g. Weed Buster Week	■				■				■				12
Council continue to monitor trees within the reserve, in particular adjacent to public walking trails and Skate Park as part of its ongoing maintenance regime	■				■						■		10
Actions recommended by the arborist should be measured against the possible habitat provided by such trees as well as the impact works will have on nearby flora				■				■			■		4
Council will continue to implement and review the Dodges Ferry Recreation Reserve Fire Management Plan 2009				■				■			■		4

Table 2.2: Pest Plant and Animal Management

Action	Criteria												Score
	Protect				Enhance				Involve				
	VH	H	M	L	VH	H	M	L	VH	H	M	L	
Council to work with volunteers/community groups in the rehabilitation of the old Pony Club area			■		■				■				10
Isolated dense weed infestations e.g. Blackberry is to be assessed for evidence of native fauna habitation. If present revegetation with appropriate species should be carried out in-conjunction with gradual weed removal using appropriate methods	■				■					■			11
Revegetation should consist of tree and understorey species indigenous to the site with open grassy areas left to provide foraging opportunities for native fauna.		■			■				■				11
A DPIPWE Permit to Take Seed/Plant Material must be obtained when required	■						■		■				8
Council to work with interested community groups in seeking funding for facilities and materials required for the propagation and growing of native plants							■		■				8

Table 2.3: Vegetation maintenance

Action	Criteria													Score
	Protect				Enhance				Involve					
	VH	H	M	L	VH	H	M	L	VH	H	M	L		
Council will continue to monitor areas within the reserve to be slashed to ensure that works have minimal impact on the ongoing viability of native grasses etc.		■			■						■		9	

Table 2.4: Threatened Flora and Fauna

Action	Criteria												Score
	Protect				Enhance				Involve				
	VH	H	M	L	VH	H	M	L	VH	H	M	L	
Council to investigate if an integrated feral cat and rabbit control is required within the reserve	■				■					■			12
Council will investigate the requirements for a detailed follow up Fauna Survey within the reserve	■				■				■				12
Council will work with interested groups in holding field days with appropriate experts to identify threatened fauna, flora or vegetation communities within the Reserve		■				■			■				10
Council will work with interested groups to identify and map threatened flora and fauna species and communities to assist in planning future on ground works	■				■					■			12
Council and Stakeholders to investigate a speed limit reduction on Old Forcett Road, adjacent to the reserve, from 80kph to 60kph	■				■				■				12
Council to investigate the placement of animal cross/warning signs for Old Forcett Road	■				■				■				12

Table 2.5: Weeds

Action	Criteria													Score
	Protect				Enhance				Involve					
	VH	H	M	L	VH	H	M	L	VH	H	M	L		
Volunteers are not to use any kind of SPRAY application of herbicides within the reserve without appropriate training and approval				■				■	■					6
Volunteers are not to use chainsaws within the reserve without appropriate training and approval				■				■	■					6
Council to investigate opportunities for volunteers to be trained in the safe use of herbicides e.g. cut and paste techniques				■				■	■					6
Those undertaking weed control works are to consult the information contained in the Weed Lifecycle and Control Option section of this document			■					■	■					9
Council in partnership with volunteers will remove isolated weeds located within the reserve, starting at the middle of the reserve and working towards the boundaries	■				■				■					12
Council in partnership with volunteers should control WONS and Declared Weeds		■				■				■				9
Council will assist, where possible, with weed mapping and monitoring and promote community events e.g. Weed Buster	■				■				■					12
Council will investigate funding to provide information to neighbouring landowners about the negative environmental impacts of dumping garden waste in the reserve	■					■			■					11

Table 2.6: Integrated Fire Management

Action	Criteria												
	Protect				Enhance				Involve				Score
	VH	H	M	L	VH	H	M	L	VH	H	M	L	
Council will maintain a fire break of a minimum width of five meters adjacent to private property that directly borders the reserve. Woody weeds in this zone will be eradicated			■				■					■	6
Council will maintain a 'fuel modified buffer zone' (approximately 20 meters wide) behind the houses adjoining the reserve and adjacent to the Primary School selectively removing small trees and shrubs and creating clumps of vegetation rather than continuous bush.		■				■				■			9
Council, as part of the Fire Management Plan review, will investigate the appropriate controlled burns intervals between one compartment			■				■					■	5
Controlled burns will be carried out in accordance with the Dodges Ferry Reserve Fire Management Plan													
Council will notify the public before any controlled burning commences	■				■					■			10
A post fire weed control, monitoring and mapping regime should be incorporated in the Fire Management Plan	■				■					■			11
The public should be encouraged to keep to walking trails at all times but particularly post fire	■						■			■			9

2.3.0 Access Management

Table 3.0: Signage

Action	Criteria												Score
	Protect				Enhance				Involve				
	VH	H	M	L	VH	H	M	L	VH	H	M	L	
Council will investigate funding opportunities for informal signage regarding dogs on lease		■			■				■				12
Council will investigate funding opportunities and the need for signage to inform people of prohibited activities e.g. no motor bikes, horses	■				■					■			12
Council will work with stakeholders and the community in regards to track accessibility and directional signage	■				■					■			12
Council to involve Dodges Ferry Primary School in the design of signs.			■			■			■				7
Council to work with the community to design and seek funding for interpretive signage to inform and educate locals and visitors about the environmental and recreational values of the reserve			■			■			■				9

Table 3.1: Walking Trails

Action	Criteria												Score
	Protect				Enhance				Involve				
	VH	H	M	L	VH	H	M	L	VH	H	M	L	
Council to investigate adequate car parking including the provision of disabled bays				■				■			■		4
Council investigate potential funding opportunities to upgrade the reserves tracks		■			■				■				11
Council will work with volunteers to rehabilitate tracks no longer required following a tracks audit		■			■				■				11
Council to investigate funding opportunities to provide for seats at points identified as part of the tracks audit				■				■			■		4
Council to consider the design, location and investigate funding for a suitable culvert creek crossing for pedestrians		■				■						■	7
All track material will be designed in-line with the proposed use and be clean of contaminants e.g. weed seed and soil pathogens	■					■						■	9
Emergency and maintenance vehicle access will be three (3) meters wide with an overall clearance of four (4) meters and a cleared height clearance of four (4) meters with the appropriate carrying capacity				■				■			■		4
Council will work with volunteers to slash fire trails when required			■					■		■			6
Council will work with volunteers to regularly assess trails for risks and hazards				■				■		■			7
Council to investigate funding opportunities for the erection of appropriate fencing and gates etc to prevent unauthorised access	■						■					■	6
Council will investigate the need to erect temporary signs to keep people out of areas regenerating after fire				■				■			■		4

Table 3.2: Dog control and management

Action	Criteria												Score
	Protect				Enhance				Involve				
	VH	H	M	L	VH	H	M	L	VH	H	M	L	
Dogs should be on lead at all times within the Reserve	■				■				■				12
Council to investigate the inclusion of a leaflet with registration to educate owners about how they can enjoy their pet and help protect our environment		■					■		■				9
Interpretive signage informing and educating the local community and visitors of why it's important to control dogs within the reserve		■					■		■				9
Council to work with dog owners to ensure compliance of Dog Management regulations in the reserve.	■					■			■				12

Table 3.3: Litter Management

Action	Criteria												Score
	Protect				Enhance				Involve				
	VH	H	M	L	VH	H	M	L	VH	H	M	L	
Council to investigate the operation and management of the recycling depot with consideration given to its location, design and capacity			■			■				■			8
Council to investigate if the frequency of house hold collection of recycling material should be modified in line with demand			■					■			■		4
Council to investigate should the frequency of the removal of material from the transfer station be increased based on increases to the volumes being stored			■					■			■		4
Council to investigate the resources and interest in organising environmental awareness days e.g. Clean up Australia Day			■			■			■				9
Council to investigate funding opportunities for the placement of litter traps in identified areas to prevent litter entering the Reserve		■				■				■			9

Table 3.4: Recreation/Community Activity Nodes

Action	Criteria													Score
	Protect				Enhance				Involve					
	VH	H	M	L	VH	H	M	L	VH	H	M	L		
Council and the community to investigate ways to excluded trail bike riders from the reserve		■				■				■				9
Council to investigate the value of a BBQ facility near the 'picnic sheds' with consideration given to the location, the risk of vandalism, fire and maintenance		■				■				■				9
Council to investigate the need for and funding opportunities to extend the fence near the creek adjacent to the skate arena to further protect the riparian zone		■				■				■				9
Council to encourage and assist interested community members to hold environmental awareness activities such as Tree Planting Days		■				■				■				9
Council to assist interested groups to hold field days, with appropriate experts, to identify threatened flora species and vegetation communities		■				■				■				9
Council to assist interested community members to work with Okines Community House to develop a local provenance native garden		■				■				■				9
Council to consult with stakeholder and the community to see if the DFFR is an appropriate site for an environmental art competition		■				■				■				9

Table 3.5: Shared Cultural Heritage

Action	Criteria												
	Protect				Enhance				Involve				Score
	VH	H	M	L	VH	H	M	L	VH	H	M	L	
Council will investigate funding opportunities for an Aboriginal Heritage Survey to assist in the planning of future works				■				■			■		4
Council will consult with the Southern Beaches Historical Society and Council records in identifying significant features and to be included in future management decisions			■					■			■		4

Table 3.6: Community Support and Resources

Action	Criteria													Score
	Protect				Enhance				Involve					
	VH	H	M	L	VH	H	M	L	VH	H	M	L		
Council to investigate the suitability of the DFFR as a Land for Wildlife site				■		■					■		6	
Council and stakeholders will encourage the formation of a DFRR Landcare group or/and a list of interested local participants	■				■						■		12	
Council will maintain and restock, when necessary, the equipment in its Landcare trailer and offer it for Community Group's use		■				■				■			9	

Table 3.7: Climate Change

Action	Criteria													
	Protect				Enhance				Involve				Score	
	VH	H	M	L	VH	H	M	L	VH	H	M	L		
Council will provide water, when possible, to help establish revegetated areas				■		■					■		6	
Council will continue to monitor and maintain storm water infrastructure including identifying and mitigating potential pollution	■						■					■	7	

Table 3.8: Landscape

Action	Criteria													Score
	Protect				Enhance				Involve					
	VH	H	M	L	VH	H	M	L	VH	H	M	L		
Council with stakeholders support will investigate the revegetation of the mown road reserve on Old Forcett Road opposite the DFRR. Sightlines for motorist's, fire and native fauna crossings should be included		■			■				■				11	
Council with stakeholder support will investigate the potential to revegetate the Okines Road roadside				■	■					■			9	
Council to investigate ways to encourage private landowners to conserve a small amount of vegetation to provide vegetation corridors for native animals to traverse through.				■		■				■			6	
Council will work with the authority responsible for establishing and maintaining vegetation corridors along the Coastal Reserves to DFRR to the vegetated areas along the Lewisham Foreshore and other reserve areas				■	■					■			8	

Table 3.9: Potential Activities

Action	Criteria												
	Protect				Enhance				Involve				Score
	VH	H	M	L	VH	H	M	L	VH	H	M	L	
Council to encourage and work with the Dodges Ferry Primary School, and interested community members, in holding environmental awareness activities e.g. tree planting days.			■		■				■				11
Council to assist interested groups hold field days with appropriate experts in identifying threatened flora and fauna		■				■			■				10
Council to assist interested community members develop a local provenance native garden at the Okines Community House.				■				■	■				6
Council to work with stakeholder and the community about whether the DFFR is an appropriate potential site for an Environmental Art Competition.				■				■			■		4
Council to work with stakeholders and the community to see if the football ground or the grassed area to the south of the primary school, near the Okines Community House is appropriate for a dog exercise area	■				■				■				12

PART3

3.0. WEEDS

Weed maps, lifecycle and control options can be photocopied, stapled together, and used by volunteers in the field at working bees.

Table 3.0: List of Weed Species for Dodges Ferry Recreation Park

Common Name	Scientific name	Status
Blackberry	<i>Rubus fruticos</i>	WONS
Canary broom	<i>Genista monspessulana</i>	DW
Cotoneaster spp		EW
Mirror bush	<i>Coprosma repens</i>	EW
Radiata Pine	<i>Pinus radiata</i>	EW
Bone Seed	<i>Chrysanthemoides monilifera</i>	WONS
Briar Rose	<i>Rosa spp.</i>	EW
Hawthorn	<i>Crataegus monogyna</i>	EW
Tree Lucerne	<i>Chamaecytisus palmensis</i>	EW
Myrtle-leaf Milkwort	<i>Polygala myrtifolia</i>	EW
Yellow African Daisy	<i>Euryops abrotanifolius</i>	EW
Succulent	<i>Various spp.</i>	EW
Purple Daisy	<i>Asteraceae</i>	EW
Australian Native		
Cootamundra Wattle	<i>Acacia baileyana</i>	EW

WONS – Weed of National Significance

EW – Environmental Weed

D – Declared Weed

3.2.0 Weed Lifecycle and Control Options

Warning: Use herbicides with great care.

- Always follow the label instructions.
- Always read the Material Safety Data Sheets (MSDS). Keep both documents with chemical used.
- Before you start, get advice from relevant government agencies or manufacturer.
- Some 'off-label' herbicide uses are permitted. Contact the Department of Primary Industry and Water or the Registrar of Pesticides for more information.

Note that with further research and improved herbicides the most appropriate control methods may change over time. Therefore it is critical that this information is revised and updated periodically to ensure the most effective control method for a given situation is being used.

Table 3.1: Blackberry *Rubus fruticosus***Status:** Weed of National Significance WONS

Lifecycle	Perennial creeper, life span of single canes 2 - 3 years, life span of basal stump unknown
Reproduction	Seed and vegetative Late
Flowering	Spring and Summer
Seed Set	February to April
	First Seed Produced Second year of cane growth
Seed Production and Viability	High seed production, viability unknown
Seed Survival in Soil	Seed Survival in Soil Unknown
Other	Up to nine separate but closely related species in Tasmania
Control Options	
Hand Removal	Seedlings can often be hand pulled (using gloves) and hung on other vegetation to dry out. For older plants, use a mattock to dig out and remove the basal stump. This reduces the energy store of the plant, allowing follow up actions to be more effective. Canes may re-sprout if left on the ground.
Brush-cutting	In dense thickets, repeated brush-cutting will halve the spread. In many situations a single slash, followed by herbicide control of the re-sprouting canes (as below) is the most appropriate method.
Cut and Paste	Use undiluted Glyphosate 360 ml/l herbicide. Cut the canes away and expose the sub-surface basal stump. Scrape away the skin of the stump and dab within 30 seconds.
Foliar Spray	Not recommended for volunteers
Ideal Control Times	September to February before fruit set

Table 3.2: Canary Broom *Genista monspessulana***Status:** Declared Weed

Lifecycle	Perennial, life span unknown
Reproduction	Seed
Flowering	Later Winter to Spring
Seed Set	Second or third year
	First Seed Produced Second year of cane growth
Seed Production and Viability	High, even for young plants
Seed Survival in Soil	Prolonged survival
Other	Seed poisonous
Control Options	
Hand Removal	Plants less than 300 mm tall easily removed especially when soil is moist.
Cut and Paste	Use undiluted Glyphosate 360 ml/l. Dab the stump within 30 seconds of cutting.
Foliar Spray	Not recommended for volunteers
Ideal Control Times	September to April

Table 3.3: Cotoneaster spp.**Status:** *Environmental Weed*

Lifecycle	Perennial, life span 10 + years
Reproduction	Seed, fleshy berries (spread by birds)
Flowering	Spring to Summer
Seed Set	Late Summer to late Winter
Seed Production and Viability	Long-lived
Seed Survival in Soil	Unknown
Other	Poisonous
Control Options	
Hand Removal	Plants less than 300 mm tall easily removed especially when soil is moist.
Cut and Paste	Use undiluted Glyphosate 360 ml/l. Dab the stump within 30 seconds of cutting.
Foliar Spray	Not recommended for volunteers
Ideal Control Times	All year round

Table 3.4: Mirror Bush *Coprosma repens***Status:** *Environmental Weed*

Lifecycle	Perennial, life span 10 + years
Reproduction	Seed, fleshy berries (spread by birds) and vegetative rooting of lower branches.
Flowering	Spring to Summer
Seed Set	Late Summer to Autumn
Seed Production and Viability	Unknown
Seed Survival in Soil	Unknown
Other	Seedlings germinate and survive better in protected areas i.e. under other shrubs
Control Options	
Hand Removal	Plants less than 300 mm tall easily removed especially when soil is moist.
Cut and Paste	Use undiluted Glyphosate 360 ml/l. Dab the stump within 30 seconds of cutting.
Ideal Control Times	All year round

Table 3.5: Radiata pine *Pinus radiata***Status:** Environmental Weed

Lifecycle	Perennial, life span 80 - 100 years
Reproduction	Seed
Flowering	Late Winter - early Spring
Seed Set	Late Summer (18 months after flowering)Late Summer to late Winter
First Cones Produced	Eighth year
Seed Production and Viability	Large quantity of seed produced, 80% viability
Seed Survival in Soil	Up to 10 years
Control Options	
Hand Removal	Plants less than 300 mm tall easily removed especially when soil is moist.
Hand Sawing	Plants to 3m cut off below first branch, within 5 cm of soil surface
Ideal Control Times	Control effective for most of the year

Table 3.6: Bone seed *Chrysanthemoides monilifera***Status:** Weed of National Significance WONS

Lifecycle	Perennial 10 to 20 years
Reproduction	Seed spread by birds and animals that eat the fruit; humans through weed removal activities and soil waste.
Flowering	Late Winter - early Spring
Seed Set	November to December
First Seed Produced	Second year, (occasionally first year)
Seed Production and Viability	Up to 50,000 in one season, 60% viability, down to 25% after 3 years.
Seed Survival in Soil	10 to 15 years
Other	Seedlings can look like Banksia seedlings. Adult plants can be confused with Boobialla (<i>Myoporum</i> Control Options: sp).
Control Options	
Hand Removal	Seedlings less than 900mm tall easily removed especially when soil is moist
Brush-cutting	Not recommended
Cut and Paste	Use undiluted Glyphosate 360 ml/l herbicide. Cut the stump and dab within 30 seconds
Foliar Spray	Not recommended for volunteers
Ideal Control Times	Cut and dab any time except mid-winter

Table 3.7: Briar Rose *Rosa* spp.

Status: Environmental Weed

Lifecycle	Very thorny, deciduous perennial 10 to 20 years
Reproduction	spread by birds and animals that eat the fruit; I humans through weed removal activities and soil waste.
Flowering	Late Spring to Summer
Seed Set	Autumn to late Winter
First Seed Produced	Third year
Seed Production and Viability	Large quantities of seed, requiring cold stratification below 5°C for 2 to 3 weeks.
Seed Survival in Soil	3 to 4 years, may have prolonged dormancy.
Other	Often used for herbal medicine and wine making.
Control Options	
Hand Removal	Seedlings less than 100mm tall easily removed especially when soil is moist, leather gloves required.
Brush-cutting	Can be slashed at any time to enable access to the basal crown for cut and pasting when strong regrowth occurs.
Cut and Paste	Use undiluted Glyphosate 360 ml/l herbicide. Cut the stump and dab within 30 seconds
Foliar Spray	Not recommended for volunteers
Ideal Control Times	Cut and dab any time except late-autumn to late winter.

Table 3.8: Hawthorn *Crataegus monogyna***Status:** Environmental Weed

Lifecycle	Very thorny, deciduous perennial, to 70 years
Reproduction	Seed spread by birds and animals that eat the fruit; humans through weed removal activities and soil waste. Suckers and cuttings.
Flowering	Late Spring to Summer
Seed Set	Autumn to late Winter
First Seed Produced	Third year
Seed Production and Viability	Large quantities of seed; enhanced germination after passing through bird digestive tract or warm moist conditions followed by chilling.
Seed Survival in Soil	No persistent seed bank reported.
Other	Toxic. Provides nesting sites for native and introduced birds. Can be de-foliated by pear and cherry slug but little long-term damage.
Control Options	
Hand Removal	Seedlings less than 100mm tall easily removed especially when soil is moist, leather gloves required.
Brush-cutting	Not recommended. Can re-sprout from cut stumps.
Cut and Paste	Use undiluted Glyphosate 360 ml/l herbicide. Cut the stump and dab within 30 seconds
Foliar Spray	Not recommended for volunteers
Ideal Control Times	Cut and dab any time except late-autumn to late winter.

Table .9: Tree Lucerne *Chamaecytisus palmensis***Status:** Environmental Weed

Lifecycle	Evergreen tree to 5m tall, to 10 years.
Reproduction	Seed spread by water; humans through weed removal activities and soil waste. Mass germination following fire and soil disturbance
Flowering	Spring to Summer
Seed Set	Autumn to late Winter
First Seed Produced	Second year
Seed Production and Viability	Large quantities of seed; enhanced germination after fire or soil disturbance.
Seed Survival in Soil	Persistent seed bank reported
Other	Toxic seed. Widely planted in agriculture as a fodder crop.
Control Options	
Hand Removal	Seedlings less than 900mm tall easily removed especially when soil is moist.
Brush-cutting	Not recommended. Can re-sprout from cut stumps.
Cut and Paste	Small plants to 3m tall use undiluted Glyphosate 360 ml/l herbicide. Cut the stump and dab within 30 seconds
Foliar Spray	Not recommended for volunteers
Ideal Control Times	Cut and dab any time

Table 3.10: Myrtle-leaf milkwort *Polygala myrtifolia*

Status: Environmental Weed

Lifecycle	Invasive ornamental perennial, to 10 years
Reproduction	Seed spread by water, ants and birds; humans through weed removal activities, soil waste and garden waste. Mass germination following fire and soil disturbance.
Flowering	Most of the year mainly Late Winter to Summer
Seed Set	Summer to Autumn
First Seed Produced	From second year
Seed Production and Viability	Large quantities of seed; enhanced germination after fire or soil disturbance. Seed can germinate under heavy shade
Seed Survival in Soil	prolonged seed bank reported
Other	Commonly available in supermarkets and nurseries.
Control Options	
Hand Removal	Seedlings less than 900mm tall easily removed especially when soil is moist.
Brush-cutting	Not recommended. Can re-sprout from cut stumps.
Cut and Paste	Use undiluted Glyphosate 360 ml/l herbicide. Cut the stump and dab within 30 seconds
Foliar Spray	Not recommended for volunteers
Ideal Control Times	Cut and dab any time

Table 3.11: Yellow African Daisy *Euryops abrotanifolius*

Status: Environmental Weed

Lifecycle	Invasive ornamental perennial, to 10 years
Reproduction	Seed spread by water, wind; humans through weed removal activities, soil waste and garden waste. Mass germination following soil disturbance.
Flowering	Most of the year mainly Early Winter to Summer
Seed Set	Early Summer to Autumn
First Seed Produced	From third year
Seed Production and Viability	Large quantities of seed; enhanced germination after soil disturbance. Seed requires light to germinate.
Seed Survival in Soil	Unknown
Other	Varieties available in supermarkets and nurseries.
Control Options	
Hand Removal	Seedlings and adult plants easily removed especially when soil is moist.
Brush-cutting	Not recommended. May regrow from cut stumps.
Cut and Paste	Use undiluted Glyphosate 360 ml/l herbicide. Cut the stump and dab within 30 seconds
Foliar Spray	Not recommended for volunteers
Ideal Control Times	Cut and dab any time

Table 3.12: Succulent Various spp.**Status:** Environmental Weed

Lifecycle	Invasive ornamental perennials
Reproduction	Easily spread vegetatively from leaf, stem and root fragments Seed spread by water, wind, humans through weed removal activities, soil waste and garden waste.
Flowering	Variable, depending on species
Seed Set	Variable, depending on species
First Seed Produced	Variable, depending on species
Seed Production and Viability	Unknown
Seed Survival in Soil	Unknown
Other	Often sold as 'water wise' plants. Cultivated varieties available in supermarkets and nurseries.
Control Options	
Hand Removal	Seedlings and adult plants easily removed especially when soil is moist. All parts need to be bagged.
Brush-cutting	Not recommended.
Cut and Paste	Not recommended
Foliar Spray	Not recommended for volunteers
Ideal Control Times	Any time

Table 3.13: Cootamundra Wattle *Acacia Baileyana***Status:** Environmental Weed

Lifecycle	Small, evergreen, spreading tree to 10m tall. Short lived to 20 years.
Reproduction	Seed spread by water, ants, wind; humans through weed removal activities, soil waste and garden waste. Can have enhanced germination following fire, but not necessary for germination generally
Flowering	Winter to early Spring.
Seed Set	Summer to autumn.
First Seed Produced	Variable, can be third year
Seed Production and Viability	Depending on climatic conditions, can be large quantities of seed.
Seed Survival in Soil	Prolonged, many years
Other	Can change soil fertility. Cultivated varieties available in supermarkets and nurseries. Can hybridise with native <i>Acacia dealbata</i> species.
Control Options	
Hand Removal	Seedlings to 500mm tall easily removed especially when soil is moist.
Brush-cutting	Not recommended.
Cut and Paste	Small plants to 3m tall, use undiluted Glyphosate 360 ml/l herbicide. Cut the stump and dab within 30 seconds.
Foliar Spray	Not recommended for volunteers
Ideal Control Times	Any time

Table 3.14: Purple Daisy Asteraceae

Status: *Environmental Weed*

Lifecycle	Small evergreen spreading perennial
Reproduction	<ul style="list-style-type: none"> Seed spread by wind, humans through weed removal activities, soil waste and garden waste. Vegetatively via cuttings.
Flowering	Winter to Summer.
Seed Set	Summer to autumn.
First Seed Produced	Can be first year
Seed Production and Viability	Unknown
Seed Survival in Soil	Unknown
Other	Cultivated varieties available in supermarkets and nurseries.
Control Options	
Hand Removal	Seedlings and adults easily removed especially when soil is moist.
Brush-cutting	All parts need to be bagged; crown and rooted stems removed
Cut and Paste	Undiluted Glyphosate 360 ml/l herbicide. Cut the stump and dab within 30 seconds.
Foliar Spray	Not recommended for volunteers
Ideal Control Times	Any time

3.3.0. Measure of Success

Outcomes that can be used to measure success of weed control include:

- Obtaining funds to do the work
- Scheduling working bees
- Over time less work is required to control weeds
- Increase in native vegetation monitored through the setup of photo points
- Revegetation where required
- Engagement of the local community through awareness raising

3.4.0. Timing of Works

Critical times and factors to account for in weed management include:

- Before the plant sets seed
- During flowering volunteers can more easily identify plant species
- Follow up weeding
- New infestations in previously 'clean' areas
- Weeds invading after disturbance
- Times identified in the individual life cycle and control options
- Availability of easily sourced appropriate funding
- Working bee's schedules devised to suit labour and budget

3.5.0: Revegetation

Table 3.5.1: List of Plant Species Indigenous for Dodges Ferry Recreation Park

Common Name	Scientific Name	Status
Trees		
Black Peppermint	<i>Eucalyptus amygdalina</i>	
Black Sheoak	<i>Allocasuarina littoralis</i>	
Black Wattle	<i>Acacia mearnsii</i>	
Blackwood	<i>Acacia melanoxylon</i>	
Common Native Cherry	<i>Exocarpus cupressiformis</i>	
Silver Banksia	<i>Banksia marginate</i>	
Silver Wattle	<i>Acacia dealbata</i>	
White Gum	<i>Eucalyptus viminalis</i>	
Shrubs >3m		
Native Hopbush	<i>Dodonaea viscosa</i>	
Prickly Moses	<i>Acacia verticillata</i>	
Prickly Box	<i>Bursaria spinosa</i>	
Shrubs <3m		
Broom Spurge	<i>Amperea ziphoclada</i>	
Common Heath	<i>Epacris impressa</i>	
Cotton fireweed	<i>Senico quadridentatus</i>	
Golden Pea	<i>Aotus ericoides</i>	
Native Currant	<i>Coprosma quadrifida</i>	
Native Indigo	<i>Indigoferra australis</i>	
Peachberry heath	<i>Lissanthe strigosa</i>	
Showy bossiaea	<i>Bossiaea cinerea</i>	
Twiggy Beard Heath	<i>Leucopogon virgatus</i>	
Yellow Spiky Bitter Pea	<i>Davesia ulicifolia</i>	
Vines		
Blue Love Creeper	<i>Comesperma volubile</i>	
Grasses and Tussocks		
Common Wallaby Grass	<i>Austrodanthonia caespitosa</i>	
Sagg	<i>Lomandra longifolia</i>	
Silver Tussock Grass	<i>Poa labillardierei</i>	
Spear Grass	<i>Stipa stipoides</i>	
Kangaroo Grass	<i>Themeda triandra</i>	
Sedges and Reeds		
Cutting Grass	<i>Ghania sp.</i>	
Nobby Club Sedge	<i>Isolepis pallidus</i>	
Pale Rush	<i>Juncus pallidus</i>	
Sand Sword-sedge	<i>Lepidosperma concavum</i>	
Coast Sword-sedge	<i>Lepidosperma gladiatum</i>	
Wire Rush	<i>Letocarpus spp.</i>	

Common Name	Scientific Name	Status
Common Reed	Pragmites australis	
Gentle Rush	Juncus amabilis	R
Succulents		
Native Pigface	Carpobrotus rossii	
Beaded Glasswort	Sarcocornia quinqueflora	
Lilies		
Pale Vanilla Lily	Arthropodium milleflorum	
Bulbine Lily	Bulbine bulbosa	
Short-stem Flax-lily	Dianella brevicaulis	
Spreading Flax-lily	Dianella revoluta	
Tasman Flax-lily	Dianella tasmanica	
Twining fringe-lily	Thysanotus patersonii	
Ferns		
Bracken Fern	Pteridium esculentum	
Orchids		
Mosquito Orchid	Acianthus pusillus	
Pink Fingers	Caladenia carnea	
Green-comb Spider Orchid	Caladenia dilatata	
Slaty Helmet orchid	Corybas incurvus	
Leopard orchid	Diuris pardina	
Tiger Orchid	Diuris sulphurea	
Striped Greenhood	Pterostylis alata	
Trim Greenhood	Pterostylis concinna	
Sun Orchid	Thelymita sp.	
Groundcovers		
Buzzy – Bidgee-widgee	Aceana novae-zelandiae	
Native cranberry	Astroloma humifusum	
Kidney Weed	Dichondra repens	
Billy-buttons	Helichrysum apiculatum	
Spreading Guinea-flower	Hibbertia procumbens	
Prostrate Guinea-flower	Hibbertia prostrata	
Running Postman	Kennedia prostrata	
Scaly Buttons	Leptorhynchus squamatus	
Southern Stork's-bill	Pelargonium australe	
Dwarf Rice-flower	Pimelea humilis	
Narrow-leaf Trigger Plant	Stylidium graminifolium	
Golden Heath	Styphelia adscendens	
Native Spinach	Tetragonia tetragonoides	

3.6.0: Fauna

Table 3.15: Native Fauna identified in Invertebrate Survey Report (Airey, C & Marino, L)

Common Name	Scientific Name	Status
Mammals		
Bat sp.		
Common Brush-tail Possum	<i>Trichosurus vulpecula</i>	
Common Ring-tail Possum	<i>Pseudocheirus peregrinus</i>	
Eastern-barred bandicoot	<i>Perameles gunnii</i>	VU
Eastern Quoll	<i>Dasyurus viverrinus</i>	s
Echidna	<i>Tachyglossus aculeatus</i>	
Pademelon (Rufus-bellied)	<i>Thylogale billardierii</i>	
Potoroo		
Red Necked (Bennetts) Wallaby	<i>Macropus rufogriseus</i>	
Southern Bettong	<i>Bettongia gaimardi</i>	
Southern Brown Bandicoot	<i>Isodon obesulus</i>	
Sugar Glider	<i>Petaurus norfolcensis</i>	
Tasmanian Devil	<i>Thylacinus cyanocephalus</i>	
Water Rat	<i>Hydromys chrysogaster</i>	
Reptiles		
Blue-tongue lizard	<i>Tiliqua spp</i>	
Lowland Copperhead Snake	<i>Austrelaps superbus</i>	
Tasmanian Tiger Snake	<i>Notechis ater humphreysi</i>	
Three-lined Skink	<i>Acritoscincus duperreui</i>	
Amphibians		
Brown tree frog	<i>Litoria ewingi</i>	v, Vu
Eastern Banjo Frog	<i>Limnodynates dumerili</i>	
Green and Gold Frog	<i>Litoria raniformis</i>	
Smooth Froglet	<i>Geocrinia laevis</i>	
Southern Toadlet	<i>Pseudophryne semimarmorata</i>	
Birds		
Australian Hobby	<i>Falco longipennis</i>	
Australian Magpie	<i>Gymnorhina tibicen</i>	
Black-faced Cuckoo Shrike	<i>Coracina novaehollandiae</i>	
Blue-winged Parrot	<i>Neophema chrysostoma</i>	
Brown Falcon	<i>Falco cenchroides</i>	
Brown Thornbill	<i>Acanthiza pusilla</i>	
Cattle Egrets	<i>Ardea ibis</i>	
Crescent Honeyeater	<i>Phylidonyris pyrrhoptera</i>	
Eastern Rosella	<i>Platycercus eximius</i>	
Flame Robin	<i>Petroica phoenicea</i>	
Forest Raven	<i>Corvus coronoides</i>	
Green Rosella	<i>Platycercus caledonicus</i>	
Grey Butcher Bird	<i>Cracticus quoyi</i>	
Grey Currawong	<i>Strepera versicolour</i>	
Grey Fantail	<i>Rhipidura fuliginosa</i>	
Grey Goshawk	<i>Accipiter novaehollandiae</i>	e
Grey Shrike-thrush	<i>Colluricincla harmonica</i>	
Kookaburra	<i>Dacelo novaeguineae</i>	
Little Wattlebird	<i>Anthochaera chrysoptera</i>	

Common Name	Scientific Name	Status
Masked Lapwing	<i>Vanellus miles</i>	
Masked owl	<i>Tyto novaehollandiae</i>	e, VU
Musk Lorikeet	<i>Glossopsitta concinna</i>	
New Holland Honeyeater	<i>Phylidonyris novaehollandiae</i>	
Noisy Minor	<i>Manorina melanocephala</i>	
White-bellied Sea Eagle	<i>Haliaeetus leucogaster</i>	v
Southern Boobook	<i>Ninox novaeseelandiae</i>	
Wedge-tailed Eagle	<i>Aquila audax</i>	e, EN
Tawny Frogmouth	<i>Podargus strigoides</i>	
Peregrine Falcon	<i>Falco peregrinus</i>	
Swift Parrot	<i>Lathamus discolor</i>	e, EN
Swamp Harrier	<i>Circus approximans</i>	
Yellow Wattlebird	<i>Anthochaera paradoxa</i>	
Yellow-throated Honeyeater	<i>Lichenostomus leucotis</i>	
Yellow-rumped Thornbill	<i>Acanthiza chrysorrhoa</i>	
Pallid Cuckoo	<i>Cuculus pallidus</i>	
Yellow-tailed Black Cockatoo	<i>Calyptorhynchus funereus</i>	
Silvereye	<i>Zosterops lateralis</i>	
Striated Pardalote	<i>Pardalotus striatus</i>	
Tasmanian Native hen	<i>Gallinule mortierii</i>	

e – Listed as Endangered under State legislation

EN – Listed as Endangered under Commonwealth Legislation (EPBC Act)

v - Listed as Vulnerable under State legislation

VU - Listed as Vulnerable under Commonwealth Legislation (EPBC Act)

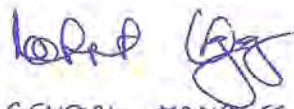
s - Listed as Significant under State legislation

Table 3.17: Introduced species including Australian Native Species

Introduced	
Common Name	Scientific Name
Birds	
House Sparrow	<i>Passer domesticus</i>
European Finch	
Common Blackbird	<i>Turdus merula</i>
Mammals	
Black Rat	<i>Ratus ratus</i>
Australian natives	
Laughing Kookaburra	<i>Dacelo novaeguineae</i>
Galahs	<i>Cacatua roseicapilla</i>
Rainbow Lorikeets	<i>Trichoglossus haematodus</i>

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