

Brighton Council

Foreshore Management Plan 2022





We acknowledge the traditional owners who once walked this country: the Mumirimina people.

The Mumirimina belonged to the Oyster Bay tribe. This was the largest tribe in Tasmania and covered 8000 square kilometres. kutalayna levee in Brighton was a significant meeting place where hundreds of generations of Aboriginal families hunted, gathered, corroboreed, camped and traded.

In the course of colonisation, dispossession of the Mumirimina was early, rapid and extensive.

We acknowledge the Tasmanian Aboriginal Community today as the continuing custodians of this land, and pay our respects to Elders past and present. Through our words and actions we strive to build a community that reflects and respects the history and hopes for all the people of Brighton.

Contents

Partnering with the Derwent Catchment Project	5
Authors	5
Publication Details	5
Disclaimer	5
Introduction	7
This plan	8
Foreshore management goals	8
Key threats	8
Format of the plan	9
Land tenure	10
Key stakeholders %	11
Protecting Aboriginal Heritage	12
Key Activities	12
Protecting high-value conservation areas	13
Key Activities	13
Promoting environmental awareness	14
Key Activities	14
Maintaining green spaces and promoting pride in the area people live	15
Key Activities	15
Promoting good biosecurity practices	15
Key Activities	15
Restoring the foreshore	16
Key Activities	16
Old Beach	18
Bridgewater foreshore	21
Herdsmans Cove	24
Key strategies and plans	28
References	29
Appendix I Old Beach Plant List	30
Appendix II Weed Management Strategy Extract -Eradication Zone 4: Foreshore/Walking trails	31
Appendix III Weeds commonly found on the foreshore	
Appendix IV Plants of Brighton	
Appendix V Unanticipated Discovery Plan	



Located on the Derwent River, Brighton has an extensive foreshore. Photo Samuel Shelly

Partnering with the Derwent Catchment Project



At around one-fifth the total area of Tasmania, the Derwent Catchment is a vast region with extraordinarily diverse landscapes. Within its borders are hydro-electricity operations, agriculture, forestry and aquaculture, and it's also one of the state's favourite tourist destinations. The bulk of Hobart's drinking water originates here.

The Derwent Catchment Project (DCP) was set up to support the community to restore and maintain natural and agricultural landscapes across this challenging environment, to ensure a prosperous and sustainable future for the Derwent Catchment.

The DCP works team is available for weed control and revegetation projects for land managers and private landowners.

Authors

For further information about this plan please contact the Derwent Catchment Project via: mel.fazackerley@derwentcatchment.org.

This plan was compiled by Melanie Fazackerley, Morgan McPherson & Josie Kelman

Publication Details

This document may be reproduced in whole or in part for the purpose of study or training, subject to the inclusion of an acknowledgement of source and it not being used for commercial purposes or sale. Reproduction for purposes other than those given above requires the prior permission of the Derwent Catchment Project and Brighton Council.

Disclaimer

The Derwent Catchment Project does not certify that this publication, or any part of it, is correct or complete. To the extent permitted by law, the Derwent Catchment Project excludes all liability to any person for any consequences, including but not limited to all losses, damages, costs, expenses and other compensation, arising directly or indirectly from using, in part or in whole, any information or material contained in this publication.



Image: Samuel Shelley, 2019

Mayors Message

It gives me great pleasure to present Brighton Council's Foreshore Management Plan. The development of a management plan to guide the collaborative management of Brighton's foreshore is a key action of Brighton's new Natural Resource Management Strategy.

Our municipality has a proud Tasmanian Aboriginal history of effective land management, with the Mumirimina people's custodianship of country. It is important that we acknowledge this history and work together to continue to look after our estuarine areas, our wetlands, saltmarshes and our coastal vegetation. As well as providing shelter, habitat and improving water quality, these areas provide an important buffer between the river and our parks, houses, and pathways.

This plan provides a practical guide for community, council and other stakeholders to work together to care for the foreshore. Initially concentrating on areas at Bridgewater, Herdsmans Cove and Old Beach, the plan will support community groups such as Bridgewater Landcare and the Friends of Old Beach Foreshore, enabling them to continue their great work cleaning up rubbish, removing weeds, and restoring foreshore vegetation.

As interest and support for foreshore management increases, we hope to include other areas such as Green Point and the Jordan River.

The Brighton Foreshore Management Plan is part of our ongoing work towards a more sustainable environment for our communities.

We look forward to working together to look after our foreshore.

Mayor Leigh Gray

Brighton Council



Image: Samuel Shelley, 2019

Introduction

Located on the River Derwent, the Brighton municipality is home to significant wetlands and waterways including the Jordan River, kutalayna. The kutalayna levee was a significant meeting place for the Mumirimina people, of the Oyster Bay tribe. In this area hundreds of generations of Aboriginal families hunted, gathered, corroboreed, camped and traded (Tasmanian Aboriginal Centre 2012).

There are a number of well-established paths and tracks that link different areas along the Derwent foreshore and Jordan River. The trails create spaces: for recreation and exercise; they link places where you can explore natural and cultural landscapes; and help connect the community.

Our foreshore areas are home to patches of remnant Eucalypt dry woodlands and significant wetland communities including saltmarshes. In 2020 the Derwent Estuary Program conducted some baseline monitoring on Derwent Estuary saltmarshes including locations in Brighton. These locations include Green Point, Gage Brook at the mouth of the Jordan River and Old Beach. This report has informed this plan.

Brighton's foreshore offers opportunities for local schools and community groups to "adopt a patch" of the foreshore to care for and use for outdoor education classes/activities.

Our local community has expressed interest in looking after some areas of the foreshore. Recently groups in Old Beach and Bridgewater have been cleaning up the foreshore and tackling weeds in some areas and undertaking plantings. There is also interest in looking after an area on the Jordan River.

In 2021, Brighton Council engaged the Derwent Catchment Project to work with stakeholders to develop a foreshore management plan for Brighton.

This plan

This foreshore management plan aims to provide a practical guide for the collaborative management of areas of the Brighton foreshore. Initially the plan concentrates on three areas in Bridgewater, Herdsmans Cove and Old Beach. These are areas that,

- community has expressed an interest in looking after
- are easily accessible
- have significant natural values
- are adjacent to areas where Brighton Council has other community infrastructure planned or in place
- offer opportunities for community and stakeholders to work together across land tenure to improve the natural values of the area

It is envisaged that these areas will provide an opportunity to raise community awareness of the natural values of the foreshore and increase the community's interest and capacity in helping care for Brighton's natural areas. This is a working plan and as interest and support for foreshore management increases the foreshore plan should be extended to include other areas, including the Jordan River and Green Point

Foreshore management goals

This plan aims to guide collaborative cross tenure management of foreshore sites to:

- Protect Aboriginal Heritage
- Protect high-conservation value areas
- Restore foreshore vegetation and habitat
- Promote environmental awareness
- Maintain green spaces and promote pride in the area
- Promote good biosecurity hygiene practices

Key threats

- Weeds weeds such as boxthorn, blackberry and briar rose not only impact natural values but also affect amenity - their spikes and thorns restrict access to foreshore areas (See Appendix III for list of weeds commonly found on the foreshore)
- Clearance of vegetation for views and/or recreational activities which increases the risk of river/coastal erosion and degrades habitat
- Garden escapees dumping of garden waste and/or the extension of gardens beyond the property boundary onto the foreshore
- Rubbish transported by stormwater and/or dumped
- Fire
- Illegal vehicular access
- Fresh water pooling on tyre indentations from vehicles bicycles and bikes across saltmarsh area can cause the saltmarsh to die back
- Dogs off leads pose a threat to native wildlife
- Foreshore development not allowing space for saltmarsh refugia
- Foreshore erosion associated with rising sea levels and an increase in storm events
- Trampling in sensitive areas



Image: Riverside Drive, Bridgewater. Brighton Council, 2022

Format of the plan

The plan provides an overview of areas of key interest and management considerations. The main communication tools are intended to be the series of maps which form the core of the plan.

Overview of management considerations

This section provides an outline of some of the management considerations giving an overview of land tenure along the foreshore, a list of key stakeholders and outlining considerations and key activities for each of the management goals.

Three areas are considered - Old Beach, Bridgewater and Herdsmans Cove

The following are provided for each location:

- Brief introduction
- Map showing management zones, key activities and responsibilities.
- Weed map for that site

The appendices provide additional information about plant species, weeds and Aboriginal heritage

Management Considerations

Land tenure

The majority of land on Brighton's foreshore is Crown Land managed by Tasmanian Parks and Wildlife Service - Property Services at the Department of Natural Resources and Environment. Within these areas are a number of smaller areas of Crown Land covered by licences and leases.

For many sections of the Derwent foreshore, Brighton Council leases the foreshore tracks/trails with a small area either side of the path for management. At Herdsmans Cove council holds a lease for the foreshore area from Gage Cove to the Jordan River. At Bridgewater council holds a licence for the foreshore area along Eddington St east of Woods Point to the dam area next to the Botanical Institute.

The waters of the Derwent and the Jordan River (south of Cove Hill Road) are part of the River Derwent Marine Conservation Area and are managed by Parks and Wildlife – Southern Region.

All works on PWS managed land requires consideration and approval by PWS under the relevant Act. Council should always review the Lease or Licence to ensure all works are included as part of the permitted activities contained within the agreement. An additional work authority and/or Council approval may be required and need to be considered when planning works.

This plan will guide cross tenure management of the foreshore so we can all work together to achieve common goals.

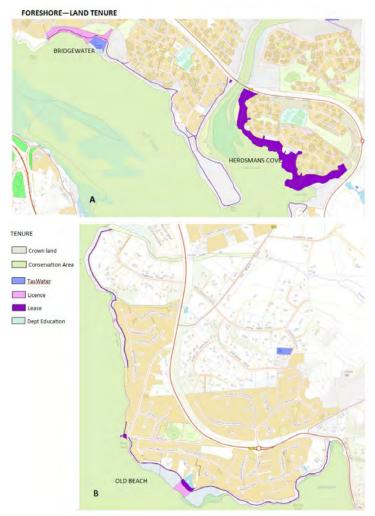


Figure 1 Map indicating land tenure of foreshore areas - A Bridgewater & Herdsmans Cove - B Old Beach Adapted from The List Map 2022

Key stakeholders %

Botanical Institute is located adjacent to the Bridgewater foreshore and runs community activities around healthy and affordable eating and provides volunteering and social enterprise opportunities.

Bridgewater Landcare Group with assistance from Landcare Tasmania this group has been working on the Bridgewater foreshore undertaking weed control, rubbish clean ups and tree plantings.

Brighton Alive – is a network of community service providers working in Brighton. They provide important links to the local community.

Brighton Council is the principal manager of local community infrastructure, including roads, waste collection, public recreation facilities and area planning. The Council also has a number of programs that link with the community and the environment, including a climate change resilience program.

Derwent Catchment Project (DCP) is a grass-roots community organisation working with community, landholders and key stakeholders to look after our natural and farming landscapes. The DCP has been working with Brighton Council and community to develop a strategic framework for natural resource management (NRM) in Brighton. The DCP has developed an NRM strategy, a weed strategy and this plan to help promote collaboration and assist in securing funding and resources for implementation activities.

Derwent Estuary Program (DEP) is a regional partnership between local governments, the Tasmanian state government, commercial and industrial enterprises, scientists and the community to restore and promote the Derwent estuary. The DEP coordinates initiatives to reduce water pollution, conserve habitats and species, monitor river health and promote greater use and enjoyment of the foreshore.

Friends of Old Beach Foreshore formed from the Old Beach Neighbourhood Watch Group, the "friends" have been working on the Old Beach foreshore undertaking rubbish clean ups, weed control and tree plantings.

Kutalayna Collective is a collective impact initiative contributing to positive change in the areas that matter most to the community -sustainable community standing strong, community culture and pride, Aboriginal children and their families, meaningful pathways to learning and employment, whole of community wellbeing and services working together

Landcare Tasmania (LT) is the peak Landcare body in Tasmania and works to represent, support, strengthen and grow the Landcare movement. In Brighton LT facilitated the formation of the Bridgewater Landcare group assisting with working bees and facilitating a number of workshops at the Bridgewater site, working closely with the Botanical Institute and other groups.

Property Services (PS), previously Crown Land Services are part of the Tasmania Parks and Wildlife Service. PS facilitate the appropriate management, use and development of Crown land, including the licensing, leasing, and sale of Crown properties. PS is also responsible for the management of unallocated Crown land.

Tasmania Parks and Wildlife Service (PWS) manages a range of reserved lands, including national parks, regional reserves, and conservation areas across Tasmania. The PWS manages some reserve areas on the foreshore and the Derwent River Marine Conservation Area.

Tasmanian Seed Conservation Centre (TSCC) is a seed bank facility based at the Royal Tasmanian Botanical Gardens. It was opened in 2005 as part of international Millennium Seed Bank Project. The seed bank focuses on the native flora of Tasmania, with a particular emphasis on Tasmania's rare and threatened plants as well as storing seed from representative populations across Tasmania

TasWater is Tasmania's water and sewage utility and has infrastructure across the municipality including the waste treatment plant on the Bridgewater Foreshore.

Understorey Network is a community organisation focused on propagating, preserving and promoting the value of Tasmanian understorey native plants. Its motto is: "It's not the whole story without the understorey."

Protecting Aboriginal Heritage

Brighton has a proud Tasmanian Aboriginal history of effective land management, with the Mumirimina people's custodianship of country. The Mumirimina (Say *Mu mee ree han*) people are one of the ten bands making up the Oyster Bay tribe. The kutalayna/Jordan River area was a significant meeting place where hundreds of generations of Palawa people hunted, gathered, corroboreed, camped and traded (Tasmanian Aboriginal Centre 2012).



Image: Murray Kelman 2022

The richness of Brighton's natural resources no doubt supported the local Aboriginal communities in the area. In turn traditional land management practices have influenced and shaped the Brighton's landscape.

Within the Brighton municipality there are over 200 known Aboriginal heritage sites, including shell middens, stone quarries, and artefact scatters. These sites reflect the extent of survey and investigation work that has been carried out to date and do not present a complete and exhaustive picture of the heritage site or Aboriginal land use in the past (Aboriginal Heritage Tasmania 2022). Known sites are concentrated around the Jordan River, Derwent Estuary and smaller waterways.

Tasmanian Aboriginal cultural material or sites, such as shell middens and rock artefacts are protected under the *Aboriginal Heritage Act 1975*. It is an offence to destroy, damage, deface, conceal, remove or otherwise interfere with a relic. It is also an offence not to report the finding of a relic.

If foreshore management activities such as weed control and planting involve digging or ground disturbance an Aboriginal Heritage Assessment may be needed. The Dial Before You Dig referral service can assist to determine whether there is a need to seek further advice about the presence of Aboriginal relics in an area. https://www.aboriginalheritage.tas.gov.au/

An Unanticipated Discovery Plan (Appendix V) should always be kept on site during the works.

If you suspect that an Aboriginal midden has been discovered during your activity, do not interfere with the site. Report the site to Aboriginal Heritage Tasmania. Provide the location of the site and images on the <u>Aboriginal Heritage Site Reporting Form</u> send the completed form to aboriginal@dpac.tas.gov.au. Aboriginal Heritage Tasmania will provide further advice in accordance with the Act.

The engagement of an Aboriginal Heritage Officer to undertake surveys of the sites covered in this plan is recommended to help identify key areas in which activities should not be undertaken. A survey will also add to our understanding of the cultural landscape.

There is an opportunity to work with the local Aboriginal community to raise awareness of Brighton's rich Aboriginal culture through activities and initiatives. The installation of interpretive signage recognising the importance of the cultural landscape would complement the existing saltmarsh signage.

Key Activities

- 1. Desktop Assessment for each site
- 2. Engage Aboriginal Heritage Officer to conduct surveys at each site
- 3. Implement AHO recommendations
- 4. Work with katalayna Collective and local Aboriginal community to raise awareness of Aboriginal culture through activities and initiatives
- 5. Install interpretive signage as appropriate

Protecting high-value conservation areas

The foreshore of the Derwent estuary is the interface between urban and rural landscape and has unique habitat. The saltmarshes on the foreshore are particularly significant. Saltmarshes are wetland habitats generally defined by the presence of halophytic communities (salttolerant plants) that can tolerate high salinity levels and are subject to waterlogging. The saltmarshes provide ecosystem services such as supporting biodiversity, including crucial feeding, roosting and breeding habitats for resident and migratory shorebirds, water birds and many terrestrial bird species, providing feeding, resting and nursery habitat for fish.

Saltmarshes also provide human-centric benefits including providing flood protection and tidal surge, improving the coastal water quality by intercepting land-driven nutrients and stabilising nutrient flows and reducing the likelihood of nutrient spikes in the system that can cause algal blooms; intercepting and settling down suspended sediments in the water column, which is critical for maintaining and enhancing coastal water quality; and for providing opportunities for recreation and education.

Ensuring saltmarshes are weed free will allow them to function to their fullest and benefit the ecosystem.



Image: Saltmarsh area Old Beach Derwent River foreshore. Brighton Council, 2022

Climate change poses risks to saltmarshes by sea-level rise, which will force saltmarshes further inland. In some instances, saltmarshes will not be able to migrate due to steepness and/or infrastructure. It is essential to ensure that future locations are free of weeds to mitigate future weed management and allow minimal disturbance to native vegetation in areas where migration is possible.

Natural and artificial wetlands along the foreshore provide habitat for local wildlife, add visual appeal to an area and can provide essential ecosystem services such as treating stormwater if used correctly. The Derwent estuary has lost most of its wetlands to development, land clearing and altered waterflow changes. The dam area on the Bridgewater foreshore offers the opportunity to implement water sensitive urban design and restore the wetland area.

Saltmarshes and wetlands pose a challenge when managing weeds as herbicide use should be kept to a minimum and only aquatic safe chemical should be used. Care must also be taken when working in these areas to avoid trampling fragile vegetation.

Works will be undertaken to protect the saltmarsh and wetland areas through removal of declared and environmental weeds and rubbish.

Working with the Tasmanian Seed Conservation Centre seed collect seed for store to ensure species of local provenance are conserved and available for future restoration works. Landcare Tasmania has already been working with the Understorey Network to propagate plants from the Bridgewater foreshore. Propagation of local provenance particularly saltmarsh and wetland plants will be important for restoration works at all sites.

Key Activities

- Seed collection
- Plant propagation
- Weed management
- Restoration



Image: Boneseed weed removal, Old Beach Clean Up Australia Day March 2022. Brighton Council, 2022

Promoting environmental awareness

Successful foreshore management depends on everyone working together.

This plan aims to foster a collaborative approach where different stakeholders and community members share, knowledge, experience and expertise about looking after the foreshore, managing weeds and restoring natural areas and increase the community's capacity to help manage the foreshore safely and effectively.

Foreshore activities such as community walks, walk and talks, schools' activities and working bees, are ways of bringing different people together to share stories and connect with each other and the environment.

The relatively close proximity of schools at Bridgewater and Herdsmans Cove present the opportunity for the foreshore areas to be used for outdoor educational opportunities.

Key Activities

- Community walks, walk and talks, schools' activities and working bees
- Communication activities to promote events and responsible use of foreshore
- Installation of interpretive signage

Maintaining green spaces and promoting pride in the area people live

The science backs it! Spending time outside makes you happy. Studies have shown that spending time outdoors can lower stress levels, reduce anxiety and improve memory (Total wellness). Maintaining our green spaces and promoting and facilitating community use of our foreshore areas is important for our health and wellbeing.

Key Activities

- Prioritise removal of weeds with thorns and/or sharp spike where there are community activities
- Promote and facilitate outdoor community activities to activate foreshore spaces
- Seek funding for foreshore projects that link environment with health and well being
- Work with the botanical Institute to run "seed bombing" activities at Herdsmans Cove to engage community in fun ways to connect to and revegetate the foreshore
- Facilitate rubbish clean ups

Promoting good biosecurity practices

Weeds and other pathogens can be transported by wind, water, animals and people Whilst there are natural causes of weed spread, a growing threat is seed distribution via vehicles and machinery. Key biosecurity messages will be promoted through this plan.

It is important to make sure vehicles, machinery and equipment are washed down before and after undertaking activities on the foreshore.

Seeds can get trapped in clothing or in mud on your shores – make sure boots, shoes, clothing and any other gear used on the foreshore is clean and dry.

Key Activities

Wash down vehicles, machinery and equipment before and after working on the foreshore

For more information see the Tasmanian Washdown Guidelines https://nre.tas.gov.au/Documents/Washdown-Guidelines-Edition-1.pdf

Restoring the foreshore

Maintain and improve our foreshores working with community to undertake on-ground actions that improve vegetation condition, create habitat and build climate resilience.

Priority should be given to high value conservation sites and sites used by the community.

Where practical revegetate areas where weeds have been controlled to create competition for regenerating weeds.

Monitor for weed germination and regrowth.

Revegetation should use local provenance native species. Suitable species are found in Appendix I and Appendix IV.

Key Activities

- Control weeds and replant with natives to create competition. Monitor for weed germination and regrowth
- Undertake revegetation works
- Manage vehicular access
- Clean out culverts and storm water drains and redesign and replant using water sensitive urbans design – such as swales and retention basins – use suitable wetland species
- Use plants to define pathways along saltmarsh areas to discourage bike access and trampling.
- Seek funding to develop and implement an erosion management plan for Old Beach
- Replant areas with suitable eucalypts where trees have been illegally removed
- Seek funding to implement water sensitive urban design around the dam at Bridgewater

There are so many good reasons to restore the vegetation on our foreshore!

Climate Change - trees absorb carbon dioxide, a green-house gas that contributes to climate change. Trees also store carbon and release oxygen!

Habitat - Restoring the remnant vegetation on our foreshore provides important habitat for wildlife.

Protection – Foreshore vegetation provides an important buffer between the river and our parks, houses, and pathways. Trees provide shelter and protection.

Water quality - Plants hold the soil together, reducing erosion and improving water quality.

Removing trees and plants on the foreshore to get a view, increases the risk of erosion and flooding for nearby properties. Healthy and intact native vegetation at the river's edge, helps protect your home from storm events.

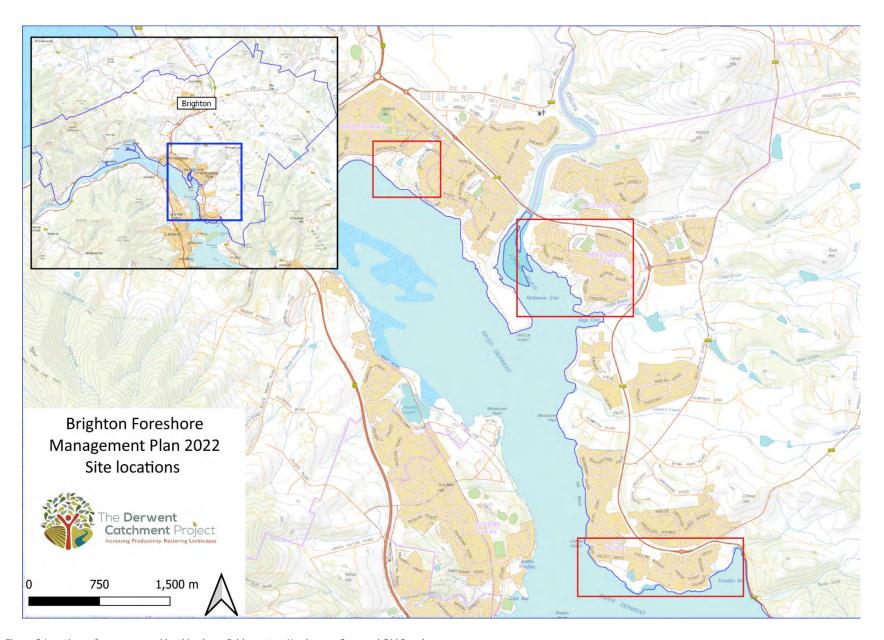


Figure 2 Locations of areas covered by this plan – Bridgewater, Herdsmans Cove and Old Beach



Image: Old Beach, Derwent River foreshore. Brighton Council, 2022

Old Beach

This plan focuses on the section of foreshore extending from Jetty Rd to Cassidy's Bay. A foreshore pathway meanders along the foreshore crossing stormwater culverts and passing significant saltmarsh areas. The area is popular for walking particularly with dog walkers. The section of foreshore near Jetty Rd is subject to erosion and inundation.

The Friends of Old Beach evolved from the Old Beach Neighbourhood Watch group and have been removing rubbish and weeds and restoring vegetation. The group is keen to continue their work.

A plant list has been developed for this area and is based on the plant survey undertaken as part of the 2020 Derwent Estuary Saltmarsh Baseline Monitoring and Management report and has been augmented by DCP observations. It is included as Appendix 1. This list is quite extensive and many of the species on the list will be found in other areas of the foreshore.

There are few remaining patches of remnant bush on this stretch of foreshore. Tasveg 4.0 maps these areas as modified land (urban areas). The remaining scattered trees include blue gums *Eucalyptus globulus*, white gums *Eucalyptus viminalis*, black wattles *Acacia mearnsii* and prickly box *Bursaria spinosa*. These trees protect our houses, pathways and parklands from erosion and inundation.

There has been a history of clearing trees for views and dumping of rubbish and garden waste. Property Services are currently investigating poisoning and damage to foreshore vegetation. As part of the National Tree Day 2022 a flyer promoting the values of foreshore vegetation was circulated to residents adjacent to the foreshore.

There has been some illegal clearance of foreshore vegetation for the construction of a BMX track. This area needs to be rehabilitated. It would be good to engage with the local BMX riders to explore the possibility of engaging them to design and possibly build some additional "dirt" features at the skate/bike park on Jetty Rd.



Old Beach Foreshore

I Draft For Review



Date 1/9/22

Scale 1:4000 @ A3



Old Beach Foreshore Weed Management zone

Weeds African

African boxthorn

Agapanthus

Blackberry

Boneseed

Californian thistle

Fennel

Gorse

Mirror bush

Montpellier broom

periwinkle

Pine tree

Red hot poker

Slender Thistle

Sweet briar • Sweet Briar •

Sydney wattle

Weeping willow

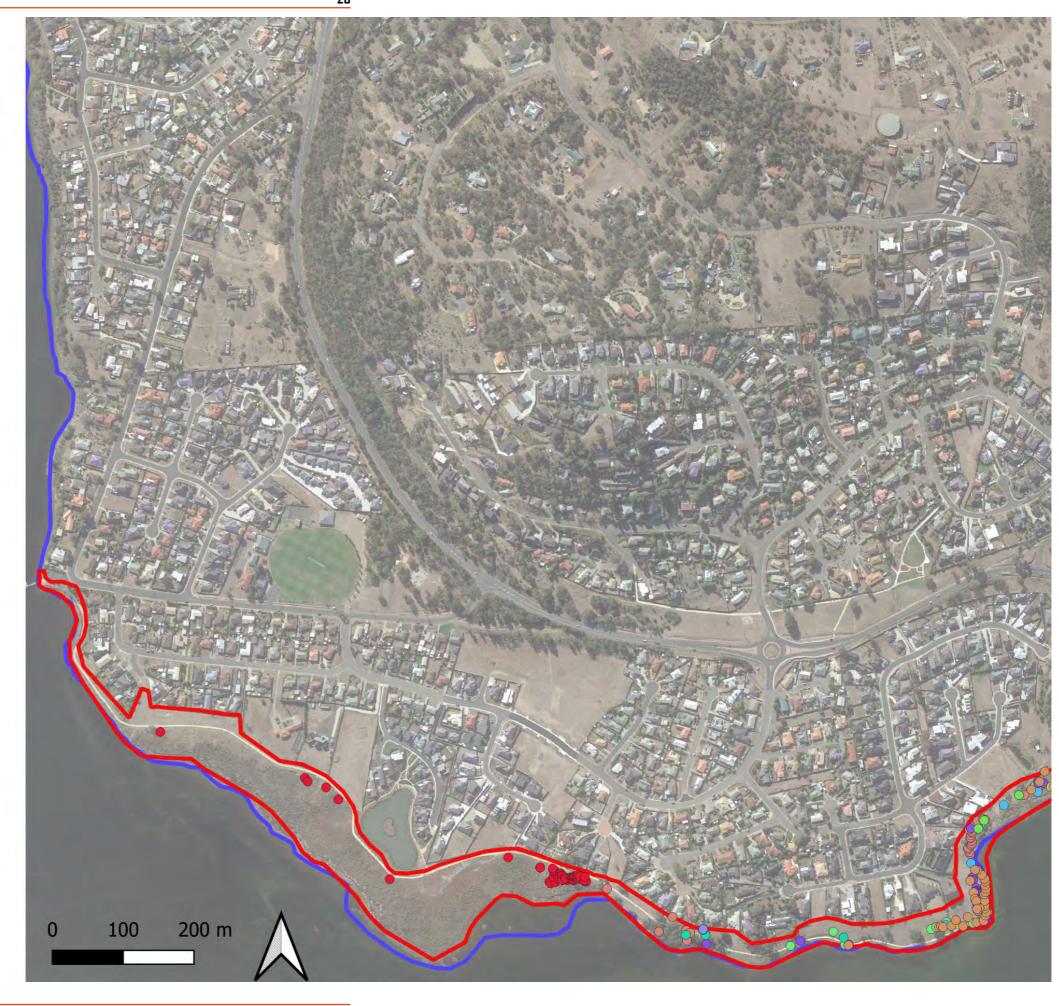
Whitweed

Willow

Treated

Weed eradication zones
Brighton Municipality





Bridgewater foreshore

A Bridgewater Parkland Master Plan report and a concept plan for the Bridgewater Foreshore Playground have been developed for this area. Brighton Council has installed the first stage of the Bridgewater Foreshore Playground and further playground stages and development are planned. The Botanical Institute has a nursery and runs a range of community activities as well as supporting social enterprises. This area is becoming an important community hub for Bridgewater and surrounding areas.

Landcare Tasmania have been working with the local community to establish and support a Bridgewater Landcare Group. They have held workshops and other community activities to promote understanding of natural values. The group has undertaken foreshore clean-ups, planting and weeding activities.

Support for ongoing works to continue to the existing patches of coastal vegetation is recommended. Funds should also be sought for a water sensitive urban design project that incorporates and enhances the existing dam. The project would restore wetland habitat providing valuable habitat and amenity and include support for the local Landcare group to undertake weed removal and revegetation activities.

The Bridgewater foreshore area currently has scattered infestations of African boxthorn. Not only does boxthorn affect the natural values but it reduces the amenity of the area. Its long strong spikes, or thorns, pose a safety risk, make it difficult to treat and create challenges for safe disposal. It is recommended that professional contractors be engaged to remove boxthorn from foreshore areas accessed by the public, particularly in this area.

The relatively close proximity of the East Derwent Primary School and the Jordan River Learning Federation middle and high school present an opportunity for educational activities on the foreshore areas and for a school group to "adopt a patch" of the foreshore to care for.



Image: Landcare Tasmania and MONA's Botanic Institute working together to replant the Eddington Street, Derwent Foreshore Area, National Tree Day, Brighton Council 2021







Bridgewater Foreshore Weed Management zone

Weeds

African boxthorn

Blackberry

Fennel

Mirror bush •

Montpellier broom

Sweet Briar

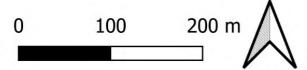
Weeping willow

Willow

Weed eradication zones

Brighton Municipality



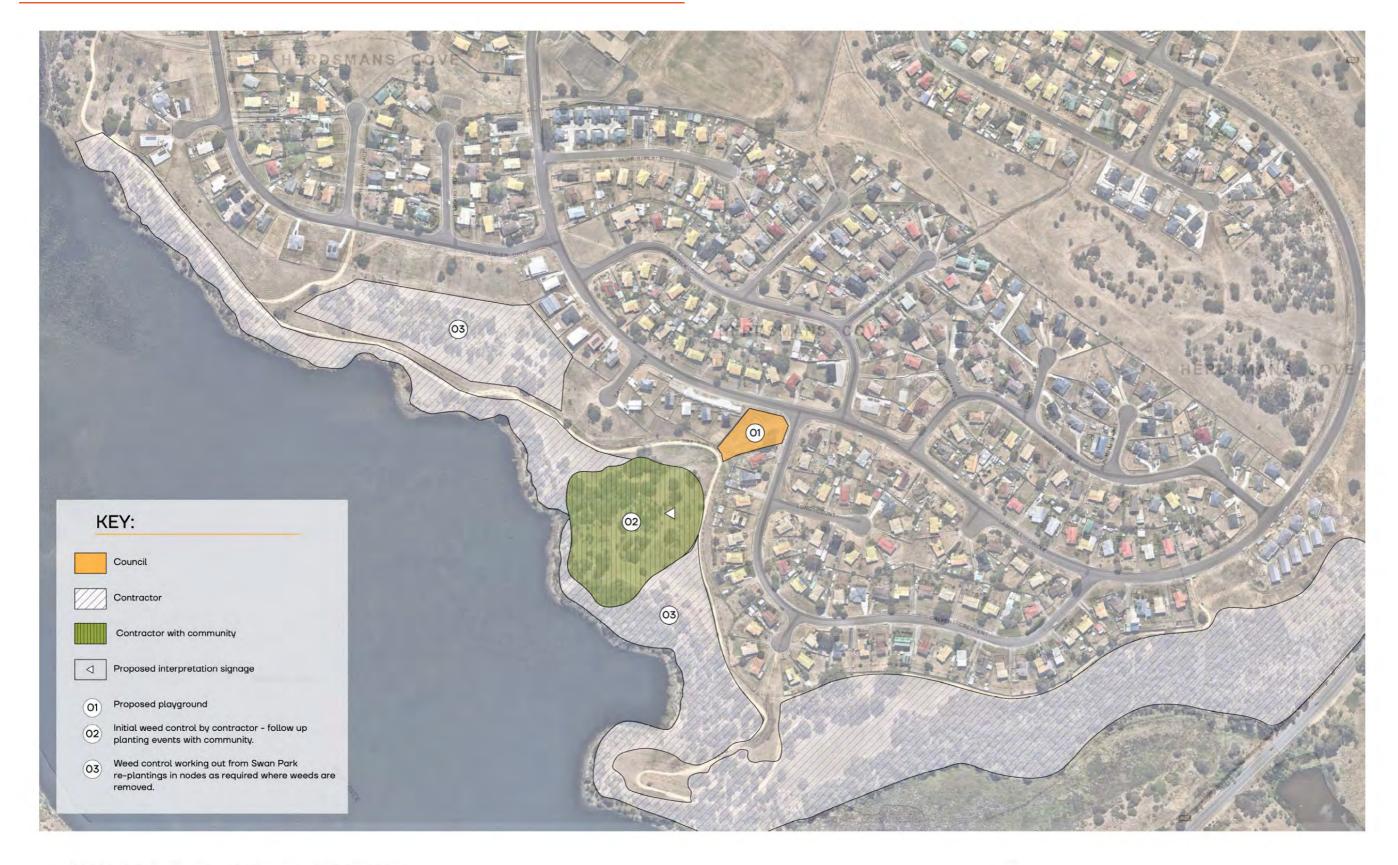




Herdsmans Cove

Brighton Council is planning to install a playground at Swan Park in Herdsman's Cove. Activation of the adjacent foreshore area would complement the playground providing nature play options. The gully area has patches of remnant vegetation and would benefit from weed control. Rubbish dumping and/or burning on the foreshore poses a threat to the natural values and the amenity of the area. Increase usage and community ownership may help to curb antisocial and illegal behaviour.

Preliminary discussions have been held with the Botanical Institute with the view of undertaking seed bombing as a fun activity to engage with young people in the area. The relatively close proximity of Herdsmans Cove Primary School also presents an opportunity for educational activities on the foreshore areas and for a school group to "adopt a patch" of the foreshore to care for.



Herdsmans Cove Foreshore

I Draft For Review



Date 1/9/22 Scale 1:3000 @ A3



Herdsman Cove Foreshore Weed Management zone

Weeds

African boxthorn

Boneseed Fennel

Sweet Briar

Whitweed

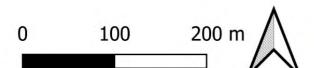
Blackberry

Various weeds

Weed eradication zones

Brighton Municipality







Key strategies and plans

Brighton Council has a range of natural resource management work with strategic ties to this plan:

- Draft Brighton Natural Resource Management Strategy
 - Goal 5.1 Incorporate regional community wellbeing into agricultural and natural area management programs to improve resilience
 - Action 5.1.5 Develop a foreshore management plan with priority areas that can be implemented with the assistance of community and school groups
- Climate change resilience program the Brighton Council Climate Change Resilience Strategy
 2019
- Street tree program the Greening Brighton Strategy 2016-2021
- Planning for the future Derwent Estuary Saltmarsh Baseline Monitoring and Management July
 2021, Inger Visby (Derwent Estuary Program) & Vishnu Prahalad (University of Tasmania)
- Regional Urban Tree Managers group (Kingborough Council, City of Hobart, Glenorchy City Council)
- The National Environment and Sustainability Program via a partnership with the University of Tasmania to work on nature-based solutions: <u>About the National Environmental Science</u> <u>Program - DAWE</u>
- Working with volunteer groups through Landcare Tasmania
- The MONA Institute Botanica, Material Institute and Bond Place
- Sustainability education program working with local schools
- Work collaboratively with regional landscape management agencies to effectively manage natural assets (e.g. PWS – Property Services, PWS – Southern Region, NRM South, DNRE, Tas Water, Derwent Estuary Program)

References

Adapt NRM, 2014 AdaptNRM | Resources (csiro.au)

Brighton Council Climate Change Resilience Strategy 2019

Brighton Council, 2022 Brighton Weed Management Strategy

Brighton Council, 2022 Draft Brighton Natural Resource Management Strategy

Greening Brighton Strategy 2016-2021

Inger Visby (Derwent Estuary Program) & Vishnu Prahalad (University of Tasmania) July 2020, *Planning for the future. Derwent Estuary Saltmarsh Baseline Monitoring and Management*

Derwent Catchment Project, 2021. *Draft Derwent Catchment Biosecurity Action Plan: Climate change preparedness and community action 2021-26.*

Nature Conservation Branch, Department of Primary Industries, Water and Environment 2000, Threatened Species Strategy

The Powerful Health Benefits of Spending Time Outside (totalwellnesshealth.com)

Aboriginal Heritage Tasmania https://www.aboriginalheritage.tas.gov.au/

The Derwent Catchment Project https://www.derwentcatchment.org

Department of Natural Resources and Environment Biosecurity Tasmania website https://nre.tas.gov.au/biosecurity-tasmania

Invasive Species Branch Department of Primary Industries, Parks, Water and Environment, 2015 <u>Weed and Disease Planning and Hygiene Guidelines</u> Preventing the spread of weeds and diseases in Tasmania. (Eds.) Karen Stewart and Michael Askey-Doran.

T.A. Remenyi, N. Earl, P.T. Love, D.A. Rollins, R.M.B. Harris Climate Futures Programme, Discipline of Geography & Spatial Sciences, University of Tasmania, *Climate Change Information for Decision Making – Brighton Council*

Appendix I Old Beach Plant List

Plant species list for Old Beach Foreshore

Inger Visby & Vishnu Prahalad, 2020 Derwent Estuary Saltmarsh Baseline Monitoring & Management July 2020

Mel Fazackerley July 2022

Dicotyledons		
Family	Scientific name	Common Name
Aizoaceae	Carpobrotus rossii	native pigface
Amaranthaceae	Sarcocornia blackiana	thickhead glasswort
Amaranthaceae	Sarcocornia quinqueflora	Tasmanian glasswort
Casuarinaceae	Allocasuarina verticillata	drooping sheoak
Convolvulaceae	Wilsonia backhousei	narrowleaf wilsonia
Fabaceae	Acacia dealbata subsp. dealbata	silver wattle
Fabaceae	Acacia mearnsii	black wattle
Goodeniaceae	Selliera radicans	shiny swampmat
Myrtaceae	Eucalyptus globulus subsp. globulus	Tasmanian blue gum
Myrtaceae	Eucalyptus viminalis subsp. viminalis	white gum
Phrymaceae	Thyridia repens	creeping monkeyflower
Pittosporaceae	Bursaria spinosa subsp. spinosa	prickly box
Theophrastaceae	Samolus repens var. repens	creeping brookweed
Monocotyledons		l
Cyperaceae	Ficinia nodosa	knobby clubsedge
Cyperaceae	Gahnia filum	chaffy sawsedge
Juncaceae	Juncus kraussii subsp. australiensis	sea rush
Juncaceae	Juncus revolutus	creeping rush
Juncaginaceae	Cycnogeton procerum	greater waterribbons
Juncaginaceae	Triglochin striata	streaked arrowgrass
Poaceae	Austrostipa stipoides	coast speargrass
Poaceae	Distichlis distichophylla	australian saltgrass
Poaceae	Poa labillardierei var. labillardierei	silver tussockgrass
Poaceae	Poa poiformis var. poiformis	coastal tussockgrass
Poaceae	Puccinellia stricta	australian saltmarshgrass
Restionaceae	Apodasmia brownii	coarse twinerush

Appendix II Weed Management Strategy Extract - Eradication Zone 4: Foreshore/Walking trails

As part of maintaining green spaces and promoting pride in the areas where people live, the walking trails along foreshores and the Jordan River have been selected as a weed management zone and make up zone 4 in Brighton's Weed Management Strategy. Reducing weed burden will reduce the number of resources needed to manage vegetation around pathways whilst ensuring the pathways themselves provide a safe and enjoyable feeling for users. These zones will also help protect the ecological communities in the associated wetlands. These wetlands are of high value to Tasmania and provide critical habitat for local wildlife. Reducing the weed burden on the riverbanks means native vegetation will not be outcompeted and will allow for natural regression away from rising seawater levels. Stakeholders include Crown Land Services, Parks and Wildlife Services, Brighton Council, and private landholders.



Image - Eradication Zone 4 Foreshore and Walking Trai

Appendix III Weeds commonly found on the foreshore

Below are the details of the major declared weeds and environmental weeds that are of concern on the Brighton foreshore.

Declared Weeds (Declared) are listed under the Tasmanian Weed Management Act 1999. Landowners and managers are legally required to eradicate and control declared weeds.

Weeds of National Significance (WONS) are priority weeds that have the potential to seriously impact landscapes across Australia due to their invasiveness, potential for spread and negative environmental, social and economic effects.

Environment Weeds are non-local plants that invade and change our landscape, threatening the survival of native plants and animals.

African boxthorn (*Lycium ferocissimum*) is a woody shrub reaching up to 4 m in height, with glossy leaves and an extensive root system incorporating a long-branched taproot. The trunk and branches are light brown and smooth when young, turning darker brown or grey with age. The twigs end in a hard, sharp spike or thorn.

The white flowers are usually produced in summer, although flowering can occur through most of the year. The fruit is an oblong berry approximately 10 mm long, going from a smooth green appearance to bright orange-red when ripe. Fruits contain numerous small, oval, flattened seeds. Seeds germinate at any time of the year and generally take two years to reach flowering stage (DPIPWE 2016).



Image: African Boxthorn, Derwent Catchment Project 2021

African boxthorn is found throughout most agricultural areas of Tasmania it is common along fence lines and beneath overhead wires as well is a long roadsides railways and waterways. Recent surveying around the Brighton municipality showed that African boxthorn is widespread and dominating in some areas. The Statutory Weed Management Plan for African Boxthorn indicates this species is classed as Zone B - 'widespread infestations' requiring containment and control. It is important that urban households are involved eradication and educated on the issues around African boxthorn as it was noted to be regularly in residents' yards.

The spikes or thorns on African boxthorn make it difficult to treat and pose challenges for safe disposal. It is recommended that professional contractors be engaged to remove boxthorn from public land or areas used by the public. **Declared - WONS**



Image: African lovegrass, Derwent Catchment Project 2022

African lovegrass (*Eragrostis curvula*) African lovegrass is a densely tufted, perennial (long-lived) grass growing from 30 to 120 cm high. The leaves are dark green to blue-green, narrow, and 25 to 35 cm long. The flowering stems rise above the tufted leaves and carry a loose fanlike grey-green flowerhead. African lovegrass prefers disturbed soils on roadsides, riverbanks, and waste places, from which it can invade adjacent degraded pastures and native grasslands. African lovegrass is generally unpalatable, produces copious seed, and can rapidly spread over and dominate degraded pastures.

African lovegrass was not recorded on the recent survey conducted for this weed management plan however, it has been identified within the municipality and it is a Zone A weed for Brighton, requiring early detection and control. It is important that African lovegrass does not establish itself within Brighton municipality. **Declared – WONS**

Blackberry (*Rubus fruticosus*) are spiny, perennial (long-lived) shrubs with trailing stems which can produce dense thickets. The canes may be erect, arching or trailing and they can reach 6 m in length. Blackberries thickets can reach two or more meters in height and cover many square meters in area. Blackberries were noted in most drainage/creek areas within the Brighton municipality. Declared - WONS



Image: Blackberry, Derwent Catchment Project 2022

Boneseed (Chrysanthemoides monilifera) It is a perennial



Image: Boneseed, Derwent Catchment Project 2022

evergreen shrub, which can grow up to three metres in height and width. It has woody branched stems and oval shaped leaves, with irregularly serrated edges with bright yellow flowers with 5 to 8 petals. Its success is due to its vigorous growth, aided by an absence of natural predators, and the ability to regenerate quickly and outcompete other species, especially after soil disturbance or fire. It is common on roadsides and quarries where mechanical disturbance has occurred.

Boneseed was recorded in high numbers across most of the municipality usually growing with African boxthorn along fence lines, roads, and

within people's properties. It was also in large

numbers along the Derwent River foreshore competing against native plants. Declared - WONS

Blue periwinkle (*Vinca major*) has broad-leaved runners that form a dense mat, shading out native plants and competing for moisture and nutrients. Its growth is particularly vigorous in riparian and other moist habitats. It competes with native plants for moisture, light, nutrients and recruitment niches.

Once established, periwinkle's rampant growth is very difficult to control, especially in bushland. Blue periwinkle is native to the Mediterranean region. It is widespread in Tasmania but does not extend into the alpine zones.

Blue periwinkle spreads by means of creeping stems that take root at the nodes and tips. New infestations can establish from plant fragments when broken off and



Image Blue periwinkle is difficult to control. Stem fragments take root in the soil. Derwent Catchment Project 2022

transported by dumping of garden waste, soil movement or floods and mowing. It spreads from gardens, roadsides, nature strips, firebreaks, fence lines and neglected rubbish dumps into the bush and along waterways. Although Blue periwinkle is a non-declared weed and has limited distribution currently it has the potential to takeover although damp areas if it continues to be transported around by roadside slashing. An educational campaign for private contractors about good hygiene practices would help reduce its spread. Blue periwinkle can be toxic if eaten.



Image: Chilean needle grass, DNRE 2022

Chilean needle grass (Nassella neesiana) is a perennial (longlived) tussock-forming grass growing to 1 metre in height. The leaves are 1 to 5 mm wide, flat and strongly ribbed on their upper surface, with leaf edges that are rough to touch. The flowering seed heads are a distinctive purplish colour, and the seeds are very sharp at the point. Chilean needle grass flowers mainly from September to December but can flower year-round. Seed is formed about one month after flowering and most seed has been dropped by February. Seeds mainly germinate in autumn and spring. Spread is by seed. In addition to the normal flower (panicle) seeds, Chilean needle grass produces hidden seeds which are formed in the nodes and bases of the flowering stems. These 'stem seeds' are self-fertilised and account for about onequarter of total seed production. They enable the plant to survive despite grazing, slashing and fire. Chilean needle grass seeds can persist in the soil for many years even if further seed input is prevented. The seeds are spread by farm machinery, clothing or livestock, by roadside mowing and earthmoving equipment, and

by floodwaters. No new sightings were made during the recent survey conducted for this weed management plan however, it is important that known sites are monitored and

controlled as required. Declared - WONS



Image: Foxglove, Derwent Catchment Project 2022

Foxglove (*Digitalis purperea*) is a biennial herb with a rosette of soft, blue-grey hairy leaves that produces a tall flower spike of white, pink or purple tubular flowers with dark mottling. It can be dispersed by wind, water, and soil because it has very small seeds. It invades wet forests, riparian and alpine areas, where it replaces native herbs. Extremely toxic to livestock and humans. It has a widespread distribution due to its popularity as a garden plant. It is typically mostly seen along roadsides and rivers in the mountains, and it can invade and become dominant. It is also difficult to control due to its toxic nature and persistence.

The main distribution of Foxglove was in the foothills of Mount Dromedary which has the perfect conditions for the Foxglove to become heavily infested.

Apparently a resident has been potting up foxglove and planting it around their yard to deter wallabies.

As Foxglove is not a declared weed, this situation must be handled in a sensitive way to ensure there are no long-term disputes. An educational program explain how and why Foxglove is a problem along with helping residents with selecting and planting natives to avoid wallaby grazing.



Image: Fennel, Derwent Catchment Project 2022

Fennel (Foeniculum vulgare), Fennel is a significant weed of open, exposed sites like roadsides, railways, wastelands, channels and drains which receive abundant water or runoff. Fennel is also grown as a commercial crop in Tasmania. Fennel is a declared weed in Tasmania under the Tasmanian Weed Management Act 1999. It was identified around most of Brighton municipality however, the largest infestations were along the Derwent estuary and within the industrial zone. It is important to control Fennel as its unusual chemical properties means that it not only outcompetes natives for space, but it can make the area chemical unsuitable. Declared

Horehound

(Marrubium vulgare) was only located from a couple of surveyed sites although data from Natural Values Atlas indicates that is spread more widely than this survey noted. Horehound is weed of pasture and crops and is particularly troublesome in the Midlands grazing areas. Managing its creep into the municipality will require constant monitoring and management. Declared





Image: Gorse, Derwent Catchment Project 2022

Gorse (*Ulex europaeus*) Gorse is a prickly evergreem shrub which may grow to a 2022 height and diameter more than 3 metres. All the stems and leaves end in a sharp spine. Gorse flowers are bright yellow pea-like flowers and are borne all over the plant. The buds develop during February and March, although flowering tends to occur in spring and autumn. Gorse bears large quantities of brown to black seed in

grey, hairy pods. Gorse can quickly dominant agricultural and natural landscapes.

Gorse was only recorded in a few locations around the municipality however, it was noted as being mowed/slashed in some instances. The presence of mown/slashed Gorse means there is a high chance there are seeds in the ground and that seeds may been transported around roadsides. Gorse seeds can stay dominant in the environment for long periods and treated sites need follow up treatment and monitoring. Declared – WONS



Image: Paterson's curse

Paterson's curse (*Echium plantagineum*) occurs across Tasmanian agricultural areas as small, scattered infestations. It is a significant pasture weed. Paterson's curse is an erect plant around 60 to 90 cm high. Seedlings appear in autumn and develop into a rosette (a flat whorl of leaves close to the ground) in winter. One or several flowering stems are produced in late winter and flowering occurs in spring. Flowers are trumpet shaped and usually blue/purple but may be pink or white (DPIPWE 2016).

It is toxic to stock where is becomes dominant in pasture and when it is in flower. It can heavily invade disturbed areas becoming pervasive in degraded pasture. It is difficult to control with herbicide and opportunistic grazing

before flowering can be an important tool for control. It is typically spread by machinery, livestock and livestock feed. There are historic sites which have received treatment in the industrial zone and along the Jordan River walking tracks. The recent survey showed that Paterson's curse is still at these locations and returning to its original size. **Declared**

Serrated Tussock (Nassella trichotoma) Serrated tussock is a perennial (long-lived) tussock-forming grass with a deep root system. The leaves of serrated tussock feel rough (or serrated) if the finger and thumb are drawn down the blade. Flower stalks usually appear in spring but may appear earlier in dry years and later in wetter years.

A tussock in full flower presents a distinctly purple appearance due to the large number of purple florets. Serrated tussock is similar to several of Tasmania's native tussock grasses, and is frequently overlooked until it begins to flower, at which time it is easily recognisable. No new sightings were made during the recent survey conducted for this weed management plan however, it is important that known sites are monitored and controlled as required. Declared - WONS



Image: Serrated tussock, Derwent Catchment Project 2022



Slender Thistle (*Carduus pycnocephalus, C. tenuiflorus*) is a spiny, erect herb that grows to between 60 cm and 100 cm high. Another species of slender thistle. Mature slender thistles are upright plants that may branch considerably or be un-branched. The stems have white cobwebby hairs while the flower heads form a cluster on the end of the stem. Slender thistles form a rosette, (a whorl of leaves close to the ground), during winter, and only produce a flowering stem during late spring. Flowering and seed production occur in early summer and the life cycle is usually completed by the end of the year. **Declared**

Image: Slender thistle, Derwent Catchment Project 2022

Sweet briar (*Rosa rubiginosa***)** is a member of the rose family. It forms a deciduous shrub 1 - 3 m high with stems carrying prickles and bristles. Suckering occurs freely from the crown, and bushes often exceed 1 m in diameter at the base. The leaves have five to seven oval leaflets, each with serrated edges. The light pink flowers have a pleasant fragrance, while the fruit (called hips) are bright red when ripe and often have bristles. It often occurs along fence lines and is some instances had been formed into a hedge along roads within Brighton municipality. Sweet briar is not a declared plant within Tasmania however, it has the potential to be an alternative host for fruit fly. This is especially important within the Brighton municipality for



Image: Sweet briar, Derwent Catchment Project, 2022

the horticultural crops that occur close to known infestations and hedges of sweet briar.



Whiteweed (*Cardaria draba*) is closely related to crop plants such as cabbages and rapeseed. It is an erect, herbaceous (non-woody) plant growing to 90 cm high with white, umbrella shaped flower heads which appear in October and November. Individual flowers are 4 mm in diameter with 4 white petals (DPIPWE 2016). White weed appears to be spreading in the Highlands, especially along roadsides in the Bothwell area.

Whiteweed is a significant weed of crops in Tasmania, reducing yields through competition with crop plants for moisture and nutrients. It is very difficult to control once it has become established in cropping paddocks. Whiteweed is also thought to taint the meat and milk of grazing animals (DPIPWE 2016). It was identified around all of the municipality and is likely being spread as part of the roadside slashing programs. Declared

Image: Sweet white weed, Derwent Catchment Project, 2022

Willow (Salix species) were recorded in most waterways and in some cases were becoming a monoculture. Willows have a drastic impact of river health and can cause localised flooding and erosion. Controlling willows can be difficult especially if there are large amounts of biological material which must be removed for safety concerns or for infrastructure protection. If control has happened or new examples are noted, it is important that new shoots are treated as Willows can quickly grow back in awkward shapes making follow up management more difficult and costly. Declared - WONS



Image: Willows, Derwent Catchment Project, 2022

Yellow burrweeds (*Amsinckia calycina***)** is an erect annual herb, which grows up to 70cm in height, with small yellow trumpet like flowers that develop in early spring, each plant can produce up to 1600 seeds. The burred seeds hook easily onto the coats of animals, which are then dispersed over large areas. It is often found in poorly managed pastures, roadsides and areas other areas where there has been soil disturbance.

Yellow Burrweed was only recorded in a few locations within the municipality however it has the potential to spread along roadsides. It is not often known by the public as a weed of concern and can go unnoticed. **Declared**

Appendix IV Plants of Brighton



Brighton

Plant Species List



This plant species list is a sample of species that occur in your municipality and are relatively easy to grow or to purchase from a native plant nursery.

Some of the more common plants are listed, as well as uncommon species that have a limited distribution and only occur in your area.

However, many more species could be included on the list. Observing your local bush is a good way to get an idea of what else may be grown in your area and is suited to your property. To help choose your plants, each species is scored against soil type, vegetation community and uses.

An extensive listing of suitable species can be found on the NRM South and Understorey Network websites.

Brighton Plant Species List

Standard Name Common Name Coastal Vegetation
Rainforest
Wet Eucalypt Forest
Dry Eucalypt Forest and Woodand
Grassy Vegetation
Heath
Sedgeland and Wetland
Riparian
Montane Vegetation
Well drained soil
Ponry drained soil
Clay soil
Clay soil

Fertle soil
Low fammability
Brosion control
Shefer belts
Bush tucker
Water Wise
Sainrity control
Easy to propagate fron

Grow from

				 _	_						_													
Acacia dealbata	silver wattle				•			*		•		•	•	•	•	•			•			•		
Acacia mearnsii	black wattle				•	•				•	•		•		•	•			•	•	•	•		
Acacia verticillata	prickly mimosa		•		•		•			•	•	•		•	•	•			•			•		
Allocasuarina littoralis	black sheoak		•							•		•	•		•				•		•	•		
Allocasuarina verticillata	drooping sheoak		•							•		•	•			•			•		•	•		
Banksia marginata	silver banksia		•							•		•		•										
Bursaria spinosa	prickly box									•		•	•			•		П			•	•		
Eucalyptus amygdalina	black peppermint	•	•			•	•			•		•	•	•							•			
Eucalyptus globulus	tasmanian blue gum			•	٠					•					٠									
Eucalyptus ovata	black gum		•	•	٠		•	٠		•	•	•	•		•	•						•		
Eucalyptus pulchella	white peppermint												•			•					•			
Eucalyptus viminalis	white gum	1		•													Ī							
Assais semistifulia	agranding wettle										-						_							
Acacia genistifolia	spreading wattle						•			•			•		•	•					٠	•		
	spreading wattle						•			•			•		•	•					•	•		
Acacia genistifolia Acacia gunnii Acacia myrtifolia	7-10-4				•									•										
Acacia gunnii	ploughshare wattle									•		•	•	•							•			
Acacia gunnii Acacia myrtifolia	ploughshare wattle		•				•			•		•	•	•							•	•		
Acacia gunnii Acacia myrtifolia Aotus ericoides	ploughshare wattle redstem wattle golden pea			•	•		•			•		•	•						•		•			
Acacia gunnii Acacia myrtifolia Aotus ericoides Cassinia aculeata	ploughshare wattle redstem wattle golden pea dollybush		•				•			•		•	•						•		•			
Acacia gunnii Acacia myrtifolia Aotus ericoides Cassinia aculeata Daviesia ulicifolia	ploughshare wattle redstem wattle golden pea dollybush native gorse						•	•				•				•			•		•			
Acacia gunnii Acacia myrtifolia Acacia myrtifolia Aotus ericoides Cassinia aculeata Daviesia ulicifolia Dillwynia cinerascens	ploughshare wattle redstem wattle golden pea dollybush native gorse grey parrotpea					•	•	•		•	•					•								
Acacia gunnii Acacia myrtifolia Acacia myrtifolia Aotus ericoides Cassinia aculeata Daviesia ulicifolia Dillwynia cinerascens Dodonaea viscosa	ploughshare wattle redstem wattle golden pea dollybush native gorse grey parrotpea hopbush			•			•	•		•	•	•	•	•									•	
Acacia gunnii Acacia myrtifolia Aotus ericoides Cassinia aculeata Daviesia ulicifolia Dillwynia cinerascens Dodonaea viscosa Goodenia ovata	ploughshare wattle redstem wattle golden pea dollybush native gorse grey parrotpea hopbush hop native-primrose	•	•	•		•	•					•	•	•					•					
Acacia gunnii Acacia myrtifolia Acacia myrtifolia Aotus ericoides Cassinia aculeata Daviesia ulicifolia Dillwynia cinerascens Dodonaea viscosa Goodenia ovata Hakea megadenia	ploughshare wattle redstem wattle golden pea dollybush native gorse grey parrotpea hopbush hop native-primrose autumn needlebush	•	•	•				•	•			•	•	•					•					
Acacia gunnii Acacia myrtifolia Acatia myrtifolia Acatia ericoides Cassinia aculeata Daviesia ulicifolia Dillwynia cinerascens Dodonaea viscosa Goodenia ovata Hakea megadenia Hibbertia serpyllifolia	ploughshare wattle redstem wattle golden pea dollybush native gorse grey parrotpea hopbush hop native-primrose autumn needlebush thyme guineaflower	•				•						•	•	•					•					

			Coastal Vegetation	Rainforest	Wet Eucalypt Forest	Dry Eucalypt Forest and Woodland	Grassy Vegetation	Heath	Sedgeland and Welland	Riparian	Montane Vegetation	Well drained soil	Poorly drained soil	Sandy soil	Loamy soil	Clay soil	Poor soil	Fertile soil	Low fammablity	Erosion control	Shelter belts	Bush tucker	Water Wise	Salinity control	Easy to propagate from seed	Easy to propagate from cuttings	Fasy to propagate by division
Standard Name	Common Name	Endemic		Veg	eta	tior	ı C	om	mu	nity	у			Soi	1 T	ype					U	ses				Grow from	
Ozothamnus obcordatus	yellow everlastingbush					•																	•		•		
Ozothamnus scutellifolius	buttonleaf everlastingbush					•																			•		
Pomaderris elliptica	yellow dogwood					•																			•	٠	
Pultenaea daphnoides	heartleaf bushpea		•			•																			•		
Solanum laciniatum	kangaroo apple			•	٠				•	٠		•	•					•				•			•		
Herbs and Gi																											
Acaena novae-zelandiae	common buzzy	+					•	•	•		•	•	٠		•		•	•		•		-			•		•
Carpobrotus rossii Chrysocephalum apiculatum	native pigface common everlasting		•			•									•	•	•		•	•		•		•	•	•	
Convolvulus angustissimus	blushing bindweed						•					•													•	•	
Dichondra repens	kidneyweed					•	•					•		•	•	•									•		•
sotoma fluviatilis	swamp isotome								•				•							٠							•
Kennedia prostrata	running postman		•			٠								•	•		•	•		٠			•		•		
Ptilotus spathulatus	pussytails						•					•			•			•				I					
Grasses, Lilli	es, Sedges																										
Arthropodium milleflorum	pale vanilla-lily					•						•			•		•					•			•		
Austrodanthonia caespitosa	common wallaby-grass					•	٠					•			•	•	•			٠					•		
Carex appressa	tall sedge								•	٠															•		
Dianella revoluta	spreading flax-lily		•		٠	•		٠				•			•										•		
omandra longifolia	sagg					•	•	٠				•		•			•	•					•		•		
Poa labillardierei	tussock grass				٠			٠	٠	٠	*	•			•	•	•			٠			٠		•		•
Themeda triandra	kangaroo grass						•				٠	٠			•	٠				٠			•		•		
Climbers																											
Billardiera mutabilis	apple-berry		٠			•		•																			
		+																									

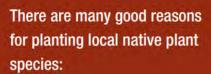
Note: However well intended, planting threatened species is potentially problematic. Due to risks of genetic contamination, limited availability of provenance plants and to discourage collection from native occurrences without a permit, threatened species were deliberately not included in these plant lists.

For more information contact:

NRM South 03 6208 6111 www.nrmsouth.org.au

or

The Understorey Network 03 6234 4286 www.understorey-network.org.au



Native plants occurring naturally in an area are adapted to survive and thrive in local environmental conditions, so you are more likely to have a successful planting site by choosing local species. By planting locally sourced species, you are helping to preserve any natural variability within that species. Planting local species also assists with providing habitat for birds, insects and mammals in your area.

Plants can be obtained from a native plant nursery or you may like to collect your own seed and to grow them yourself. The Understorey Network can assist you with advice on how to propagate native seeds. It's cheap (no hothouses or shadehouses are required) and surprisingly easy!











Illustrations: Janet Fenton Graphic Design: Julia Dineen Printed on 100% recycled paper.

Data sources: DPM (2007). Nathre Vascular Plant Records for Tasmania. Unpublished data provided on CD by Natural Values Alias 30/03/2007.

Appendix V Unanticipated Discovery Plan

Unanticipated Discovery Plan

Procedure for the management of unanticipated discoveries of Aboriginal relics in Tasmania

For the management of unanticipated discoveries of Aboriginal relics in accordance with the Aboriginal Heritage Act 1975 and the Coroners Act 1995. The Unanticipated Discovery Plan is in two sections.

Discovery of Aboriginal Relics other than Skeletal Material

Step I:

Any person who believes they have uncovered Aboriginal relics should notify all employees or contractors working in the immediate area that all earth disturbance works must cease immediately.

Step 2:

A temporary 'no-go' or buffer zone of at least 10m x 10m should be implemented to protect the suspected Aboriginal relics, where practicable. No unauthorised entry or works will be allowed within this 'no-go' zone until the suspected Aboriginal relics have been assessed by a consulting archaeologist, Aboriginal Heritage Officer or Aboriginal Heritage Tasmania staff member.

Step 3:

Contact Aboriginal Heritage Tasmania on 1300 487 045 as soon as possible and inform them of the discovery. Documentation of the find should be emailed to

aboriginal@dpac.tas.gov.au as soon as possible. Aboriginal Heritage Tasmania will then provide further advice in accordance with the Aboriginal Heritage Act 1975.

Discovery of Skeletal Material

Step I:

Call the Police immediately. Under no circumstances should the suspected skeletal material be touched or disturbed. The area should be managed as a crime scene. It is a criminal offence to interfere with a crime scene.

Step 2:

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

Step 3:

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

Step 4:

If it is suspected that the skeletal material is Aboriginal, Aboriginal Heritage Tasmania should be notified.

Step 5:

Should the skeletal material be determined to be Aboriginal, the Coroner will contact the Aboriginal organisation approved by the Attorney-General, as per the *Coroners Act 1995*.



Guide to Aboriginal site types

Stone Artefact Scatters

A stone artefact is any stone or rock fractured or modified by Aboriginal people to produce cutting, scraping or grinding implements. Stone artefacts are indicative of past Aboriginal living spaces, trade and movement throughout Tasmania. Aboriginal people used hornfels, chalcedony, spongelite, quartzite, chert and silcrete depending on stone quality and availability. Stone artefacts are typically recorded as being 'isolated' (single stone artefact) or as an 'artefact scatter' (multiple stone artefacts).

Shell Middens

Middens are distinct concentrations of discarded shell that have accumulated as a result of past Aboriginal camping and food processing activities. These sites are usually found near waterways and coastal areas, and range in size from large mounds to small scatters. Tasmanian Aboriginal middens commonly contain fragments of mature edible shellfish such as abalone, oyster, mussel, warrener and limpet, however they can also contain stone tools, animal bone and charcoal.

Rockshelters

An occupied rockshelter is a cave or overhang that contains evidence of past Aboriginal use and occupation, such as stone tools, middens and hearths, and in some cases, rock markings. Rockshelters are usually found in geological formations that are naturally prone to weathering, such as limestone, dolerite and sandstone

Ouarries

An Aboriginal quarry is a place where stone or ochre has been extracted from a natural source by Aboriginal people. Quarries can be recognised by evidence of human manipulation such as battering of an outcrop, stone fracturing debris or ochre pits left behind from processing the raw material. Stone and ochre quarries can vary in terms of size, quality and the frequency of use.

Rock Marking

Rock marking is the term used in Tasmania to define markings on rocks which are the result of Aboriginal practices. Rock markings come in two forms; engraving and painting. Engravings are made by removing the surface of a rock through pecking, abrading or grinding, whilst paintings are made by adding pigment or ochre to the surface of a rock.

Burials

Aboriginal burial sites are highly sensitive and may be found in a variety of places, including sand dunes, shell middens and rock shelters. Despite few records of pre-contact practices, cremation appears to have been more common than burial. Family members carried bones or ashes of recently deceased relatives. The Aboriginal community has fought long campaigns for the return of the remains of ancestral Aboriginal people.

Further information on Aboriginal Heritage is available from:

Aboriginal Heritage Tasmania Community Partnerships and Priorities Department of Premier and Cabinet GPO Box 123 Hobart TAS 7001

Telephone: 1300 487 045

Email: aboriginal@dpac.tas.gov.au

Web: www.aboriginalheritage.tas.gov.au

This publication may be of assistance to you but the State of Tasmania and its employees do not accept responsibility for the accuracy, completeness or relevance to the user's purpose, of the information and therefore disclaims all liability for any error lass or other consequence which may arise from relying on any information in this publication.

