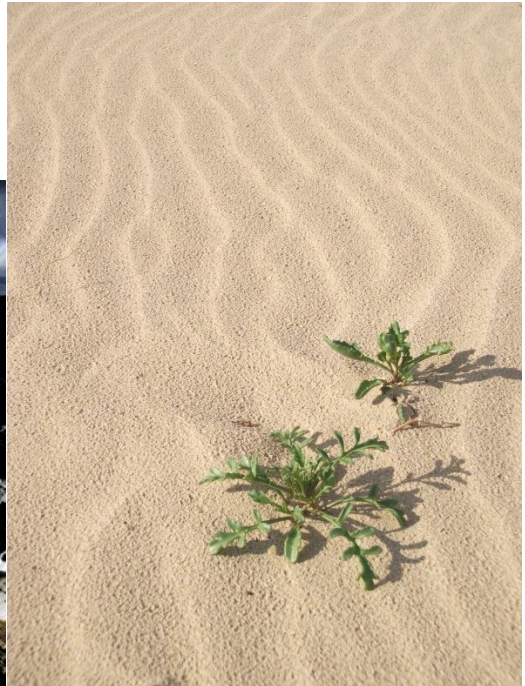


# BLESSINGTON COASTAL RESERVE

## RESERVE ACTIVITY PLAN 2013 – 2018



Prepared by Watershed Tasmania and Natural Resource Planning Pty Ltd for Clarence City Council

March 2013





*Suggested citation:*

Watershed Tasmania and Natural Resource Planning (2013). Blessington Coastal Reserve Reserve Activity Plan 2013-2018. Report for Clarence City Council, March 2013, Watershed Tasmania, Cygnet and Natural Resource Planning, Hobart.

*Produced by:*

Natural Resource Planning Pty Ltd

ACN: 130 109 250

PO Box 4530 Bathurst Street

Hobart, TASMANIA, 7000.

Australia.

[www.naturalresourceplanning.com.au](http://www.naturalresourceplanning.com.au)

Watershed Tasmania

PO Box 381

Cygnet, TASMANIA, 7112.

Australia.

E: [alan@watershedtas.com.au](mailto:alan@watershedtas.com.au)

Mob: 0448 039110



© Natural Resource Planning Pty Ltd & Watershed Tasmania, 2013.

This work is protected under Australian copyright law. The document is intended for general circulation within the community for the purposes of managing the Blessington Coastal Reserve. Commercial use of the contents and format of this report and the intellectual property therein is prohibited except as provided for by the service contract between Natural Resource Planning and Clarence City Council.

Natural Resource Planning is an ethically based company specialising in the science and practice of natural resource management. Watershed Tasmania is a strategic partner of NRP specialising in land management and community engagement.

The businesses encourage understanding, uptake and use of their products and services. Potential users should use the contact details above.

## Contents

1	BACKGROUND.....	1
2	OBJECTIVES.....	2
3	SITE DESCRIPTION .....	2
4	SITE VALUES.....	5
5	STAKEHOLDER CONSULTATION .....	8
6	WEED MANAGEMENT .....	9
7	REGENERATION AND REVEGETATION.....	11
8	RESERVE ENTRANCES.....	11
9	WALKING TRACKS .....	14
10	INFRASTRUCTURE .....	16
11	CLIMATE CHANGE .....	17
12	OTHER MANAGEMENT ACTIVITIES .....	18
13	COMMUNITY PARTICIPATION AND AWARENESS .....	18
14	IMPLEMENTATION PLAN .....	19
15	FUTURE PRIORITIES.....	27
16	REFERENCES.....	28
	APPENDIX 1. CLARENCE CITY BUSHLAND AND COASTAL STRATEGIC PLANNING FRAMEWORK. ....	29
	APPENDIX 2. VEGETATION OF THE BLESSINGTON COASTAL RESERVE. ....	30
	APPENDIX 3: SUMMARY OF STAKEHOLDER CONSULTATION .....	33
	APPENDIX 4: WEED SPECIES PRESENT AND RECOMMENDED CONTROL TECHNIQUES .....	34
	APPENDIX 5: LOCATION OF WEED SPECIES.....	37
	APPENDIX 6: LOCAL NATIVE SPECIES SUITABLE FOR REVEGETATION AND LANDSCAPING WORK .....	37
	APPENDIX 7. ENTRANCE ENHANCEMENT DIAGRAMS. ....	41
	APPENDIX 8: SUMMARY OF MANAGEMENT RECOMMENDATIONS .....	43
	Appendix 9. REPORT CARD FOR BLESSINGTON RESERVE.....	46
	Appendix 10. FUNDING ESTIMATES FOR BLESSINGTON RESERVE ACTIVITY PLAN 2013-18.....	47



# 1 BACKGROUND

Clarence City Council (the Council) owns and manages a diverse range of natural areas across the city area. Blessington Coastal Reserve is part of the natural area network, contributing recreational amenity for residents and the broader Tasmanian community. The reserve also makes an important contribution to the protection of natural assets of local and significance. In recognition of the vital role of natural areas, Council has developed a city wide framework for its approach to protecting, enhancing and managing natural assets - the Clarence Bushland and Coastal Strategy (Watershed Tasmania, 2011). The Strategy recognises the role that each reserve plays as part of the network and a key priority action is the preparation and implementation of a Reserve Activity Plan (RAP) for each reserve. Blessington has been selected as a priority area for the development of a RAP. Appendix 1 illustrates the role of the RAP within the Strategic Framework of the Clarence Bushland and Coastal Strategy.

Blessington Reserve (see Figure 1) has a diversity of natural and recreational values that will benefit from enhanced management, particularly its role as a highly valued neighbourhood asset for walking and locally significant site for protecting cultural heritage and native wildlife. The RAP is designed to be the primary source of information and guidance on the reserve and to detail the values, issues and actions necessary to ensure the Blessington Coastal Reserve continues to be a valued community asset.

Watershed Tasmania was engaged to facilitate the development of the Blessington RAP including the active involvement of the community.

The recommendations contained within this document are intended to provide guidance for on-ground activities that can be implemented by Council. In many cases implementation will be in collaboration with the local residents and landcare and coastcare groups (including South Arm Coastcare group and South Arm Progress Association). Implementation of the recommended actions will be subject to available funding and associated resources.

It is important to acknowledge that there are many individuals and community groups that have for many years taken pride in and played a key role in caring for Blessington Reserve. Council will need to maintain positive collaboration with the community to ensure the recommendations are successfully delivered.

***'I am blessed to be able to live in beautiful South Arm and anything that is going to add to its beauty is a real bonus***

(Kaye Stansfield – local resident).

## 2 OBJECTIVES

The objectives of the Blessington Street Coastal Reserve Activity Plan are to:

- Ensure the reserve is sustainably managed to preserve and enhance its natural, cultural and social values;
- Identify priority management activities to be undertaken within the reserve by Council and/or volunteer groups as resources become available during the period 2013-2018; and
- Encourage community engagement through raising awareness of the reserve's values and encourage participation in activities to minimise threats to these values.

The most important outcome of the RAP will be a prioritised and costed 5 year activity schedule endorsed by Council. This will be based on priority management actions drawn from assessment of the natural, recreational, social and cultural aspects of the reserve along with detailed community consultation with key stakeholders and the community in general.

In developing the priority actions a key focus has been open, transparent engagement with local residents and the community, particularly local groups. The community has a valuable understanding of the reserve and will assist to define the priority issues and actions. This will ultimately enhance the environmental health of the reserve as well as recreation and visitor use opportunities.

## 3 SITE DESCRIPTION

Blessington Coastal Reserve is a narrow sinuous reserve of approximately 5 ha, bounded by the foreshore of the Derwent Estuary and Blessington Street, which in turn fringes the a small urban area of South Arm, (see Figure 1.). The reserve is a winding coastal strip of land composed of cliff tops, cliff faces and foreshores. An unconnected set of short trails exist along its length, separated by areas of steeper grade. The local community actively uses the walking trails and associated beaches. There are several points of entry including a primary entry at 169 Blessington Street which has limited car parking and a playground (see Figure 1. Locality Plan).

The area is predominantly disturbed native vegetation with some small patches of cleared land adjacent to private residences. The southern end of the Opossum Bay Marine Conservation Area is contiguous, immediately adjacent offshore from the Reserve.



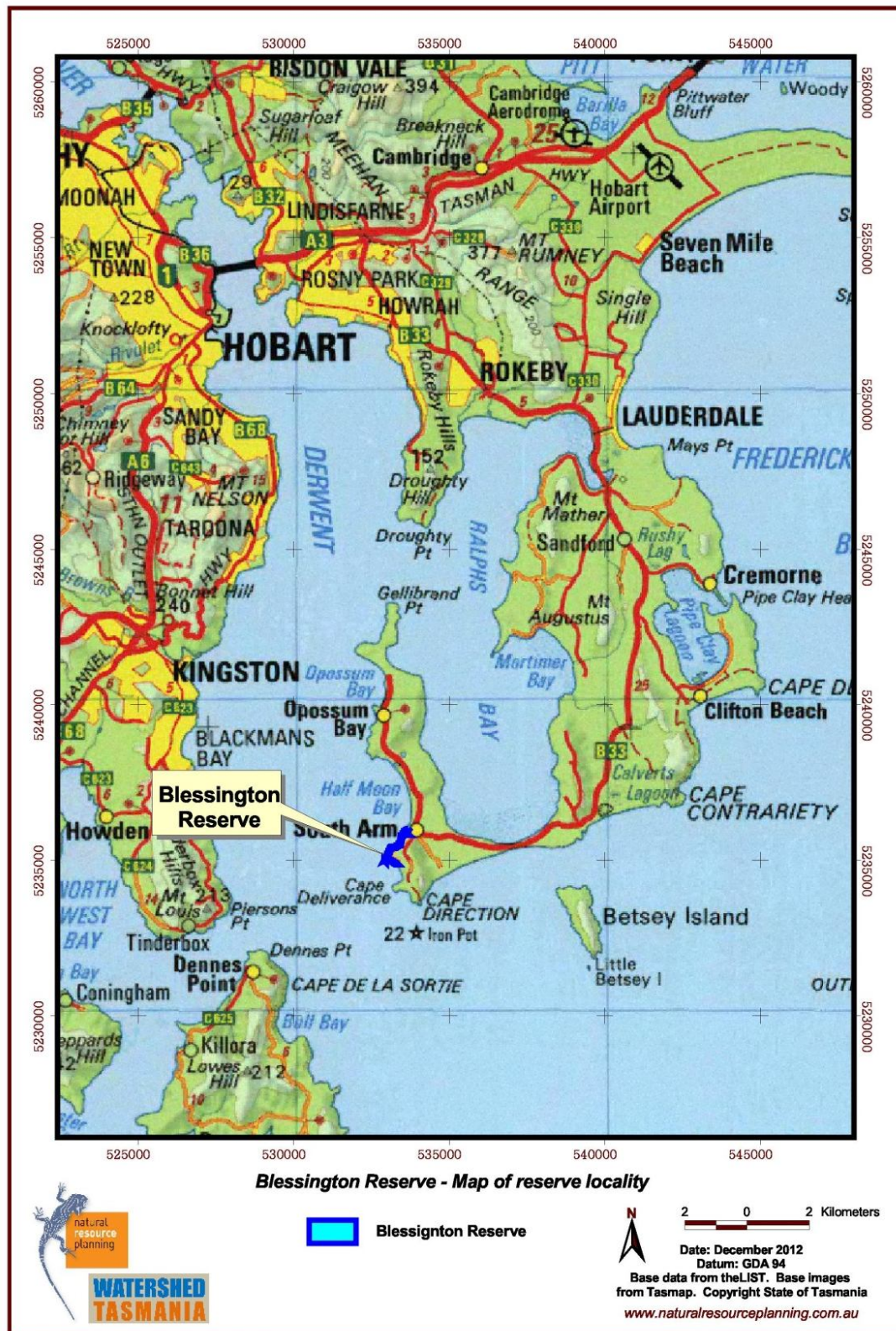


Figure 1. Blessington Street Coastal Reserve Locality Plan.





**Figure 2.      Playground 169 Blessington St with a key beach access point in the background**

## 4 SITE VALUES

The key values that have been identified by the community or through analysis of natural and recreational resource information are:

- The vegetation is mainly Coastal Woodlands dominated by sheoaks (*Allocasuarina verticillata*), which contributes to sense of place, provides a shelter belt and protection from onshore winds and a cool shady retreat during hot weather;
- The landforms are low sea cliffs and sandy beaches. The cliffs are composed of sedimentary rocks that resist erosion by waves, providing views for visitors and residents. The beaches have only gentle swells and are a magnet for local families and beach combers (See Figure 3.);
- The reserve provides a valuable recreational area for locals, with the predominant use being walking, in many instances with pet dogs;
- Cherished wildlife benefits from the habitat, likely to include the threatened eastern barred bandicoot; and
- A key role in providing a resilient frontage to the Derwent Estuary. The resistant cliff areas will assist in absorbing the potential impacts of climate change and associated sea level rise whilst the adjacent soft sandy beaches will retreat as a result of storm surges
- Providing an excellent outdoor laboratory for nearby local primary School for investigating flora and fauna, particularly at the seashore, in rock pools and along beaches.



**Figure 3. View looking along beach in the middle part of the Reserve.**

## 4.1 Native flora, fauna and animal management

The area is well regarded by the local community for its natural values. . The reserve contains important habitat for a diversity of locally valued native wildlife, echidnas, skinks and a diversity of common bird species. A search of the Natural Values Atlas (DPIPWE, 2012) indicates that there are no native species, flora or fauna, of significance present within the reserve or nearby. However, Temby (2005) and Watson (Pers. Comm.) have indicated that the hairy new holland daisy (*Vittadinia muelleri*) is present in the reserve. The species is listed as Rare under the *Tasmanian Threatened Species Protection Act 1995*. The nature of the habitat present means it is also likely to support eastern barred bandicoots (*Perameles gunnii*), which has been observed in the area by residents. Tasmania is the stronghold for this species, which is now almost extinct on mainland Australia and is listed as Vulnerable under the *Commonwealth Environment Protection and Biodiversity Conservation Act 1999*. The species range in Tasmania has contracted over recent decades, with threats arising from local habitat destruction and predation by introduced predators such as cats and foxes. It is suspected that when the vegetation was intact and included blue gums as emergent trees, that swift parrots would have utilised the area for foraging habitat.

Local residents have recorded a diversity of birdlife including; striated pardalote; currawong, new holland honey eaters, grey fantails, welcome swallows, superb fairy wrens, green rosella , noisy minors, wattle birds, magpie, yellow-tailed black cockatoo, galah, striated and forty spotted pardalotes, kookaburra, white faced heron, masked plover, short tailed shearwater and pied oyster catcher. In addition, there are several feral bird species present, blackbirds, sparrows and starlings.

### Bushfire Management

The presence of the weeping sheoak indicates that fire has not been a regular occurrence in the area. The age of the sheoaks and the absence of successful regeneration of eucalypts is an indication that it is some time (perhaps over 30 years) since a major fire has occurred. Council has had the area assessed for fire risk and considers that the use of a buffer along the property boundary will be sufficient to avoid significant bushfires. It will be essential to encourage neighbours to manage their fuel loads and Clarence City Council to complement this by maintaining a fuel reduction zone along property boundaries, while still maintaining local species diversity and habitat in the reserve.

**Recommendation 1: Construct a 3 metre wide firebreak and wildfire fire response access along all property boundaries that adjoin the reserve.**



## **Pet cats and dogs and feral animals**

The local community includes many pet cat and dog owners. There is a risk that both types of pets, if uncontrolled, and feral cats and dogs will threaten native animals. Of particular risk are the eastern barred bandicoots and other ground dwelling native animals.

The Cat Management Act (2011) provides additional council powers to add to existing animal management regulations and strong direction on how Cat owners need to manage their pets. Clarence City Council endorses the Act and fully supports pet owners to neuter and tag their pets in combination with keeping their pets inside their properties and particularly keeping them inside at night.

**Recommendation 2: That council encourage neighbours to manage pet cats and dogs on their properties to protect the fauna in the reserve from predation.**

**Recommendation 3: Council initiate a program of regular standardised bird surveys of the reserve using the Birdlife Tasmania bird survey methodology.**

## **4.2 Geomorphology and geoconservation**

The geomorphology of the reserve has been mapped by Sharples and Mowling (2006) as part of a larger project covering south east Tasmania. The coast has been classified by its geomorphological significance and sensitivity to human disturbances. The beaches and associated dunes in and adjoining the reserve have been classified as of moderate priority for their geoconservation values. They are considered to be of moderate sensitivity, indicating that disturbance may significantly degrade some but not all elements of the coast.

The rocky shoreline of the reserve has been classified as of moderate to low geoconservation priority for their geoconservation values. They are considered to be of moderate sensitivity, with human disturbance capable of causing some modification of natural landforms and landform processes over small areas. There is a Geoconservation site of local significance in the vicinity of the South Arm Boat Ramp. It is an example of Permian Burrow Casts, a fossilised imprint of the activity of ancient sea life. The site is a sea cliff exposure and is reasonably robust.

The beaches and associated dunes are composed of soft coastal sediments. These are likely to be susceptible to significant change under sea level rise, including beach erosion and inland retreat of the shoreline and fore dune. The rocky areas have some robustness to sea level rise. However they are in some cases composed of soft marine sediments which may be susceptible to undercutting and collapse under higher sea levels.

## **4.3 Cultural heritage**

The Mumirimina band, (considered by some as part of the 'Oyster Bay' tribe) lived in the broader area that includes the reserve (Ryan, 2012). Their connection with the coastal landscape is known to have been strong and rich. The area remains a fishing spot for many locals today. The Mumirimina people's connection with the landscape was dramatically affected by British colonisation and by 1830 significantly diminished (TAC, 2010). Aboriginal Heritage Tasmania has registered sites located within

the reserve. This does not mean that there are not further sites yet to be discovered (Karen McFadden, pers. com.).

Under the Tasmanian Aboriginal Relics Act 1975 (The Aboriginal Relics Act), it is an offence to 'destroy' damage, disfigure, conceal, expose, excavate or otherwise interfere with a relic' unless a permit has been granted. It is therefore important to ensure that no artefacts or other cultural material are exposed or disturbed without a permit during reserve management activities. Any artefacts that are inadvertently uncovered will be immediately reported to Aboriginal Heritage Tasmania and an Aboriginal Heritage Officer engaged to assess the area prior to any further on ground work occurring. Aboriginal Heritage Tasmania (AHT) has prepared an Unanticipated Discovery Plan (AHT, 2011) for aboriginal sites to assist in applying the correct approach in the event that any material culture, including any human remains, is discovered.

#### **4.4 Recreational values**

The key recreational values of the reserve are:

- Walking, beach combing;
- Swimming;
- Beach and rock fishing; and
- Nature appreciation

The reserve plays a very important role in meeting recreational needs of the local community and the greater area as a whole.

#### **4.5 Education values**

The education values of the area are not utilised at this stage, however the site lends itself to short school excursions focussed on providing a rocky seashore learning experience.

### **5 STAKEHOLDER CONSULTATION**

The RAP has been developed with active consultation with the local community and key community organisations with an interest in the reserve. A public meeting (a 'Walk and Talk') was conducted by Council and Watershed Tasmania on 4th August, 2012. The aim of the meeting was to gain input from stakeholders regarding the values and issues relating to the site. Twenty two community members attended, with 12 also submitting written feedback based on a mail out to local residents. The issues raised are summarised in the Appendix 3. Responses from the community were considered throughout the development of the RAP. Where possible, all relevant community feedback has been considered in the development of the Blessington Reserve Activity Plan. However some issues identified during the consultation process are beyond the scope of this plan or pertain to issues



outside the reserve. These issues have been noted by Council and will be considered through other processes.

Council has worked closely with two key community groups with an interest in the area: South Arm Coastcare Group; and South Arm progress Association. Strong support was provided on the benefits of using the Report Card (Appendix 10) as an excellent means of communicating with the community.



**Figure 3. Local Community Walk and Talk at Blessington Street Coastal Reserve.**

## **6 WEED MANAGEMENT**

### **6.1 Weed species present**

A detailed weed management plan was prepared for the reserve Temby (2005). A number of significant weeds are present in key locations within the reserve (See Appendix 5). The majority of the site is essentially modified woodland dominated by Weeping She Oak (*Allocasuarina verticillata*) in which weeds are of a more scattered and localised distribution. However there are areas which have more serious infestations of weeds that should be a focus of weed management actions, particularly on the dune system along Fort Beach. The key weed species are Boneseed, African Boxthorn and Canary broom. All are Weeds of National Significance (WoNS) in an area that is a hot spot for its control and eradication. Council is very aware of the presence of the weeds. A list of weed species is provided in Appendix 4 with accompanying maps in Appendices 5.

## 6.2 Recommendation for primary weed control work

Invasive plants were the focus of the Weed Management Action Plan prepared by Temby (2005), which included a comprehensive set of management actions and a classification of the reserve into zones with similar weed management requirements. Council has endeavoured to tackle the priority actions within current resources. The primary weed control work should be focussed on declared weeds and other environmental weeds whose current distribution in Tasmania is limited. The sequence of work should be to protect the native vegetation patches first and the key points of entry to minimise further spread into and out of the reserve, before tackling the primary weeds on the balance of the property.

Controlling declared weeds whose distribution in the reserve is currently limited or can be controlled with a minimum of resources. These include Boneseed and African Box Thorn. A patch of Canary Broom exists and it is critical that it is tackled as a matter of urgency.

**Recommendation 4: A priority program for controlling the declared weeds Boneseed, African Boxthorn and Canary Broom.**

## 6.3 Non priority weed species

Once priority weed control actions have been successfully completed, there are several known non priority weed species (see Appendix 4 & 5). The key species are Cotoneaster, New Zealand Flax, Mirror Bush, Sydney Wattle, sweet pittosporum and Radiata pine. These have potential to dominate localised areas within the reserve.

**Recommendation 5: Following control of priority declared weeds, other weeds to be targeted.**

## 6.4 Maintenance of weed control work

Weeds will be a persistent future management issue for the reserve, due to a combination of germination of existing soil seed banks, re-sprouting and the continued risk of new infestations from both existing and new weed species. A long term commitment is required to ensure that any investment in weed control is cost effective and successful.

An annual program of weed control that addresses tasks in priority order is essential, particularly for primary weed control priorities. This should be undertaken during spring and summer to align with the active growing period of most weeds, making them most obvious during surveillance. Previously treated areas should be checked and new areas tackled. These should represent the next highest priority and be of a suitable size that can be accommodated into ongoing maintenance capacity.

**Recommendation 6: An annual survey and follow up of control of all targeted weeds to be undertaken during spring/summer.**

Mapping the presence and density of weeds is important for assisting in determining management priorities and as a record of treatment work undertaken and the level of success for otherwise.

**Recommendation 7: Spatially accurate weed mapping to be conducted at least on a five yearly basis to monitor progress and inform future weed management prioritisation. Information should be captured using standardised approach and the data submitted to the State Government to assist in broader scale weed management knowledge.**

There is potential for weed control in some areas of the reserve to destabilise sand dunes and lead to accelerated erosion. In undertaking weed control and eradication works it will be necessary to consider the risks to other aspects of the reserve environment and, where needed, to either supplement control with rehabilitation of native vegetation. In some cases it may be appropriate to limit the spread of weed infestations without an intention for their eradication in order to protect sensitive areas.

## **7 REGENERATION AND REVEGETATION**

The native vegetation of the site is altered, both in terms of its canopy and understorey species composition and structure. As the reserve is very narrow and steep in places, efforts to enhance the native vegetation may be both costly and ultimately futile. The opportunity exists to work with neighbours on both the selective planting of some individual canopy tree species with a stronger focus on diversifying the understorey species of the area. The most important action is to enhance natural regeneration by conserving and enhancing groundcovers composed of native grasses and sedges (understorey). This will help improve soil health to increase the mycorrhizal association which is the fundamental requirement for the health of sheoaks. It would be beneficial to encourage neighbours to also maintain mulch and native grasses/ sedges rather than exotic lawns.

The reintroduction of a sparse distribution of canopy trees (Bleu Gums and White Gums) would be of benefit for increasing the diversity of the habitat, particularly the capacity of the area to provide foraging habitat for Swift parrot.

**Recommendation 8: Initiate annual strategic plantings of Blue Gums to recreate an emergent canopy of trees that provide foraging habitat for Swift parrots where possible including White Gums.**

## **8 RESERVE ENTRANCES**

The reserve has 7 entry points, an example of a key entrance is Figure 2. There are two primary entries, one at each end, and several minor entry points along Blessington Street via a series of narrow laneways between individual residences. A key issue raised was the lack of clarity regarding access at the northern end near the adjacent jetty facilities, (See Figure 5). Several residents in the vicinity expressed their concerns with reserve users, mistaking their Service Access road (Slip-road) as also being for general public vehicular access and parking for entering the reserve. This shared entry is in disrepair and of a low standard of construction. There is considerable room for improvement in the standard of entry, particularly in terms of the road surfaces, defining shared and restricted use provisions and signage.



**Figure 5. The entrance to Blessington St at the northern, Jetty Rd end.**

A summary of the issues surrounding the use of these entrances is provided in Table 5.

**Table 5:** Management activities required for reserve entrances

Issue	Description	Recommendation
Signage	Inconsistent signage to identify reserve and reserve boundaries	Install reserve signs that are consistently themed and informative. This should include interpretive signs that promote the values of the reserve including the foreshore and rugged cliffs. Generations of people have participated in the heritage of the area and this should be reflected in the signage and planting. There is an existing public car park and toilet facility at the Jetty Road end of the reserve that needs to be better signed to inform reserve users that this is the location for parking and how to then enter by foot the reserve. Good examples of signage are found at Rosny-Montague Bay and SMB Reserves.
Track Condition	Some entrances are overgrown and narrow	Upgrade entrances to suitable design standards. The slip-road (Service Access Road) at the Jetty Road end of the reserve needs to be enhanced to improve the accessibility for private residences in that vicinity and to also allow for shared use by walkers entering the reserve (through some form of roadway marking and signage) .
Visual Amenity	The visual amenity is degraded	Improve the visual amenity of entrances through localised landscaping.
Encouragement of park users.	There is either poorly signed or limited formal parking near entrances The 169 Blessington Rd entry point has the potential to offer a small (say 2-3 bay) formal car parking area that would encourage greater use.	Develop a formal parking area at the 169 Blessington St entrances Enhance the secondary entry points at other existing minor entrance points along Blessington St (e.g. between ? and ? Blessington St and support this with the installation of signage that encourages visitors.
Naming confusion for St John's Beach	Members of the community expressed the view that the proper name for this beach should be Spring Beach.	Change the name back to Spring Beach via consultation between community and Clarence City Council and a formal submission to the Nomenclature Board

**Recommendation 9: Installations of signs (including tall Beach Access Point marker poles), improve Slip road Service Access road standard, improving amenity and developing thematic names for 2 major entrances (Jetty Road and 169 Blessington St). See Appendix 7.**





**Figure 6. Image of an example modern beach access steps (Bellerive Beach), note that a single steps option would be installed at Blessington.**

## **9 WALKING TRACKS**

There are several disconnected sections of walking track that run along above the cliff lines of the narrow reserve (see Map 2), which are for walking, (some minor bike riding). Council has, in recent years, undertaken considerable work to improve the existing track network. This has involved a combination of, removal of hazardous overhanging tree branches, closure of illegal unsanctioned beach access tracks, relocation of track for safety purposes, construction of high standard concrete step systems and stabilisation of cliff faces. However, the current condition of some sections of the tracks is deteriorating and this has implications for the safety and amenity. The key management issues identified with walking tracks are summarised in Table 6 below. Clarence City Council considers public safety and provision of safe beach access as a priority.

Stepped access to the beaches is an important part of ensuring safe access within the reserve. These steps need to meet Australian Standards. The access to Fort Beach lacks the necessary steps to

provide for safe access and to stop erosion of the dune system. Upgrading these accesses is a priority for the reserve.

A number of community members have expressed the desire to see the track network made continuous. This is consistent with the broader plan for the completion of the Clarence Foreshore Trail as part of the Clarence Tracks and Trails Strategy (<http://www.ccc.tas.gov.au/page.aspx?u=963>).

There is a diversity of views, interests and potential safety issues with the development of a continuous track through Blessington Coastal Reserve, although none that are considered insurmountable. Investigations for a continuous track would require detailed discussion and consideration of the environment, technical and social aspects. This is required to confirm the most feasible approach that meets local needs and allay concerns of those who prefer that the tracks remain unconnected or are not confident that maintenance of any new track sections will be adequate.

It is important to note that any track and car park upgrade includes addressing the issue of inappropriate public use of private access road in the vicinity of Jetty Rd. It would be beneficial to develop a solution that clarifies the different access provisions and ensures the quiet enjoyment of neighbours.

**Table 6: Track management Issues identified within the reserve.**

Description	Recommendation
Tracks do not meet Australian standards	Audit the existing tracks and upgrade to Class 2 or Class 3 track where appropriate.
Dead tree limbs overhanging the track	Maintenance of vegetation adjacent to and overhanging walking tracks
Debris on the track making it hard to traverse	Maintenance of track to remove unsafe debris.
None or inadequate signage	Directional signage to be installed at track intersections and interpretive signage to be installed at relevant sites within Blessington

**Recommendation 10: Undertake an assessment of the existing walking tracks against appropriate track standards and guidelines. Upgrade and maintain tracks using Best Management Practice in accord with the Australian Standards.**

**Recommendation 11: Engage a track planning consultant to undertake careful design of a linkage track through the reserve. This is anticipated to involve:**

**a. assessment of track alignment options;**

- b. design to cater for local community use, class 3, with the potential provision in the next review period of the RAP to upgrade it to class 2 depending on demand and usage levels at that time.
- c. factor in to the track design the separate recommendation (No. 1) for a 3 metre wide firebreak and wildfire fire response access along all property boundaries. This proposed fire-break along the rear of all properties boundaries would be advantaged by a Class 3 track. The Track Planning Consultant will need to specifically consider the benefit of having a separate walking track alignment in this narrow Coastal reserve.
- d. explore design options at the northern end to align the track to reduce the visual impacts of reserve users walking near their boundary, including the option of directing some of the trail onto the rocky foreshore, provide it does not impact on accessibility for the older and less able walker.
- e. once design is drafted, the track plan will be released for extensive local community consultation and subsequent Council review.

**Recommendation 12:** That the issue of private versus public access for residences at the Jetty Rd end, be resolved by defining a walking/biking route between the existing carpark to the entrance to the reserve and delineating this as adjacent but separate track, from the associated Sliproad. The Sliproad needs to have an annual road maintenance schedule and provide signage.

## **10 INFRASTRUCTURE**

The main focus of other infrastructure development is the benefits, for many less active walkers, of seating at regular intervals that allow for opportunities to rest and enjoy the spectacular views across the Derwent Estuary. The provision of seating and observation points needs to be supported by adequate shading, to maximise use of the facilities all year round. Seating should be of a type that is robust enough to withstand the potential impacts of vandalism and be of a colour that blends into the environment.

**Recommendation 13:** New outdoor seats of suitable design and materials to be installed at key locations in the Reserve.

Whilst not seen as a large number, some residents also delight in walking their dogs. The risk of site pollution and loss of amenity from dog faeces would be best managed by considering suitable waste facilities being installed and maintained.

**Recommendation 14:** Dogs to be under effective control for wildlife protection and courtesy of others and waste dispensers and bins should be installed at all main entrances to the reserve.

There are public toilet facilities adjacent to the Jetty Rd entrance to the reserve. There was a diversity of views regarding the option of installing an additional public toilet at the far end of the reserve near the playground and whether it would be of benefit to the reserve users and not a concern for neighbouring residents.

**Recommendation 15: Undertake a feasibility study to confirm whether a public toilet (dry composting) should be installed to cater for reserve users, particularly walkers, at the entrance at the South eastern end of the reserve, adjacent to the playground and in conjunction with an upgraded entry point.**

There have been instances of encroachment of vegetation clearing from private properties and installation of private structures on reserve land. Whilst not a major issue, at this stage, the risk is that in the absence of being informed of good neighbour responsibilities that inappropriate encroachments will continue to degrade the reserve. There are also potential legal issues where injury or harm to reserve users arises through use of unauthorised structures.

In addressing these issues it will be important to include encouragement of neighbours to manage their fuel loads and refrain from manicuring/altering the landscape of the reserve by pulling back and allowing natural understorey regeneration to occur. Clarence City Council needs to complement this by maintaining a fuel reduction zone along property boundaries that also encourages suitable native understorey to regenerate.

**Recommendation 16: That the local community be better informed about the values of Blessington Coastal Reserve, why illegal encroachment is not acceptable, the need for shared responsibility for caring for the reserve and what it means to be a good neighbour.**

## 11 CLIMATE CHANGE

Clarence City Council has developed a comprehensive understanding of the potential implications of climate change on public assets and areas of high value (CCC, 2009). It is clear that under certain scenarios coastal infrastructure is at risk of damage or loss. The Council is aware of the need to evaluate options for cost effectiveness in dealing with climate change impacts on communities and its infrastructure, particularly where there may be a need to relocate or rebuild elsewhere.

Members of the local community have expressed the view that they believe the coastline at Fort Beach has already retreated some 5-6 metres. Given the low lying nature of parts of the reserve it would be prudent to undertake an evaluation of the risk posed to all infrastructure assets to ensure that the implications of potential sea level rise are manageable. For example, the access points to the beaches could lose functionality, but also play an enhanced role with modifications under higher sea levels. An annual monitoring of sea level change is warranted. This should be supported by a detailed assessment of a time series of ortho-rectified aerial photos over the Fort Beach to establish its historic erosion trends and the establishment of detailed beach monitoring, preferably using a combination of the community based TASMARC approach (<http://www.tasmarc.info/>) and Clarence

City Council to instigate annual aerial photo monitoring of beach recession as part of its Annual Aerial Beach monitoring program.

**Recommendation 17: Undertake a climate change risk analysis for all infrastructure assets in the reserve.**

## 12 OTHER MANAGEMENT ACTIVITIES

Other issues were:

- Rubbish still gets dumped occasionally and needs to be picked up before it scatters;

**Recommendation 18: A review of the existing reserve maintenance program should be undertaken to address the issues raised during the stakeholder consultation.**

## 13 COMMUNITY PARTICIPATION AND AWARENESS

Whilst the South Arm area has small population, it is very keen to participate in the decision making for the future of the reserve and its ongoing management.

**Recommendation 19: Council continue to encourage the South Arm Coastcare and South Arm Progress Association in their on-going community participation. This will need to include assistance in the development of funding submissions.**

Many local residents do not have a good understanding of this public space on their doorstep and would benefit from learning about it and encouragement in becoming involved in its use and care.

**Recommendation 20: Community education should be undertaken to facilitate change in behaviour and encourage ownership and appreciation of the values of the reserve. Define the nature of engagement incl. gardening focus and waste mgt. and the benefits of the greenways and their role that they can contribute. A key example is raising community awareness and involvement in active sound fire management on and adjacent to the reserve.**

**Table 7.** Management issues requiring education and awareness within the reserve.

Issue	Description
Garden waste dumping	Dumping of garden waste in the reserve encourages the spread of unwanted weeds and is visually unattractive for all users.
Clearing of native	Removal of native vegetation in the Reserve (e.g. to improve views) is illegal. It encourages the establishment of weeds and reduces species diversity and animal



vegetation	behaviour.
Environmental weeds	Weeds in adjacent gardens pose a threat to existing native vegetation within the reserve.

The South Arm Coastcare group has been actively involved in the care and maintenance of the Reserve and has a keen interest in the reserve's future. A collaborative approach between Clarence City Council and the coastcare group will be valuable in encouraging locals to become more interested and involved in management of the natural assets of the reserve.

**Recommendation 21: Council should consider a collaborative program of reserve care that respects the efforts of the South Arm Coastcare group and fosters the group's capacity to grow.**

## 14 IMPLEMENTATION PLAN

An implementation plan has been developed that identifies the key management activities, in order of priority, to be undertaken in the reserve. Priorities have been classified into three groups:

- Priority 1:
- Priority 2:
- Priority 3:

This plan aims to guide future management activities for Council, subject to availability of resources. It is assumed that, due to resource constraints, not every prioritised activity will be achieved within the current life of the RAP. It is therefore important that the plan is reviewed at least every 5 years to ensure that resources are correctly prioritised.

**Recommendation 22: An annual review of the Implementation Plan, using established performance criteria, should be adopted.**

There is also a need to undertake more frequent operational monitoring of management actions to ensure that assumptions made about priorities and appropriate actions have been correct. A cost effective annual monitoring program is desirable that measures more immediate outputs and contribution to longer term outcomes. This can take the form of:

- Simple regular photo-point monitoring of works activities
- Surveillance of specific management actions to confirm success
- Permanent monitoring points that measure broader range of biophysical attributes (e.g. bird diversity, landscape function and soil health, invertebrate diversity and composition).

The implementation activities that involve infrastructure are shown on Figure 6.

**Recommendation 23: Develop an annual monitoring program that cost effectively measures the outputs of actions undertaken. Can be initiated using monitoring of 5 – 8 photo points.**



### Blessington Reserve - Map of access & facilities

-  Access point
-  Walking track
-  Beach access
-  Playground
-  Access & parking improvements
-  Maps & signage
-  New toilets

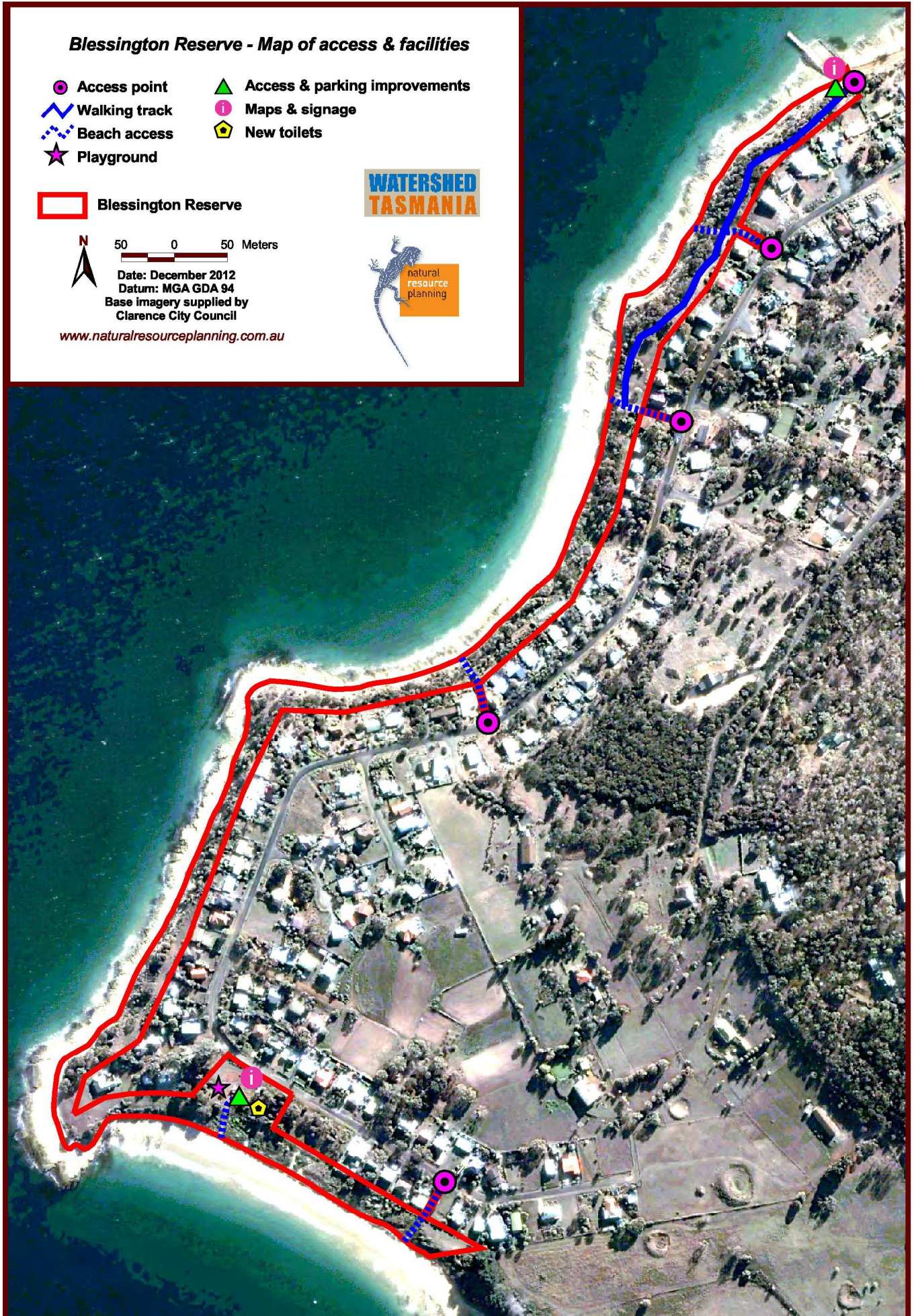
 Blessington Reserve



Date: December 2012  
Datum: MGA GDA 94  
Base imagery supplied by  
Clarence City Council

[www.naturalresourceplanning.com.au](http://www.naturalresourceplanning.com.au)

**WATERSHED  
TASMANIA**





**Table 8:** Implementation Plan, highlighting the prescribed management activities in Blessington Coastal Reserve.

Priority	Action	Seasonal timing	Performance measure	Responsibility
<b>Flora and Fauna</b>				
1	Construct a 3 metre wide firebreak and wildfire fire response access along all property boundaries that adjoin the reserve.	Construction during dry months and maintenance prior to bushfire season	Firebreak in place and actively maintained	Council
1	Develop and implement a program of regular (seasonal) standardised bird surveys	Once per season.	Surveys conducted and results analysed	Council
<b>Weed Control</b>				
1	Control the declared weeds Boneseed, African Boxthorn and Canary broom.	Spring – summer for spot spraying, all year round for mechanical techniques.	All declared weeds eradicated	Council

2	Following control of priority declared weeds, Cotoneaster, New Zealand Flax, Mirror Bush, Sydney Wattle, sweet pittosporum and Radiata pine should be targeted.	All year round for mechanical techniques.	All targeted weeds removed	Council
1	An annual survey and follow up of control of all targeted weeds should be undertaken.	spring/summer	All targeted weeds are eradicated.	Council, volunteer groups.
3	Undertake GPS mapping of all weeds	Spring – summer	Weed maps and Council database are updated within five years.	Council
<b><i>Regeneration and revegetation</i></b>				
1	Strategic plantings of locally native eucalypts to recreate an emergent canopy of trees that provide foraging habitat for Swift parrots.	Annually in winter	Plants established and thriving	Council, volunteer groups.
<b><i>Access management</i></b>				
1	Installations of signs and beach access poles, improving amenity and developing thematic names for entrances.	N/A	Reserve signage in place.	Council
<b><i>Walking tracks</i></b>				



1	Undertake an Audit of the existing walking tracks against the Guide to Road Design Part 6A: Pedestrian and Cyclist Paths (Austroads 2009).	N/A	Audit completed	Council
1	Improve the private access and public access at the Jetty Road end of the reserve	N/A	Access improvement completed	Council
2	Develop a Track Plan	N/A	Track Plan completed	Council
<b>Infrastructure</b>				
1	New outdoor seats of suitable design and materials installed at key locations in the Reserve.	N/A	Seat installed	Council
2	Dog waste dispensers and bins should be installed at all main entrances.	N/A	Bins installed	Council
3	Public toilet installation at 169 Blessington St	N/A	Toilet installed	Council
<b>Climate Change</b>				
2	Undertake a climate change risk analysis for all infrastructure assets in the reserve.	N/A	Analysis completed and priority risks addressed where practicable	Council
<b>Other management issues</b>				

1	A review of the existing reserve maintenance program should be undertaken to address the issues raised during the stakeholder consultation.	Summer	Review completed and concerns addressed where practicable	Council
<b>Community participation and awareness</b>				
2	Council facilitate a strengthened partnership with South Arm Coastcare and South Arm progress Association that supports the co-ordination of an on-going community participation and awareness program.	N/A	Increased community participation in reserve activities	Council
2	Community education should be undertaken to facilitate change in behaviour and encourage ownership and appreciation of the values of the reserve. Particularly in the management of pets.	N/A	Improvement in collaboration with neighbour and reserve users in managing the reserve and increased fauna diversity.	Council
<b>Implementation Plan</b>				
1	An annual review of the Implementation Plan, using established performance criteria, should be adopted.	In line with Council budgetary planning cycle	Annual review completed	Council

Future Priorities				
3	RAP reviewed to assess progress and determine ongoing management priorities.	2018	Review completed	Council

## 15 FUTURE PRIORITIES

A strategic review of the Blessington Coastal Reserve Activity Plan will be required at least in 2018, to ensure that:

- The outlined objectives are being fulfilled
- The Reserve Activity Plan is being appropriately assessed against performance measures
- On-going management activities adapt to the changes in the x number years ahead.

A monitoring, evaluation, reporting and improvement approach needs to be adopted, that ensures regular assessment of the delivery of the RAP. It needs to be based on a structured approach that assesses operational delivery through to the achievement of higher level long term goals. An annual review and report will be the foundation for confirming operational delivery, linked to a mid-term review that assess broader strategic direction and external factors that may be relevant to longer term site level goals.

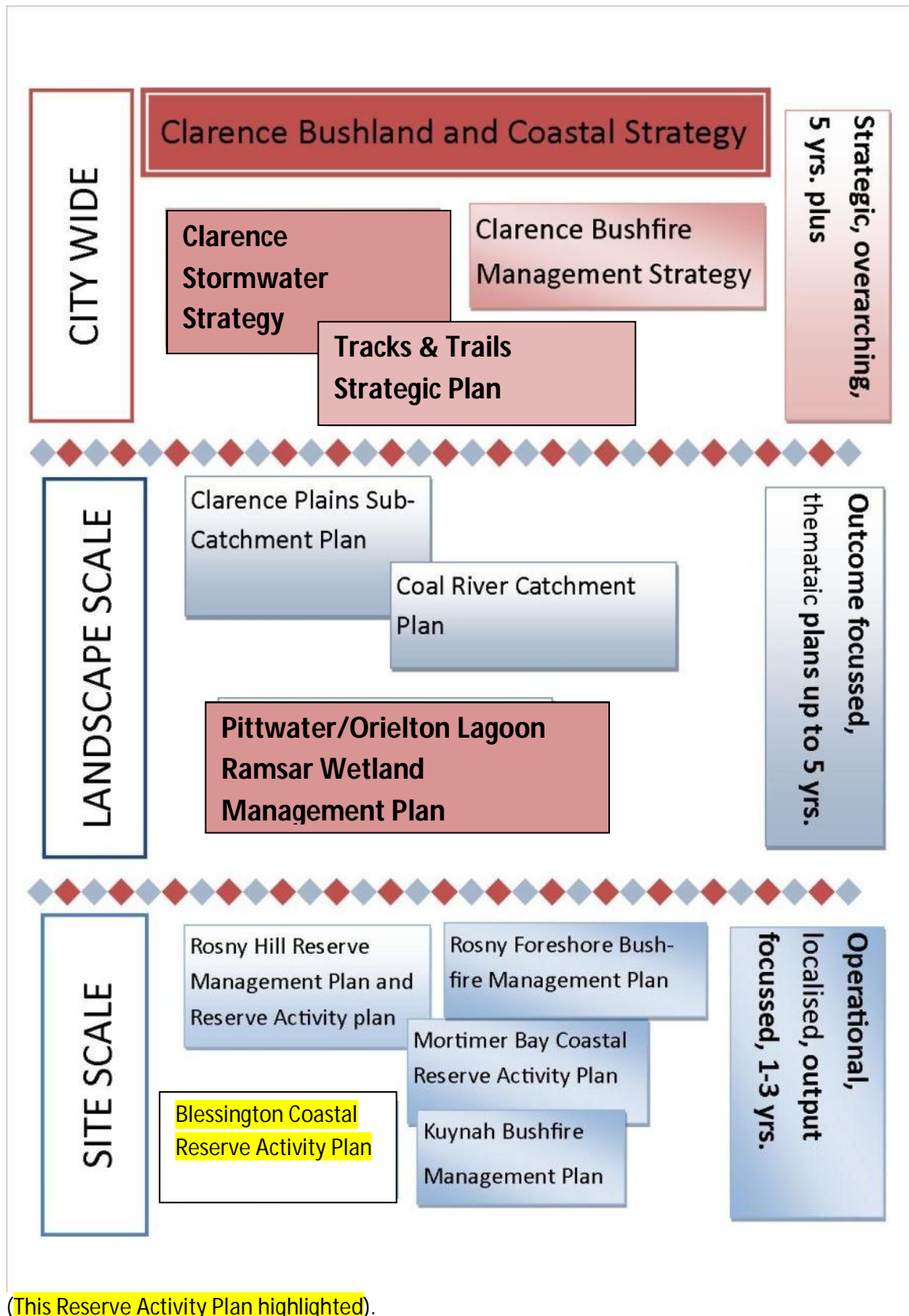
<b>Recommendation 23: The Blessington Reserve Activity Plan should be reviewed in 2018 to assess progress to date and define future management activities for the site.</b>
---

## 16 REFERENCES

- Aboriginal Heritage Tasmania (2011), Unanticipated Discovery Plan. Department of Primary Industries, Parks, Water and Environment, Hobart.
- Clarence City Council (2009), Climate change impacts On Clarence coastal areas – Final Report. Clarence City Council, Rosny.
- DPIPWE (2011), Natural Values Atlas report for the Blessington Coastal Reserve, data accessed 8, August 2012.
- Harris, S. & Kitchener, A. (Eds.) (2005). From forest to fjeldmark: descriptions of Tasmania's vegetation. Department of Primary Industries, Water & Environment, Hobart.
- Knight, R and Cullen, P.J. (2010), using and interpreting landscape ecology assessments of natural resources to develop priorities and plans for property management. A report for Caring for Our Country Project 'Using Landscape ecology to prioritise property management actions in Tasmania'. Natural Resource Planning, Hobart, Tasmania.
- Ryan (2012), Tasmanian Aborigines: A History Since 1803. Allen and Unwin, Sydney.
- Sharples, C. & Mowling, F. (2006). Southern Natural Resource Management region coastal geomorphic mapping & geomorphic decision report tools - interpretation report & manual. Report to the Southern Tasmania regional NRM coastal management committee & the Coastal & Marine branch of the Department of Primary Industries & Water. November 2006.
- Tasmanian Aboriginal Centre (2010), Mumirimina People of the Lower Jordan Valley. Draft History Report.
- Temby, N (2005) Weed Management Plan Blessington Foreshore Reserve: South Arm, May 2005.
- Watershed Tasmania (2011), Clarence City Bushland and Coastal Strategy. Clarence City Council, 2011.



## APPENDIX 1. CLARENCE CITY BUSHLAND AND COASTAL STRATEGIC PLANNING FRAMEWORK.



## APPENDIX 2. VEGETATION OF THE BLESSINGTON COASTAL RESERVE.

The Blessington Coastal Reserve occupies a narrow coastal strip with frontage to the Derwent River estuary. The native vegetation of the reserve is strongly influence by exposure to the coast, exhibiting significant change in vegetation structure and composition over relatively short distances.

Cliff-top areas are dominated by a forest and woodland Drooping Sheoak (*Allocasuarina verticillata*). The native vegetation on the dune system along Fort Beach is likely to have been dominated largely by species typical of coastal scrubs such as White Correa (*Correa alba*) and Sea-box (*Alyxia buxifolia*).

It is likely that the areas currently occupied by sheoak previously supported higher numbers of eucalypt species, particular Blue Gum (*Eucalyptus globulus*). Fire and the deliberate removal of trees from the reserve appear to have played a part in reducing the number of eucalypts in the reserve to just a few individuals.

The inland side of the reserve shares an equally long frontage with coastal urban development. A large number of exotic species occur, including major environmental weeds listed as Weeds of National Significance and/or Declared Weeds under the Tasmanian Weed Management Act 1999. The distribution of weeds within the reserve ranges from scattered locations to continuous infestations of multiple species. As a result, management of weeds is a major requirement for securing the natural values of the reserve.

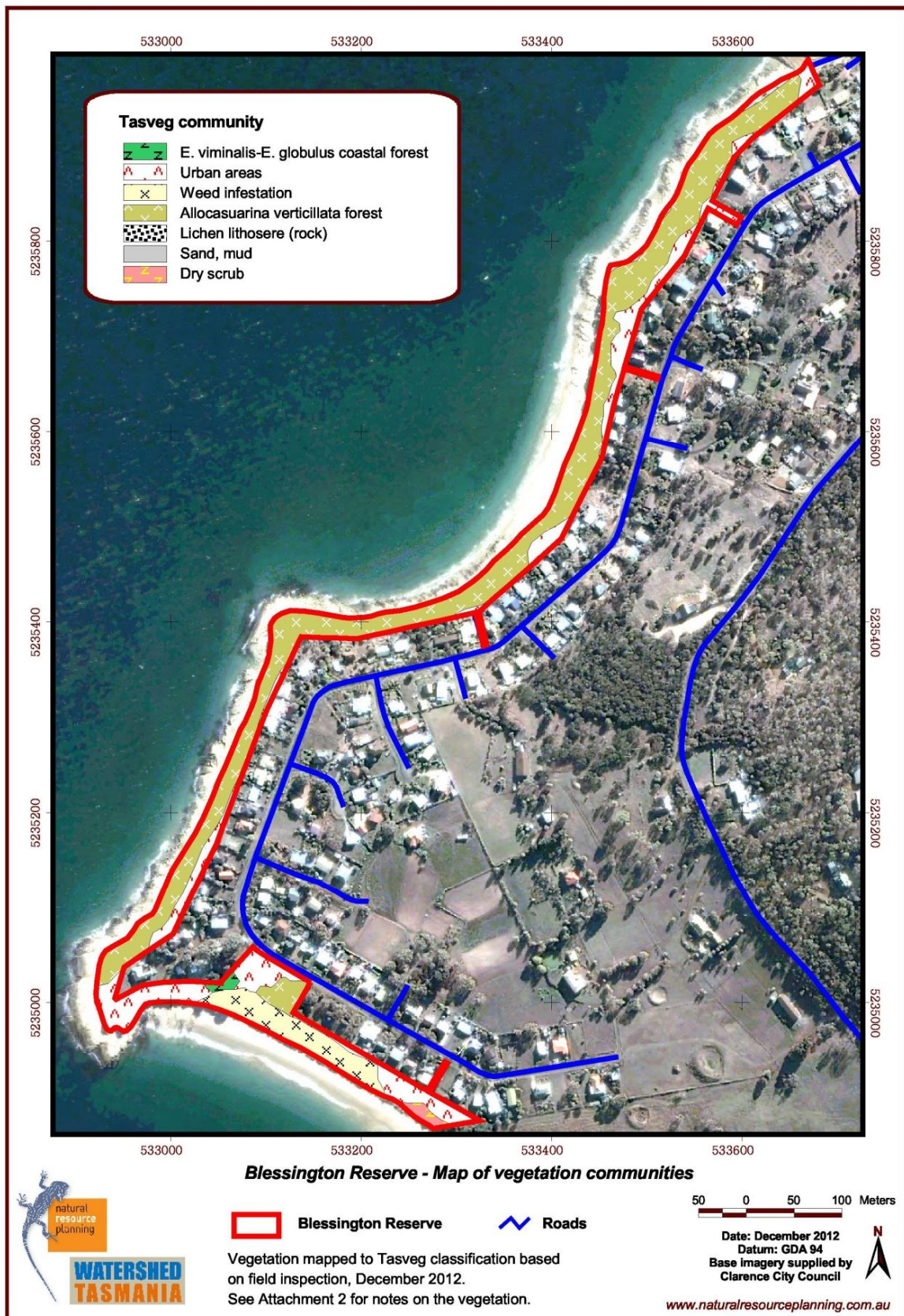
The current vegetation of the dune system along Fort Beach is a relatively complex mosaic. The vegetation has been mapped to the classification of TASVEG (Harris and Kitchener 2005), however there is considerable internal variation in the vegetation characteristics of the mapped areas. Scales for undertaking management within the reserve will be finer than the vegetation depicted in the map.

The native vegetation communities in the reserve are described below.

Community name	TASVEG code	Description/Comments
<i>Allocasuarina verticillata</i> forest	NAV	<p>This forest/woodland varies from pure stands with 100% litter layer or with little else but leaf litter beneath the trees, to woodlands in which umbrageous trees are interspersed in a species-rich sward dominated by tussock grasses and herbs. These woodlands and forests occur on very dry sites.</p> <p>This woodland may have come to dominate this site, replacing woodland dominated by Blue Gum (<i>Eucalyptus</i></p>

		<i>globulus</i> ) due to a range of factors, including excessive fires and removal of other canopy tree species for, legitimate safety reasons and/or illegally for viewsheds.
<i>E. viminalis</i> – <i>E. globulus</i> <i>Coastal Forest</i>	DVC	<p>This community is dominated by either White Gum (<i>E. viminalis</i>) or Blue Gum (<i>E. globulus</i>) but at Blessington is dominated by Blue Gum. The natural understorey of the community can be either scrubby or heathy.</p> <p>The extent of the community at South Arm has likely been reduced through urban development. The community has likely been replaced in part of the Blessington reserve by <i>Allocasuarina forest</i>, which probably now extends inland into areas previously dominated by eucalypts. The mapped area community is part of a single small patch which extends into the reserve from adjoining private land.</p>
<i>Dry scrub</i>	SDU	<p>Dry scrub (SDU) has several facies and occurs on a variety of rock types across the State. Its sclerophyllous dominants are predominantly from the families Myrtaceae and Fabaceae. The canopy varies from dense to open and uneven.</p> <p>The community is likely to have previously dominated the vegetation of the dunes along Fort Beach. Much of this area is now mapped as a weed infestation, with species such as New Zealand Flax and Marram Grass locally dominant. Only a small area of the community is considered sufficiently dominated by native species to fit within the Tasveg classification. However, species associated with the community occur throughout the areas that are now dominated by weeds.</p>





## APPENDIX 3: SUMMARY OF STAKEHOLDER CONSULTATION

A public meeting on from 3 pm - 5 pm on 4th August 2012 invited the community to raise issues about Blessington Coastal Reserve, to assist in the development of the *Blessington Reserve Activity Plan*. 22 stakeholders attended the walk and talk, a further 12 written comments were received. Table 9 summarises the responses provided.

**Table 9:** Summary of stakeholder feedback in August 2012

Management issue	Number of feedback comments	Recommendation that addresses this issue. (by number)
<b>Weed Control</b>		
Undertake weed control activities	5	3, 4, 5 and 6.
<b>Infrastructure</b>		
Resolve inappropriate use of private access road by reserve users	6	8 and 11
Provide seating at strategic view sheds.	6	12
Provide a better standard of tracks, particularly for the mobility impaired or for prams. A diversity of opinions regarding the merits or otherwise of a continuous track that allows the full reserve to be traversed without recourse to using the Blessington St.	20	9, 10 and 11
Install a public toilet and car park in the vicinity of the playground at 169 Blessington St.	6	14
Install better signage to let people know what you can and cannot do here	1	8
<b>Other management issues</b>		
Managing the presence of cats and dogs, both feral and pet, as well as encroachment through proper fencing and signage	7	19

Community responses were considered in the development of the Plan. Where feedback was not within the Plan's scope, Council noted them and where possible will address them by other means.

- Proactive weed hygiene practices for recreational users; and
- Preventative fire management practices.



## APPENDIX 4: WEED SPECIES PRESENT AND RECOMMENDED CONTROL TECHNIQUES

Table 1. Weed Species presence by Zone (See Map in Appendix 5.)

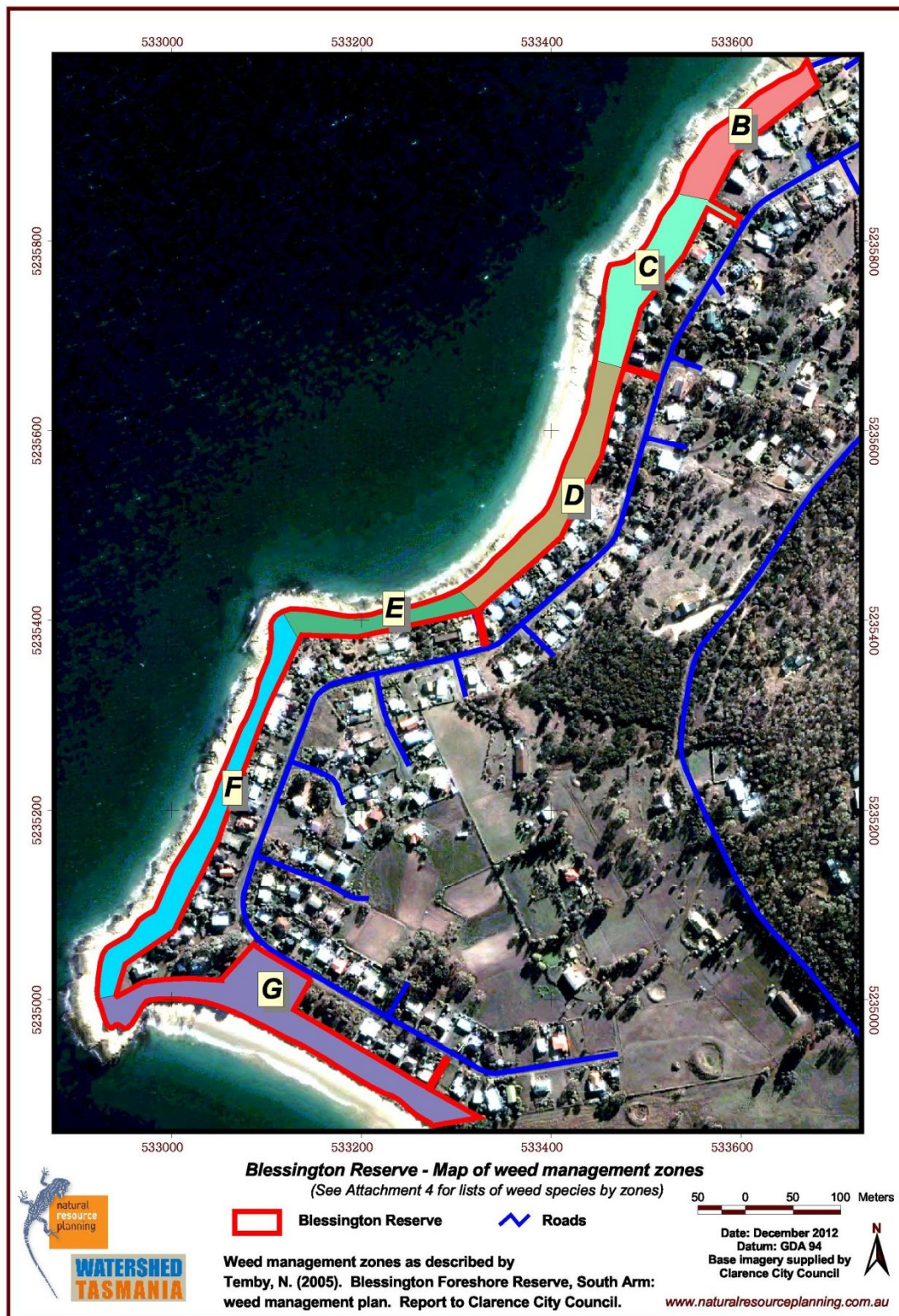
Species	Weed Zone					
	B	C	D	E	F	G
African Boxthorn	Y	Y	Y	Y	Y	
African Daisy			Y			
Agapanthus				Y		Y
Bee Balm	Y			Y		Y
Boneseed	Y	Y	Y	Y	Y	
Cape Ivy	Y	Y				
Cape Leeuwin Wattle					Y	
Cotoneaster	Y	Y				
Fennel			Y			
<i>Gazania</i> sp.		Y	Y	Y	Y	Y
Macrocarpa						Y
Marram Grass			Y			Y
Mirror Bush			Y		Y	Y
New Zealand Flax	Y	Y	Y			Y
Radiata Pine						Y
Scrambling Groundsel						Y
Sweet Pittosporum			Y			
Sydney Golden Wattle			Y			
garden daisies		Y			Y	Y
garden succulents	Y			Y	Y	Y

**Table 2. Weed Status and Management recommendations.**

COMMON NAME	SCIENTIFIC NAME	STATUS	RECOMMENDED TECHNIQUE
african boxthorn	<i>Lycium ferocissimum</i>	Declared WONS	
african daisy	<i>Osteospermum sp.</i>		
agapanthus	<i>Agapanthus praecox</i>		
bee balm	<i>Melissa officinalis</i>		
boneseed	<i>Chrysanthemoides monilifera ssp. monilifera</i>	Declared WONS	Hand pull, collect and dispose safely of any seeds/fruits.
canary broom	<i>Genista monspessulana</i>	Declared	
cape ivy	<i>Delairea odorata</i>		
cape leeuwin wattle	<i>Paraserianthes lopanthes</i>		
cotoneaster	<i>Cotoneaster glaucophylla</i>		
fennel	<i>Foeniculum vulgare</i>	Declared	

garden daisies (various)			
gazania	<i>Gazania spp.</i>		
macrocarpa pine	<i>Cupressus macrocarpa</i>		
marram grass	<i>Ammophila arenaria</i>		
mirror bush	<i>Coprosma repens</i>		
new zealand flax	<i>Phormium tenax</i>		
pale flax	<i>Linum marginali</i>		
radiata pine	<i>Pinus radiata</i>		Cut down mature trees and monitor for seedlings which can be manually removed
scrambling groundsel	<i>Senecio angulatus</i>		
succulents (various)			
sweet pittosporum	<i>Pittosporum undulatum</i>		
sydney golden wattle	<i>Acacia pycnantha</i>		Cut and paste with suitably approved herbicide, monitor for seedlings that can be hand pulled.

## APPENDIX 5: LOCATION OF WEED SPECIES



## APPENDIX 6: LOCAL NATIVE SPECIES SUITABLE FOR REVEGETATION AND LANDSCAPING WORK

The following tables provide lists of species that are appropriate for revegetation works in Blessington Reserve. They are drawn from the Tasmanian Vegetation TASVEG Vegetation Community Benchmarks (DPIPWE, 2012). Each native vegetation community relevant to Blessington Coastal Reserve (see Section 4.2) has a list of species that are considered to be representative of that community. These lists should form the basis of plant selection for any revegetation projects that occur in the reserve. Whilst not all species will be available from nurseries, the opportunity does exist to work with the community to produce less commonly available plants, for example through the Understorey Network (see [www.understorey-network.org.au](http://www.understorey-network.org.au)).

### NAV – *Allocasuarina verticillata* forest:

Plant Form Code*	Species name (scientific and common)
T	<i>Acacia dealbata</i> silver wattle
T	<i>Acacia mearnsii</i> black wattle
T	<i>Allocasuarina verticillata</i> drooping sheoak
T	<i>Beyeria viscosa</i> pinkwood
T	<i>Bursaria spinosa</i> prickly box
T	<i>Eucalyptus globulus</i> blue gum
T	<i>Myoporum insulare</i> common boobialla
S	<i>Lissanthe strigosa</i> peachberry heath
S	<i>Rhagodia candolleana</i> coastal saltbush
PS	<i>Acrotriche serrulata</i> ants delight
PS	<i>Astroloma humifusum</i> native cranberry
H	<i>Ajuga australis</i> australian bugle
H	<i>Caladenia</i> spp. finger-orchid
H	<i>Dichondra repens</i> kidneyweed
G	<i>Ehrharta stipoides</i> weeping grass
SCE	<i>Clematis aristata</i> Clematis



DVC - Eucalyptus viminalis – Eucalyptus globulus coastal forest and woodland:

Plant Form Code*	Species name (scientific and common)
T	<i>Acacia dealbata</i> silver wattle
T	<i>Acacia melanoxylon</i> blackwood
T	<i>Allocasuarina littoralis</i> black sheoak
T	<i>Banksia marginata</i> silver banksia
T	<i>Exocarpos cupressiformis</i> common native-cherry
S	<i>Acacia sophorae</i> coast wattle
S	<i>Bossiaea</i> spp. bossia
S	<i>Epacris impressa</i> common heath
S	<i>Leptospermum scoparium</i> common teatree
S	<i>Leucopogon parviflorus</i> coast beardheath
S	<i>Tetratheca labillardierei</i> glandular pinkbells
S	<i>Tetratheca pilosa</i> hairy pinkbells
PS	<i>Acrotriche</i> spp. ants delight
PS	<i>Astroloma humifusum</i> native cranberry
PS	<i>Bossiaea prostrata</i> creeping bossia
PS	<i>Kennedia prostrata</i> running postman
H	<i>Dichondra repens</i> kidneyweed
H	<i>Euchiton</i> spp. cottonleaf
H	<i>Orchidaceae</i> orchids
H	<i>Viola</i> spp. Violet
H	<i>Wahlenbergia</i> spp. bluebell
G	<i>Austrostipa</i> spp. speargrass
G	<i>Poa labillardierei</i> tussockgrass
LSR	<i>Dianella revoluta</i> spreading flaxlily
LSR	<i>Diplarrena moraea</i> white flag-iris
LSR	<i>Lomandra longifolia</i> sagg
GF	<i>Pteridium esculentum</i> bracken
SCE	<i>Cassytha</i> spp. dodderlaurel

SDU – Dry Scrub

Plant Form Code*	Species name (scientific and common)
T	<i>Banksia marginata</i> silver banksia
T	<i>Leptospermum glaucescens</i> smoky teatree
T	<i>Leptospermum scoparium</i> common teatree
S	<i>Acacia verticillata</i> prickly moses
S	<i>Allocasuarina monilifera</i> necklace sheoak
S	<i>Amperea xiphoclada</i> broom spurge
S	<i>Aotus ericoides</i> golden pea
S	<i>Astroloma pinifolium</i> pine heath
S	<i>Epacris</i> spp. heath
S	<i>Leucopogon</i> spp. beardheath
S	<i>Oxylobium ellipticum</i> golden shaggypea
S	<i>Pultenaea juniperina</i> prickly beauty

S	<i>Richea procera</i> lax candleheath
PS	<i>Hibbertia</i> spp. guineaflower
PS	<i>Styphelia adscendens</i> golden heath
H	<i>Goodenia lanata</i> trailing native-primrose
H	<i>Pelargonium australe</i> southern storksbill
H	<i>Stylidium</i> spp. triggerplant
G	<i>Ehrharta</i> spp. ricegrass
G	<i>Poa</i> spp. tussockgrass
LSR	<i>Gahnia grandis</i> (West coast only) cutting grass
MSR	<i>Lepidosperma concavum</i> sand swordsedg
MSR	<i>Lepidosperma</i> spp. swordsedg
SCE	<i>Billardiera</i> spp. appleberry

## APPENDIX 7. ENTRANCE ENHANCEMENT DIAGRAMS.

The following diagrams provide a conceptual layout for the enhancement of primary entrances at South Arm Jetty and 169 Blessington St (near the Playground).

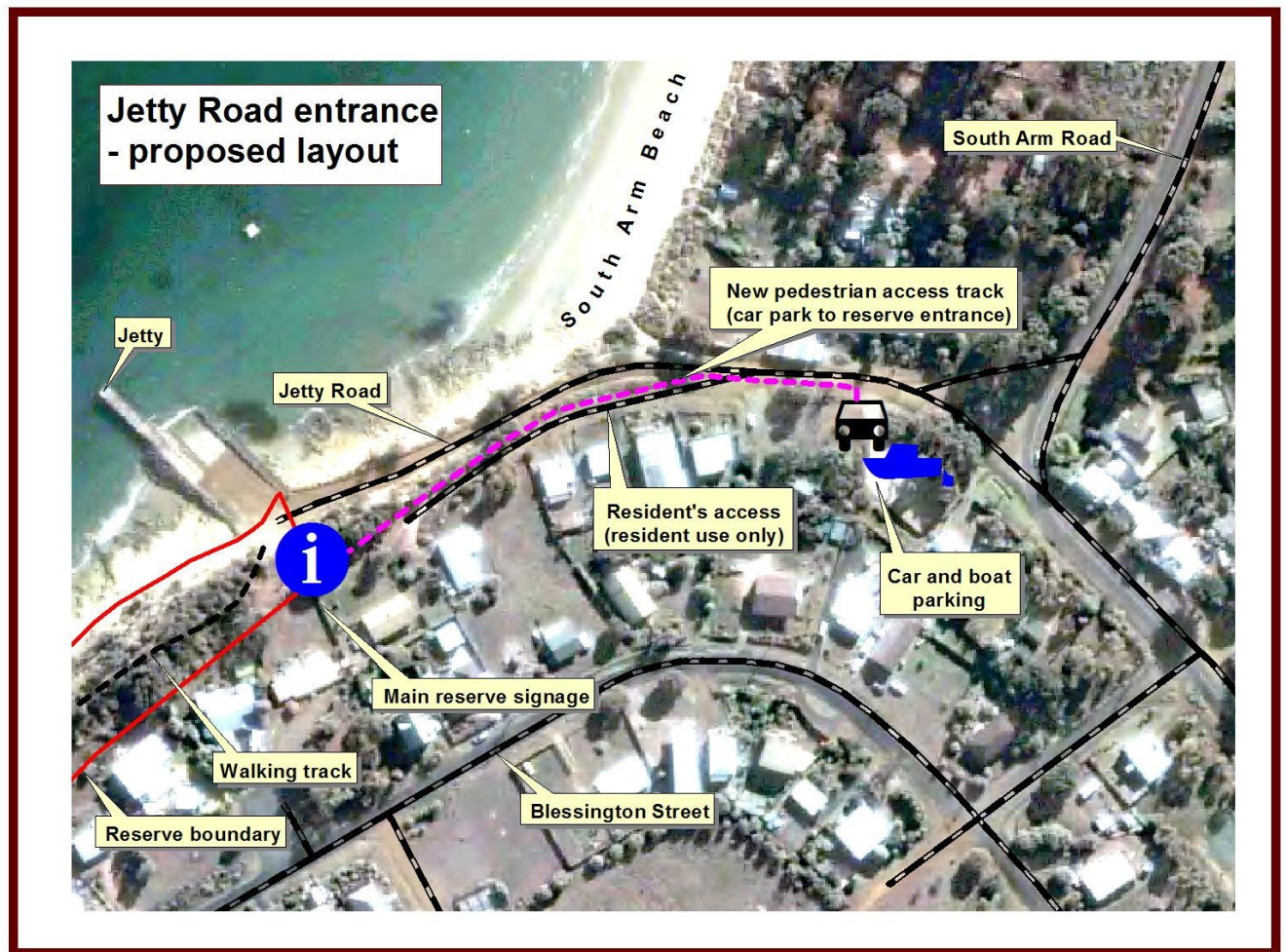


Figure 1. Jetty Road Entrance.

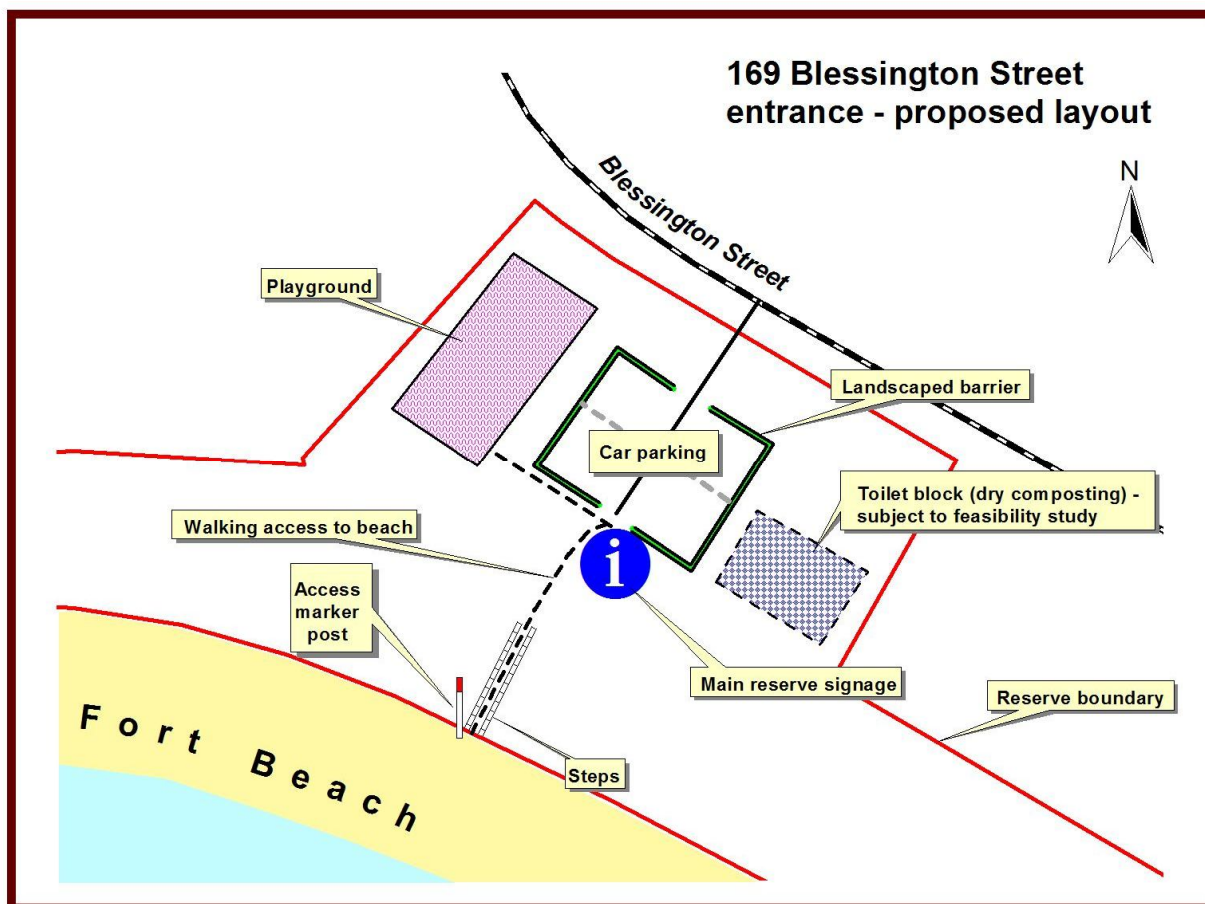


Figure 2. 169 Blessington Street Entrance.

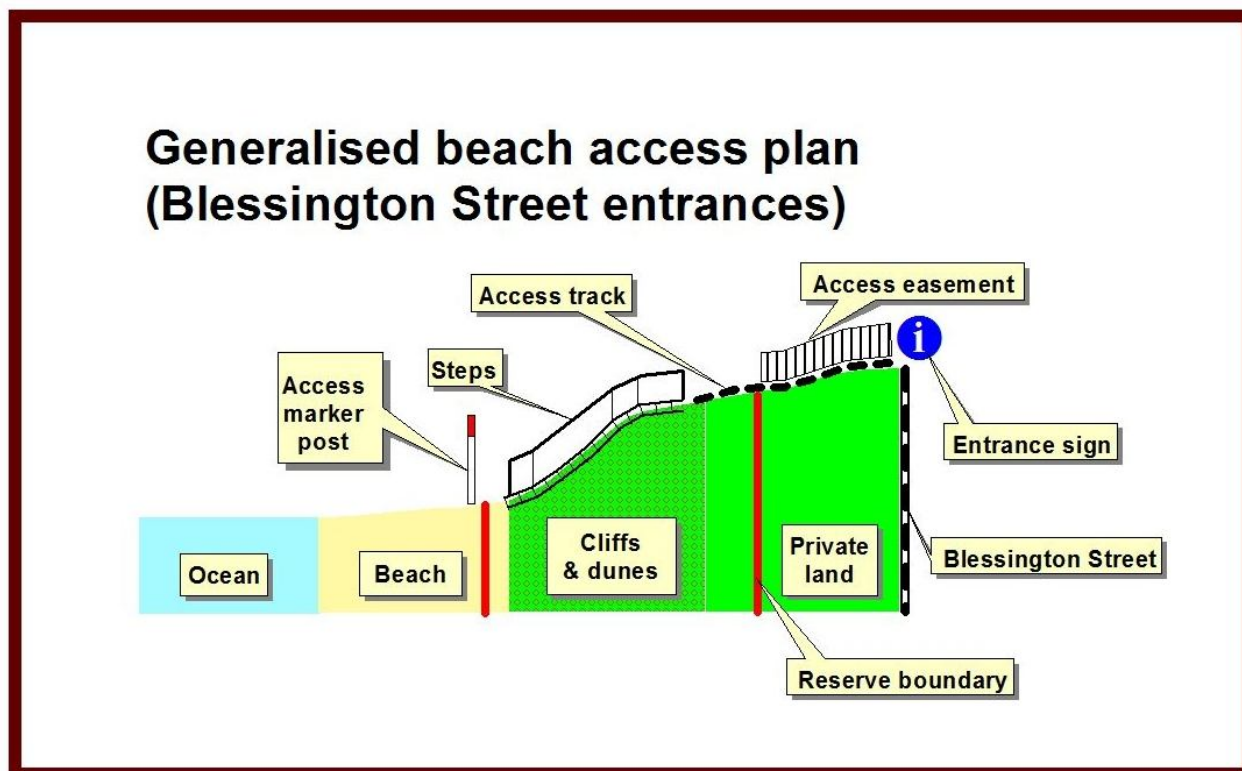


Figure 3. Generalised access design.

## APPENDIX 8: SUMMARY OF MANAGEMENT RECOMMENDATIONS

<b>Flora and Fauna</b>	
1:	Construct a 3 metre wide firebreak and wildfire fire response access along all property boundaries that adjoin the reserve.
2:	That council encourage neighbours to manage pet cats and dogs on their properties to protect the fauna in the reserve from predation.
3:	Council initiate a program of regular standardised bird surveys of the reserve using the Birdlife Tasmania bird survey methodology.
<b>Weed management</b>	
4:	A priority should be controlling the declared weeds Boneseed, African Boxthorn and Canary Broom.
5:	Following control of priority declared weeds, other weeds should be targeted.
6:	An annual survey and follow up of control of all targeted weeds should be undertaken during spring/summer.
7:	Spatially accurate weed mapping should be conducted at least on a five yearly basis to monitor progress and inform future weed management prioritisation. Information should be captured using standardised approach and the data submitted to the State Government to assist in broader scale weed management knowledge.
<b>Regeneration and revegetation</b>	
8:	Initiate annual strategic plantings of Blue Gums to recreate a emergent canopy of trees that provide foraging habitat for Swift parrots where possible including White Gums.
<b>Reserve entrances</b>	
9:	Installations of signs (including tall Beach Access Point marker poles), improve Sliproad Service Access road standard, improving amenity and developing thematic names for 2 major entrances (Jetty Road and 169 Blessington St). See Appendix 7.
<b>Walking tracks</b>	
10:	Undertake an assessment of the existing walking tracks against appropriate track standards and guidelines. Upgrade and maintain tracks using Best Management Practice in accord with the Australian Standards.
11:	Recommendation 11: Engage a track planning consultant to undertake careful design of a linkage track through the reserve. This is anticipated to involve:



<p>a. assessment of track alignment options;</p> <p>b. design to cater for local community use, class 3, with the potential provision in the next review period of the RAP to upgrade it to class 2 depending on demand and usage levels at that time.</p> <p>c. factor in to the track design the separate recommendation (No. 1) for a 3 metre wide firebreak and wildfire fire response access along all property boundaries. This proposed fire-break along the rear of all properties boundaries would be advantaged by a Class 3 track. The Track Planning Consultant will need to specifically consider the benefit of having a separate walking track alignment in this narrow Coastal reserve.</p> <p>d. explore design options at the northern end to align the track to reduce the visual impacts of reserve users walking near their boundary, including the option of directing some of the trail onto the rocky foreshore, provide it does not impact on accessibility for the older and less able walker.</p> <p>e. once design is drafted, the track plan will be released for extensive local community consultation and subsequent Council review.</p>
<p>12: That the issue of private versus public access for residences at the Jetty Rd end, be resolved by defining a walking/biking route between the existing carpark to the entrance to the reserve and delineating this as adjacent but separate track, from the associated Sliproad. The Sliproad needs to have an annual road maintenance schedule and provide signage.</p>
<p><b>Infrastructure</b></p>
<p>13: New outdoor seats of suitable design and materials to be installed at key locations in the Reserve.</p> <p>14: Signage needs to remind reserve users that dogs are to be under effective control for wildlife protection and courtesy of others and waste dispensers and bins should be installed at all main entrances to the reserve. In addition remind neighbours and reserve users of the Cat Management Act and the value of doing the right thing, particularly in protecting the Eastern barred bandicoot.</p> <p>15: Undertake a feasibility study to confirm whether a public toilet (dry composting) should be installed to cater for reserve users, particularly walkers, at the entrance at the South eastern end of the reserve, adjacent to the playground and in conjunction with an upgraded entry point.</p> <p>16: That the local community be better informed about the values of Blessington Coastal Reserve, why illegal encroachment is not acceptable, the need for shared responsibility for caring for the reserve and what it means to be a good neighbour.</p>
<p><b>Climate Change</b></p>
<p>17: Undertake a climate change risk analysis for all infrastructure assets in the reserve.</p>
<p><b>Other management activities</b></p>

18:	A review of the existing reserve maintenance program should be undertaken to address the issues raised during the stakeholder consultation.
<b>Community participation and awareness</b>	
19:	Council continue to encourage the South Arm Coastcare and South Arm Progress Association in their on-going community participation. This will need to include assistance in the development of funding submissions..
20:	Community education should be undertaken to facilitate change in behaviour and encourage ownership and appreciation of the values of the reserve. Define the nature of engagement incl. native gardening focus and waste mgt. and the benefits of the greenways and their role that they can contribute. A key example is raising community awareness and involvement in active sound fire management on and adjacent to the reserve.
21:	Council should consider a collaborative program of reserve care that respects the efforts of the South Arm Coastcare group and fosters the groups' capacity to grow.
<b>Implementation Plan</b>	
22:	An annual review of the Implementation Plan, using established performance criteria, should be adopted.
23:	Develop an annual monitoring program that cost effectively measures the outputs of actions undertaken. Can be initiated using monitoring of 5 – 8 photo points.
<b>Future Priorities</b>	
24:	The Blessington Reserve Activity Plan should be reviewed in 2018 to assess progress to date and define future management activities for the site.

## APPENDIX 9. REPORT CARD FOR BLESSINGTON RESERVE

### THE DRAFT PLAN RECOMMENDS:

- >> Link existing tracks to Fort Beach
- >> Signage to promote public access and closure of private
- >> New steps at beach accesses
- >> Street accesses and seats upgraded
- >> Upgrade car park
- >> Beach erosion monitored using air photos and TASMARC
- >> Restore vegetation
- >> Support South Arm Coast Care Group
- >> Maintain fuel reduced zone in Reserve and adjoining properties



John 123

*'I am blessed to be able to live in beautiful South Arm and anything that is going to add to it's beauty is a real bonus'*

Kaye Stansfield



Native Pigeon



Spring Beach



Koala  
Koalas are Australia's most iconic animal and are found only in the wild in mainland Australia.

*Sharing the Care*  
Your views are welcome

**STAY WITH US...**  
Council invites your comments on the Draft Blessington Coastal Reserve Activity Plan. The Plan will guide the community and Council as we work together to improve the management of the Reserve. You can find the draft plan at [www.ccc.tas.gov.au/environment](http://www.ccc.tas.gov.au/environment)

**USE THE ONLINE FORM OR CONTACT**  
BY 18 FEB 2013  
**Alan Barton** 0448 039 110  
[alan@watershedtas.com.au](mailto:alan@watershedtas.com.au)  
**Phil Watson** 6245 8619  
[pwatson@ccc.tas.gov.au](mailto:pwatson@ccc.tas.gov.au)

  
Councils • a higher place

*In the Spring of 2012 Clarence City Council asked the community about Blessington Coastal Reserve.  
..these are the results.*



	EVALUATION				DESCRIPTION	COMMUNITY COMMENTS
		CAN DO BETTER	PASS	VERY GOOD		
		OUTSTANDING				
LOCATION					Narrow sinuous park between Derwent foreshore and Blessington Street.	
VEGETATION					Coastal woodlands, dominated by sheoaks. Attractive wildflowers explode in spring, a display of orchids, daisies and native fuschias.	<i>Could be improved with white gums emerging from the canopy</i>
ANIMALS AND BIRDS					Valued wildlife benefits from the habitat, including the threatened Eastern Barred Bandicoot.	
LANDSCAPE					Picturesque sea cliffs and sandy beaches. Hard, sedimentary rocks resist waves, avoiding erosion.	
ACCESS					There are several access points. Disconnected trails span its length, separated by steep areas.	<i>Could be improved with track to link beaches</i>
USAGE					A magnet, primarily for local families, walkers and beach combers. Valuable recreation resource for locals.	<i>A recreational gem for locals!</i>
THREATS					Weed species, fires and coastal erosion.	<i>Shared responsibility</i>



Stay with us on the journey of caring for Blessington Coastal Reserve. Your comments and ideas are welcome!  
Go to [www.ccc.tas.gov.au/environment](http://www.ccc.tas.gov.au/environment) and find out how.

## Appendix 10. FUNDING ESTIMATES FOR BLESSINGTON RESERVE ACTIVITY PLAN 2013-18

ACTION	ESTIMATED COST (\$)				
	2013-14	2014-15	2015-16	2016-17	2017-18
FLORA AND FAUNA					
Construct (and maintain) a 3 metre wide firebreak and wildfire fire response access along all property boundaries that adjoin the reserve.	10,000	1000	1000	1000	1000
Regular standardised bird surveys of the reserve using the Birdlife Tasmania bird survey methodology.	200				200
<b>Total cost of Flora and fauna</b>	10,200				200
WEED CONTROL					
Undertake primary control of all declared weeds particularly WONS	2000		700		
Control all other environmental weeds identified in Section 6		700	700	700	700
Undertake annual sweep and follow-up control of all targeted weeds		700	700	700	700
Undertake follow-up GPS mapping of all weeds					700
<b>Total cost of weed control activities</b>	2000	1400	2100	1400	2100
REGENERATION AND REVEGETATION					
Initiate annual strategic plantings of Blue Gums to recreate a emergent canopy of trees that provide foraging habitat for Swift parrots.		700			700
<b>Total cost of revegetation and regeneration activities</b>		700			700
ACCESS MANAGEMENT					



Install large information and interpretive signs at the main reserve entrances at Jetty Road and 169 Blessington St entrances	2000				
Install small identification signs (5) at all other reserve entrances.	1500				
<b>Total cost of access management activities</b>	3500				
<b>WALKING TRACKS</b>					
Conduct a Track assessment and maintenance	1,500				
Develop a Track Plan	3,000				
Key track works:		25,000			
<ul style="list-style-type: none"> <li>Extend existing to make continuous,</li> <li>upgrade existing (as at Feb 2013)</li> <li>maintain walking tracks to AS 2156.1-2001</li> </ul>			15,000	15,000	10,000
Enhance entrance at the jetty road end of the reserve.	10,000				
<b>Total cost of walking track activities</b>	4,500	25,000	15,000	15,000	10,000
<b>INFRASTRUCTURE</b>					
Install beach steps and poles	12,000				
Install seating at priority sites.	10,000				
Jetty Road Carpark enhancement	3,000	10,000	10,000		3,000
Implementation of entrance upgrades	5,000				
<b>Total cost of infrastructure</b>	30,000	10,000	10,000		3,000
<b>CLIMATE CHANGE</b>					
Conduct a Climate change risk analysis of	2,000				

the reserve					
<b>Total cost of Climate Change</b>	2,000				
OTHER MANAGEMENT ISSUES					
Review of the existing reserve maintenance program		1,000			
<b>Total cost of other management issues</b>		1,000			
COMMUNITY PARTICIPATION AND AWARENESS COSTS					
Undertake awareness raising of the issue of fire management/natural and recreation values (possibly brochure) of the reserve and local participation	1,000	1,000			1,000
<b>Total cost of community participation and awareness costs.</b>	1,000	1,000			1,000
IMPLEMENTATION PLAN AND FUTURE PRIORITIES					
Conduct a mid-term review of the Blessington Reserve Activity Plan			2,000		10,000
Undertake a full review of the Blessington Reserve Activity Plan			2,000		10,000
<b>Total cost of implementation Plan review</b>			4,000		20,000
<b>TOTAL COST OF ALL RESERVE ACTIVITIES</b>	<b>63,200</b>	<b>40,100</b>	<b>32,100</b>	<b>17,400</b>	<b>38,000</b>

#### Notes & assumptions

1. Labour costs = \$700/day (based on two people at contractor rates).  
These will be significantly less if work is undertaken by Council or volunteers.
2. Minimum \$3,000/annum allocated for revegetation activities (labour + materials).  
Additional funds may be required for revegetation following large scale weed control activities.
3. Cost of upgrading gravel tracks = \$30 / lineal metre, plus labour.
4. N/A = Council in kind support is anticipated for this activity.