



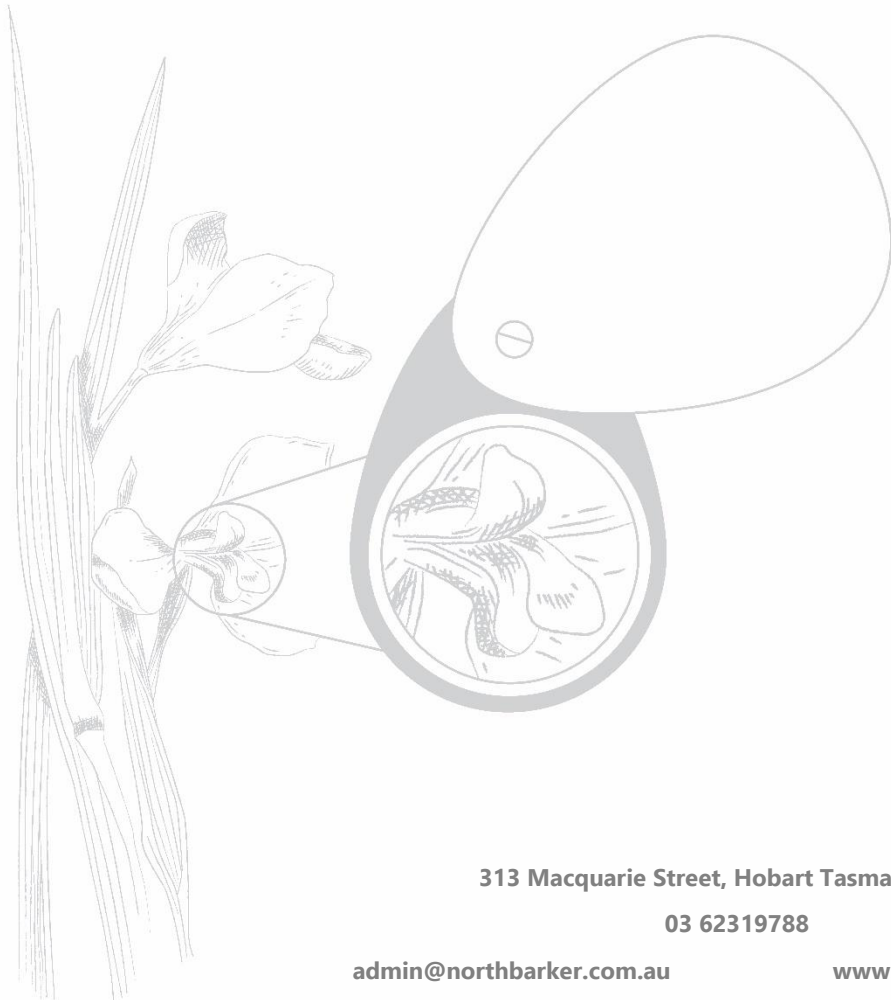
Samuel Thorne Reserve

Reserve Management Plan

9th August 2024

For Sorell Council

SOR007



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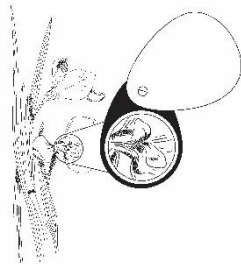
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ACKNOWLEDGEMENTS

Project name	Samuel Thorne Reserve Management Plan
Location	139 Lewisham Scenic Drive, Lewisham
Proponent	Sorell Council
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NBES Job Code	SOR007

Version	Date	Author	Position	Comment
Version 0.1	25/01/2024	Kelly Simpson	Senior Ecologist	Draft
Version 1.0	8/02/2024	Philip Barker	Principal Ecologist	Review and deliver to client
Version 1.1	18/04/2024	Kelly Simpson	Senior Ecologist	update with council comments
Version 1.2	9/08/2024	Kelly Simpson	Senior Ecologist	Final report following community consultation



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SUMMARY – SAMUEL THORNE RESERVE MANAGEMENT PLAN

Reserve Name	Location	Size
Samuel Thorne Reserve	139 Lewisham Scenic Drive, Lewisham	0.3 ha
Zone	Natural Asset Code (C7.0) Provision/s	Other TPS Code Overlays
Open Space (zone 29)	<ul style="list-style-type: none"> Waterway and Coastal Protection Area (SW edge) 	<ul style="list-style-type: none"> Bushfire-prone Landslip hazard Flood-prone hazard areas Safeguarding of airports
Reserve Description		
Reserve is bound by Lewisham Scenic Drive, Crown land along the foreshore and residential properties. The reserve comprises open maintained grassy areas with patches of remnant trees and shrubs. The reserve provides public access via a walking track and stairs to the foreshore trail between Lewisham and Carlton Beach.		
Council Infrastructure and Assets		
Fenceline along road, reserve name board, rubbish bin, dog waste bag dispenser, picnic table, bench seat, interpretative sign, walkway to foreshore includes mix of gravel path and timber stairs through foreshore Crown land.		
Hazard Management Areas		
2m wide HMA along northwest boundary and a 3m wide HMA along southeast boundary. The HMAs should be: <ul style="list-style-type: none"> Maintained in low fuel condition: <ul style="list-style-type: none"> Remove fallen limbs, sticks, leaf litter and bark litter. Remove pine bark and other flammable mulch. Prune low-hanging tree branches (<2m from the ground) to provide vertical separation between fuel layers. Cleared of vegetation leaving only grasses and succulent ground covers and maintained at less than 100mm height. 		
Natural Values		
Vegetation	Maintained grassland with patches of modified <i>Eucalyptus amygdalina</i> forest and woodland on dolerite (TASVEG 4.0-unit DAD).	
Threatened flora, fauna and/or fauna habitat	No records of threatened flora or fauna from the reserve. Mature white gums provide potential habitat for the swift and blue winged parrots.	
Orchids	Non-threatened orchids present. Refer to reserve plan for orchid locations.	
Weeds (Declared, WoNS & Environmental)	Boneseed, Spanish heath and montpellier broom occur as saplings and seedlings in scattered locations. Other common environmental weeds present include gazania, African daisy, cocksfoot, panic veldt grass, freesia and garden geranium.	
Community values		Cultural values
<ul style="list-style-type: none"> passive recreation walkway linkage to foreshore track scenic views appreciation of nature 		<ul style="list-style-type: none"> historical interpretative sign regarding Samuel Thorne (part of convict trail) potential midden sites (no known previous surveys or published data available)



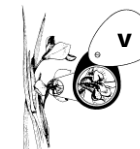
Summary of Management Actions (refer to Section 4 for more detail)			
Responsibility	Key Actions	Timing	Comment
Sorell Council	<u>Land use Planning</u> <ul style="list-style-type: none"> Council to investigate options to add the reserve to the LGA Reserves layer on LIST Map. Council to investigate planning options to ensure the long-term conservation and protection of the reserve. 	High priority	
	<u>Tree/vegetation management</u> <ul style="list-style-type: none"> Continue monitoring of hazardous trees as part of ongoing program. Any cut branches to be placed in vegetation zones for habitat value. Monitor health of mature white gums and engage an arborist as required. Slash open grassy areas to encourage native grasses. Liaise with NRE to undertake weed management within Crown land foreshore area beyond reserve boundary. 	<ul style="list-style-type: none"> Hazardous tree monitoring to be undertaken annually (August-September) or as recommended by SBLC or neighbouring residents. Slashing (outside of designated HMAs) to be undertaken in late January/February after native grass seed set. No slashing to occur in the orchid zone during flowering time (spring). 	<ul style="list-style-type: none"> No heavy machinery to be utilised in the reserve for slashing. No vehicles to be parked in the reserve. Slashing to cease in proposed revegetation areas once these areas have been planted and/or resources are available to maintain natural regeneration in these areas.
	<u>Fire management</u> <ul style="list-style-type: none"> Establish and maintain 2m wide HMA along northwest boundary and a 3m wide HMA along southeast boundary. The HMAs should be: <ul style="list-style-type: none"> Maintained in low fuel condition: Remove fallen limbs, sticks, leaf litter and bark litter. Remove pine bark and other flammable mulch. Prune low-hanging tree branches (<2m from the ground) to provide vertical separation between fuel layers. Cleared of vegetation leaving only grasses and succulent ground covers and maintained at less than 100mm height. 	<p>Council to establish HMAs (medium priority 2024-2025 financial year).</p> <p>Fire abatement inspections to occur annually (Sept-Dec)</p> <p>Letterbox drop to occur on an annual basis and prior to the bushfire season.</p>	<p>Council to keep record of the fire abatement date and time and share with stakeholders</p> <p>Opportunity to improve fire risk understanding through social media posts.</p> <p>Fire retardant species within the HMAs will reduce fire risk and help retain soil moisture levels rather than having bare ground in the HMAs.</p>



Summary of Management Actions (refer to Section 4 for more detail)			
Responsibility	Key Actions	Timing	Comment
	<ul style="list-style-type: none"> Continue fire abatement inspections as required. Council's Asset Management Register to be updated to include the recommended HMAs once installed. This recommendation includes creating awareness internally at Council of HMA locations and maintenance specifications. Undertake letterbox drop regarding bushfire risk and education around fire retardant species which occur in the reserve. The letter should highlight Council's responsibilities with managing the HMAs and emphasise the need to keep these areas free of garden waste/firewood etc. Council to also undertake discussion with adjacent landowners regarding maintaining their entire allotments as HMAs. 		
	<p><u>Infrastructure management</u></p> <ul style="list-style-type: none"> Maintain Council infrastructure and assets as required and respond to any incidence of vandalism when reported. Check and update contact details on the reserve nameboard as required. Council to consult with neighbouring properties and organise removal of any vehicle gates along the reserve boundaries. Council to maintain bollards to prevent unauthorised vehicle access to the reserve. 	<p>Annually (Sept-Dec)</p> <p>Inspection and maintenance of assets to be undertaken in conjunction with fire abatement inspection or as reported by SBLC/community.</p>	
	<p><u>Community Education</u></p> <ul style="list-style-type: none"> Undertake letterbox drop within local area regarding Council's policy on tree vandalism, the importance of Samuel Thorne reserve as well as responsible pet ownership. 	<p>Annually</p>	



Summary of Management Actions (refer to Section 4 for more detail)			
Responsibility	Key Actions	Timing	Comment
	<ul style="list-style-type: none"> Council to work on an engagement strategy which assists with managing relationships between SBLC and residents. 		
SBLC (with support from Council)	<p><u>Vegetation management and weed control</u></p> <ul style="list-style-type: none"> Create defined borders/edging to limit slashing and create vegetation zones (refer to reserve plan). Ongoing weed control, prioritise declared weeds and other invasive environmental weeds within vegetation zones. Revegetate areas indicated in reserve plan. Utilise native species listed in Appendix B. Ongoing maintenance will be required. Undertake plantings of canopy trees (white gum and black peppermint) to supplement mature trees near end of life. Report any signs of tree vandalism to council NRM officer. Monitor health of mature white gum tree and report any deterioration to council. Add known orchid species and additional flora species noted to list in Appendix B. Promote and establish fire retardant succulents in HMAs in consultation with council and adjacent landowners. 	<p>Annual working bee (July/Aug/Sept) or more frequently if resources are available.</p> <p>Council to post working bee dates on social media.</p> <p>Planting works and the removal of slashing from the revegetation zone (to encourage natural regeneration) should only be undertaken if resources are available to maintain these areas.</p>	<p>Notify Council of any maintenance works required.</p> <p>Seek assistance from Council for the removal of woody weed debris if required.</p> <p>Any revegetation works and planting of canopy trees to be undertaken in consultation with Council NRM officer to ensure views/fire risks are not compromised.</p> <p>Recommend planting 2-3 trees for each mature canopy tree present to allow for plant losses.</p>
Opportunities			
Education	Opportunity to set up camera traps to determine use of the site by marsupials. May also assist with determining the degree of rabbit infestation.		
Collaboration	Opportunity for Council depot staff to dedicate time on a regular basis to join SBLC during their working bees so as to gain a comprehensive understanding of the reserve with the long-term aim of assuming responsibility for the maintenance and upkeep of the reserve. This arrangement would foster and strengthen relationships between council and SBLC and allow SBLC to slowly expand their activities within other reserves once Samuel Thorne Reserve is at a stage/condition where it can be managed and maintained by council staff with minimal resources required.		
Note			



Summary of Management Actions (refer to Section 4 for more detail)			
Responsibility	Key Actions	Timing	Comment
While every effort will be made to consult with SBLC regarding the management of the reserve, as the owner and manager Council may undertake works independently as required if SBLC cannot be contacted and/or an agreement cannot be reached.			





Figure 1: Samuel Thorne Reserve Plan



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1. INTRODUCTION

1.1. BACKGROUND

North Barker Ecosystem Services (NBES) have been engaged by Sorell Council to prepare Reserve Management Plans for five of their reserves in the Southern Beaches area. These include Dodges Ferry Recreation Reserve, Parnella Reserve, Payeena Reserve, White Gums Reserve and Samuel Thorne Reserve. The plan will outline the goals, objectives and strategies for the effective management and conservation of each specific reserve. The plans have been prepared in consultation with Council as well as relevant stakeholders including Southern Beaches Landcare/Coastcare Inc. (SBLC), community, local residents, government agencies, etc.

This report has been structured to provide a concise summary of the reserve management plan which is supplemented by a more detailed report. The summary at the front of the document provides a tabulated series of management actions along with designated responsibilities and timeframes. This is to be utilised by landcare and council contractors/field staff to easily understand the values within the reserve and provides a concise list of actions with timing as well as a spatial plan attached. More detailed information regarding the reserve history, values and the management actions is provided in the body of the report.

Reserves such as Samuel Thorne which are located along a developed coastline are becoming more important for conservation and community connection to nature. Samuel Thorne Reserve also highlights important links to our past heritage and is one of only three public access points to the foreshore in Lewisham.

1.2. RESERVE DETAILS

Samuel Thorne Reserve ('Reserve') is approximately 0.3 ha and is located at 139 Lewisham Scenic Drive in Lewisham (Figure 2). The Reserve land is owned by Sorell Council and is zoned as Open Space (Zone 29) under the Sorell Local Provisions Schedule (LPS) of the Tasmanian Planning Scheme (TPS). The Reserve is not subject to the Natural Assets Code with the exception of the coastal edge which is included in the Waterway and Coastal protection overlay. The Reserve and entire foreshore area is covered by the bushfire-prone overlay.

The Reserve is bound by Lewisham Scenic Drive, residential properties and native vegetation along the foreshore which is designated crown land and zoned Environmental Management (zone 29) under the Sorell LPS. The reserve provides access to the Lewisham foreshore, one of only three public access points along this stretch of coast.

1.2.1. Brief history

The land was transferred to the community by Harry Jones when he subdivided in 1988. In 2004 community members successfully opposed the rezoning and selling of the reserve. In early 2006, after consultation with the Council, local residents expressed an interest in developing this land for passive recreational use. Access to the foreshore from the reserve was in disrepair, unsafe and prone to erosion. SBLC through the Southern Coastcare Association of Tasmania (SCAT) applied for and received a grant from the Australian Government (Envirofund) to construct a safe access via a combination of a formed walkway and earth and timber steps. Council supplied plans and applied to lease the land from the Crown. It provides access to the informal coastal walkway which extends from Gwynns Point in the north to Okines Beach in the south. In 2007 the reserve was officially opened by the then Governor of Tasmania Sir William Cox, at a community event jointly hosted by Southern Beaches Historical Society, SBLC, Sorell Landcare and Council.

In more recent years there has been conflict over the management of the site and illegal activities undertaken by adjacent residents including tree vandalism and unconsented use of the reserve for property access during construction which resulted in damage and modification to existing vegetation



and ground conditions. A Reserve Activity Plan was prepared in June 2019 by SBLC which outlined key issues and values of the reserve and provided detailed recommendations as well as designated tasks for council and SBLC. Expert advice was also sought from LMRS Pty Ltd as to review of the plan and outlines further rehabilitation recommendations in regards to the disturbed areas along the northern boundary. These recommendations and actions have been incorporated into this management plan where applicable.

SBLC Inc. undertake a working bee in the reserve at least once a year which generally focuses on weed management.

1.2.2. Council infrastructure

Council infrastructure includes fencing along the road and a gravel pathway into the reserve, name board, picnic table and bench seat within the open central part of the site. A rubbish bin and dog waste bags are also provided at the reserve entrance. Parking space for one car has been established on Lewisham Scenic Drive, in front of the bus stop. An interpretative sign has also been installed outlining the history of the early pioneer, Samuel Thorne. A fence runs along the boundary of council and crown land and from here the site drops off steeply towards the foreshore. This is where the timber walkway and steps have been constructed to access the foreshore.

1.3. **STAKEHOLDER CONSULTATION**

A consultation session was undertaken between stakeholders, Council staff and NBES on the 10th November 2023. The SBLG as well as nearby residents, indigenous groups, government agencies and NGOs were invited to attend and provide information on the reserve. An online feedback form was also set up on Council's website to allow further community input regarding the management of the reserve. Additional community information sessions and online feedback forms were held in July 2024 for comment on the draft report. Information received has been reviewed as part of the development of this final plan and is included in Appendix A.

The community feedback reflects a strong desire to balance ecological conservation with practical considerations such as fire safety and recreational use. Effective communication and collaboration with local groups and volunteers are seen as crucial for successful management. There is a clear emphasis on protecting native vegetation, managing invasive species, and maintaining the natural state of the reserves with minimal infrastructure. The feedback also highlights the importance of public engagement and education to foster a deeper appreciation for the ecological and historical value of the reserves. Additionally, the idea of creating a green network to connect the reserves and using LUPA zoning to protect them for future generations indicates a long-term vision for sustainable management and community involvement.

1.4. **OBJECTIVES**

The objectives of the Samuel Thorne Reserve Management Plan are to:

- Ensure the Reserve is sustainably managed to preserve and enhance its natural, cultural and social values.
- Identify areas suitable for bushfire HMA and include recommended prescriptions to be undertaken as part of the reserve management plan.
- Identify and delegate priority management activities to be undertaken within the Reserve by Council, community groups and/or volunteers as resources become available.
- Increase connectivity between the reserve and foreshore vegetation.
- Promote the history of Samuel Thorne and connect residents and the wider community with stories from our past.
- Identify opportunities for community engagement and collaboration.



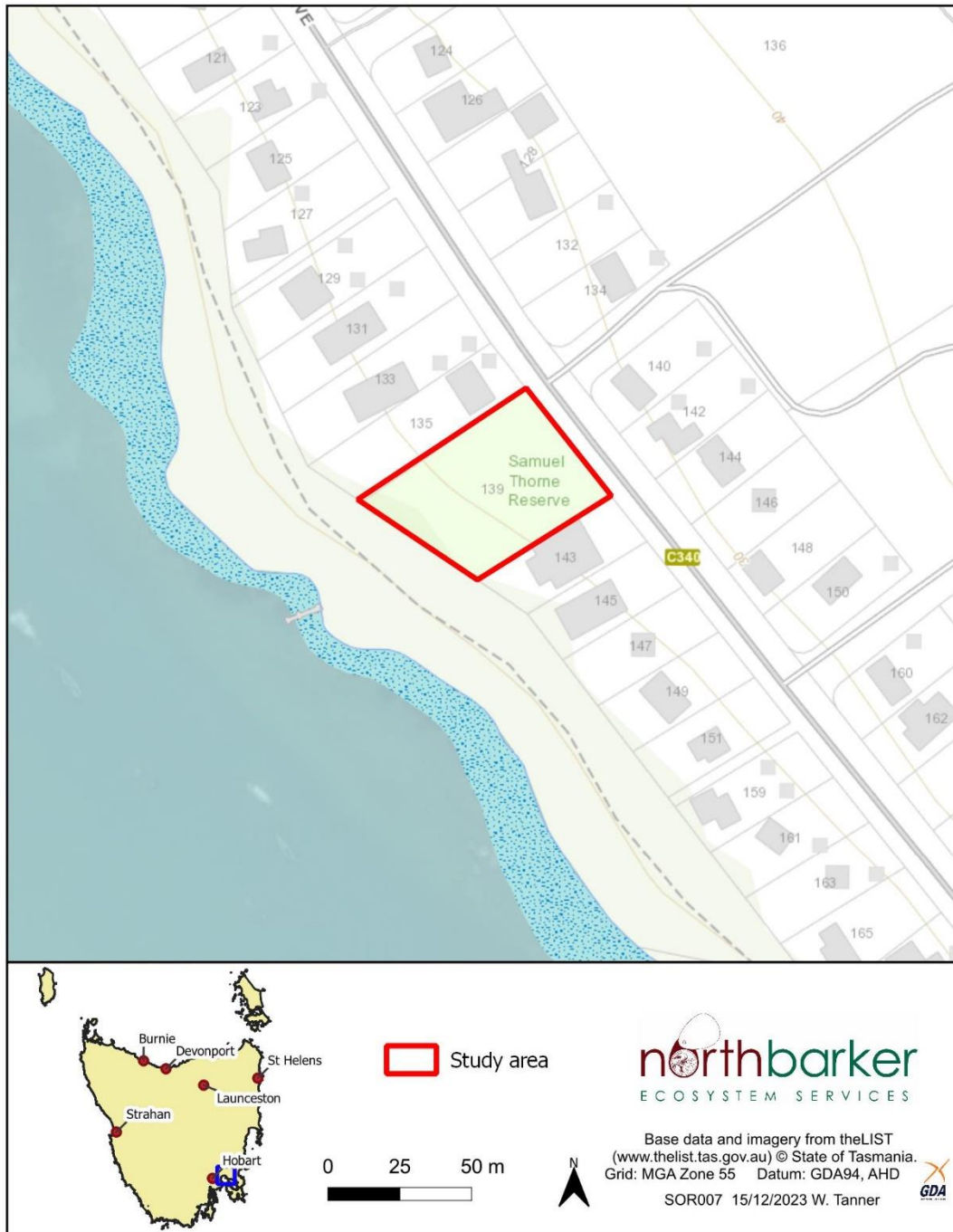


Figure 2. Location of Samuel Thorne Reserve

2. RESERVE VALUES

This section describes the natural, community and cultural values of the reserve. Information in this section was collected during field investigations in November-December 2023 and through the stakeholder consultation.

2.1. NATURAL VALUES

2.1.1. Vegetation

Comprises patches with native trees and shrubs amongst a maintained grassland. One large (>100cm DBH) *Eucalyptus viminalis* (white gum) is located within the reserve and a second (~90cm DBH) is located just beyond the fenceline on Crown land. Three smaller *Eucalyptus amygdalina* (black peppermint) with DBH 30-50cm occur along the top part of the reserve adjacent to the road. Other native trees and shrubs present include *Dodonaea viscosa*, *Allocasuarina verticillata*, *A. littoralis*, *Acacia mearnsii*, *Bursaria spinosa* and *Banksia marginata*. The understorey in unslashed areas comprises a mix of native and exotic grasses and graminoids including *Lomandra longifolia*, *Poa* sp., *Dactylis glomerata*, *Themeda triandra*, *Ehrharta erecta*, *Dianella brevicaulis* and *Briza maxima*. Scattered herbs and low shrubs include *Bossiaea cinerea*, *Astroloma humifusum* and *Hibbertia riparia*. The exotic *Gazania* is common throughout slashed areas and *Freesia* is common in patches. African daisy, geranium and succulents also occur, mostly along the northern boundary. A full species listed is provided in Appendix B.

TASVEG 4.0 has mapped foreshore vegetation along the edge of the reserve as FAG (Agricultural land) and vegetation within the reserve as FUR (Urban areas). Site inspections reveal vegetation along the foreshore to be *Allocasuarina verticillata* forest (NAV). Vegetation within the reserve is highly modified. Remnant white gums, the presence of black peppermint and the geology of the site being dolerite suggest the reserve may have comprised *Eucalyptus amygdalina* forest and woodland on dolerite (DAD). This vegetation community is not listed as threatened under the Tasmanian *Nature Conservation Act 2002* (NCA) or the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBCA).





Plate 1: Vegetation along Lewisham Scenic Drive showing mature black peppermint and native trees and shrubs



Plate 2: View of open area looking north towards mature white gum. Orchid area in foreground.



Plate 3: Pathway towards foreshore with adjacent shrubland

2.1.2. Threatened flora

No threatened flora species listed under either the Tasmanian Threatened Species Protection Act (TSPA) or the Commonwealth Environment Protection and Biodiversity Conservation Act 1999 (EPBCA) were observed during the survey. In addition, no previous records of threatened flora occur within 500m of the reserve based upon data from the Natural Valus Atlas¹.

A number of orchid species have been recorded by SBLC including *Diuris sulphurea* (tiger orchid) and *Thelymitra ixioides* (spotted sun-orchid). No threatened orchids are known to occur but further survey during suitable time and favourable conditions are recommended.

2.1.3. Fauna habitat

While vegetation along the foreshore provides some connectivity, the reserves position amongst residences and predominately cleared agricultural land to the east, is likely to limit fauna use to more mobile species such as birds and bats. The two mature white gum trees provide potential nesting habitat for hollow dependent species. Shrubs and graminoids/grasses provide some shelter and nesting opportunities for small birds. The small size of the reserve, limited vegetation cover and isolated position in the landscape is likely to limit larger marsupials utilisation of the site. Evidence of rabbits was noted.

2.1.4. Threatened fauna habitat

No known records of threatened fauna listed under the TSPA or the EPBCA occur within the reserve or within 500m of the reserve based upon the Natural Valus Atlas². Habitat trees may provide potential nesting opportunities for the swift parrot. White gums provide foraging and nesting habitat for the forty-spotted pardalote although there are no records of this species in the area. The Eastern barred

¹ Department of Natural Resources and Environment (2023)

² Department of Natural Resources and Environment (2023)

bandicoot is known to inhabit periurban environments and could potentially utilise habitat in the reserve as it favours open grassy areas with nearby dense vegetation cover for shelter.



Plate 4: Large mature white gum in the reserve provides potential nesting habitat for the threatened swift parrot.

2.1.5. Introduced flora

A total of 11 exotic species were recorded within the Reserve. Weeds are common throughout slashed areas and amongst clumps of vegetation, particularly around disturbed edges. Common exotics noted include gazania, African daisy, freesia and exotic grasses, panic veldt grass, cocksfoot and greater quaking-grass. Three declared weeds were recorded in the reserve including boneseed, montpellier broom and Spanish heath. All species were noted to be smaller saplings and seedlings. Locations are

shown

in



Figure 1. Garden escapees noted include Cootamundra wattle, garden geranium and a succulent. Additional invasive species noted beyond the reserve boundary within foreshore vegetation on Crown

land included: winter euryops (cliff area), boneseed (cliff area), sweet pittosporum (waters edge) and cotoneaster (waters edge).

Declared weeds recorded are listed as Zone B for the Sorell Council area under the Tasmanian *Biosecurity Act 2019*. Gazania, sweet pittosporum and cotoneaster are also listed as priority environmental weeds under the Sorell Weed Strategy (draft October 2023).



Plate 5: Spanish heath noted in the reserve



Plate 6: Montpellier broom observed flowering in the reserve

2.2. OTHER VALUES

2.2.1. Community values

Superb views of the Southern Beaches area, Seven Mile Beach spit, the Pitt-Water Ramsar Site and Mount Wellington are possible from the high side of the reserve. The reserve provides 'green space' and passive recreation opportunities for local residents as well as for the enjoyment of the natural environment for all visitors to the Lewisham area. The reserve provides public access to the foreshore, boat sheds and foreshore trail.

2.2.2. Cultural values

The reserve is named after Samuel Thorne who was one of the original settlers of Lewisham in the early 1800s. An interpretative sign has been installed in the reserve with information about Samuel Thorne. However, stakeholder feedback from the Southern Beaches Historical Society, has indicated that the yellow convict sign is not appropriate as it is not part of the established convict trail and indicates an incorrect historical reference.

Stakeholder feedback noted a potential midden site around the base of the mature *Eucalyptus viminalis* which was exposed by the adjacent resident during their construction and use of the reserve for access. It is not known whether any previous heritage surveys have been undertaken in the reserve and sensitive indigenous sites are generally not published to ensure their protection. Middens are likely to be widespread in near coastal land systems and may occur in the reserve. In the event that an Aboriginal

artefact is inadvertently uncovered, an Unanticipated Discovery Plan³ should be implemented immediately and the items reported to Aboriginal Heritage Tasmania for advice.



Plate 7: Interpretative sign located in the reserve with information about Samuel Thorne.

³ [UDP.pdf \(aboriginalheritage.tas.gov.au\)](https://www.aboriginalheritage.tas.gov.au/udp.pdf)

3. MANAGEMENT ISSUES AND THREATS

The following management issues have been identified through the site inspection and stakeholder consultation process:

- Inappropriate use of the reserve for access to residential property along the northern boundary during construction. This has led to loss of vegetation, compaction of the soil around the white gum Tree Protection Zone (TPZ), weed encroachment, contamination with concrete runoff. Compliance in relation to this matter was not adequately addressed at the time. Subsequent advice was sought by Council and rehabilitation of this area was required by the adjacent land owner.
- Health of the mature white gum
- Inappropriate slashing regime: encourages exotic species, not allowed native grasses to set seed, potential to impact negatively upon orchid populations.
- No definition between zones (maintained open space/firebreaks/native vegetation)
- Tree vandalism within the reserve. Community feel there has been inadequate response by Council to address illegal activity and vandalism in the past. Community volunteers seek ongoing support from Council to manage the reserve.
- Vandalism of infrastructure in the reserve including signs, bollards etc. One bollard noted missing during the site surveys which is allowing unauthorised vehicle access to reserve.
- Conflict over management of the reserve in the past between Council, SBLC and local residents. Lack of communication between interested stakeholders.
- Ongoing weed management and encroachment of garden escapees.
- Lack of management of weeds on adjacent crown land.
- Maintenance/management of vegetation for views.
- Competing interest of the car park being used as a designated bus stop and by neighbours.
- The historical sign installed by council is not part of the established convict trail and indicates an incorrect historical reference.

4. MANAGEMENT ACTIONS AND OPPORTUNITIES

Land use Planning

- Council to investigate options to add the reserve to the LGA Reserves layer on LIST Map.
- Council to investigate planning options to ensure the long-term conservation and protection of the reserve.

Vegetation management

- Define zones of vegetation to limit slashing. This can be done using fallen branches etc to create a defined edge. This will assist Council's work crew by establishing a limit to their slashing activities and defining those zones to be retained as native vegetation which will be hand weeded by the landcare group.
- Manage open areas to encourage native grasses. Slashing or mowing to be undertaken after completion of native grass seeding (late January to February).
- Encourage regeneration and supplement with plantings (if required) along lower fenceline on reserve side to increase connectivity to foreshore vegetation. This area is currently slashed. If resources are available to manage this area, then slashing should be restricted and the area allowed to naturally regenerate. Undertake weed control and supplementary plantings where natural regeneration is lacking. Further opportunity to revegetate and consolidate vegetation zones particularly around edges and along the SE boundary. Limit the planting of dense shrubs/groundcovers within the orchid zone. Revegetation works should only be undertaken if sufficient resources are available to undertake ongoing regular maintenance of plants. Any planting works adjacent to the firebreak should utilise fire retardant species. No planting to be undertaken in firebreak zones.

Tree management:

- Council to continue general hazard assessment of mature trees as part of Council's ongoing maintenance program.
- Manage the *Eucalyptus viminalis* for its long-term survival, within reason, leave fallen limbs and bark in the fall zone for habitat (outside firebreak), maintain and protect the soil around its root zone.
- Engage an arborist if the health of the tree deteriorates to assess the long-term health of the *E. viminalis* and provide the report to stakeholders.
- Undertake supplementary planting of *E. viminalis* and *E. amygdalina* to support replacement of older mature trees as they reach their life expectancy. Many of these smaller reserves have a limited number of mature canopy trees and the loss of even one or two can have a significant impact upon the amenity of the reserve and the condition of the understory vegetation. Planting 2-3 white gums/black peppermints in the vicinity of older trees now will assist with reducing these impacts in the long term. Plantings should be undertaken in consultation with council and should not increase the fire risk.

Weed management:

- SBLC to continue ongoing weed control focusing on the eradication of declared weeds and controlling invasive environmental weeds. Weed works should focus on vegetation zones, working from the inner areas outwards.
- Recommended control techniques for declared and priority weeds are outlined in Appendix D.
- SBLC tasks should focus on hand removal and cut and paste techniques. Any spraying required should be undertaken by trained contractors with plant identification skills.
- Council to collaborate with NRE to undertake weed control within the adjacent foreshore vegetation. Invasive species present include boneseed, winter euryops, sweet pittosporum and cotoneaster.

Fire management:

The following recommendations are from the Fire Risk Consultants report:

- Council establishes and annually maintains a 2m wide hazard management area within the reserve adjacent to 135 Lewisham Scenic Drive so that fuels are reduced sufficiently, and other hazards are removed such that the fuels and other hazards do not significantly contribute to bushfire attack. The hazard management area should be:
 - 2m wide x the entire northwest boundary of the reserve (refer to Figure 1 for location);
 - Maintained in low fuel condition:
 - Remove fallen limbs, sticks, leaf litter and bark litter.
 - Remove pine bark and other flammable mulch.
 - Prune low-hanging tree branches (<2m from the ground) to provide vertical separation between fuel layers.
 - Cleared of vegetation leaving only grasses and succulent ground covers and maintained at less than 100mm height.
- Council establishes and maintains perpetually a 3m wide hazard management area within the reserve adjacent to 143 Lewisham Scenic Drive so that fuels are reduced sufficiently, and other hazards are removed such that the fuels and other hazards do not significantly contribute to bushfire attack. The hazard management area should be:
 - 3m wide x the entire southeast boundary of the reserve (refer to Figure 1 for location);
 - Maintained in low fuel condition:
 - Remove fallen limbs, sticks, leaf litter and bark litter.
 - Remove pine bark and other flammable mulch.
 - Prune low-hanging tree branches (<2m from the ground) to provide vertical separation between fuel layers.
 - Cleared of vegetation leaving only grasses and succulent ground covers and maintained at less than 100mm height.
- It is recommended that the property owners of 135 Lewisham Scenic Drive & 143 Lewisham Scenic Drive continue to maintain their entire allotments as hazard management areas (areas of low fuel).
- Council's Asset Management Register is updated to include the recommended hazard management areas once installed. This recommendation includes creating awareness internally at Council of hazard management area locations and maintenance specifications.

In addition, the following recommendations are made:

- Council to continue fire abatement inspections at the start of the bushfire season in September to December.
- Maintain bollards for emergency access to the reserve.
- Encourage native grasses in the firebreaks and low flammability species (such as *Myoporum insulare*, *Atriplex cinerea*, *Carpobrotus rossii*, *Rhagodia candolleana*, *Tetragonia implexicoma*) in adjacent areas of vegetation.

Orchid management:

- Continue to undertake hand removal of exotic species within the orchid area. Undertake selective removal of shrub saplings and groundcovers as required in order to retain favourable orchid habitat in this area.
- SBLC, with assistance from Council or consultant, to undertake survey of orchid species at appropriate time and add recorded species to the list in Appendix B. Extent of orchid zone to be confirmed and outlined on reserve plan.

- No slashing to be undertaken in the orchid zone during flowering times (generally spring, dependent upon species present⁴).
- Council to investigate options for reducing the threat of herbivory from feral animals such as rabbits.

Infrastructure management:

- Council to continue maintenance of infrastructure and assets within the reserve. This includes responding to reports of vandalism.
- Council to replace the bollard missing from the accessway off Lewisham Scenic Drive to prevent unauthorised vehicle access to the reserve. This access should be maintained for emergency vehicle and arborist access.
- Avoid use of vehicles and heavy machinery in the reserve. All Council equipment is to be thoroughly cleaned in accordance with the standard operation procedure for hygiene protocol to ensure Depot minimize the risk of weed spread between areas.
- The existing sign should be replaced and could provide more informative information for the interest of the community and visitors.

Recreational activities

- Council to investigate option to install a sign near the entrance of the reserve which highlights linkage to foreshore track.

Community engagement

- Opportunity to set up camera traps to determine use of the site by marsupials. May also assist with determining the degree of rabbit infestation and associated impacts, particularly on orchids.
- Council to work on an engagement strategy which assists with managing relationships between SBLC and residents.

⁴ Refer to Flowering Times of Tasmanian Orchids: A practical guide for field botanists (Wapstra 2018)

APPENDIX A - STAKEHOLDER CONSULTATION

Summary and Analysis of Community Feedback for Samuel Thorne Reserve.

1. Conservation and Ecological Restoration
 - Fauna and Flora: Emphasis on maintaining a balance between conservation of wildlife and ensuring fire safety
 - Native Vegetation Protection: Suggestions for replanting native species and ensuring they are not overshadowed by invasive plants
2. Fire Safety
 - Fire Risk Management: Multiple respondents highlighted the importance of managing fire risks through careful vegetation management, maintaining fire breaks, and addressing the increased BAL Ratings affecting insurance policies.
3. Community Involvement and Communication
 - Volunteering Efforts: Recognition of volunteer contributions and a call for better follow-up and support to ensure sustainability of volunteer efforts.
 - Community Ownership and Conflict Management: Concerns about conflicts between users, neighbours, and groups. Suggestions for increasing awareness of the reserves' existence and purpose to foster greater community ownership, protection, and volunteer engagement.
4. Infrastructure and Accessibility
 - Minimal Man-Made Structures: Preference for maintaining the natural state of reserves with minimal infrastructure, except for necessary amenities like picnic tables and walking trails.
 - Signage: Need for updated and accurate signage that reflects historical and ecological information
5. Aesthetic and Recreational Values
 - Scenic Value: Appreciation for the scenic views provided by some reserves and the importance of preserving these open spaces
6. Green Network and Zoning:
 - Green Network Concept: Suggestions to consider the reserves as part of a broader green network, potentially linking them with other private and public lands to create a green web. This network could grow over time and include other smaller reserves.
 - Zoning for Protection: Questions about the possibility of protecting the reserves through special local government reserve zoning to ensure their preservation for future generations.

Feedback received at the community meeting on 10th November 2023:

- New Management Plan and Report prepared by Sally and Chris Johns and Gwen Egg in 2019. (report provided to NBES)
- Gazania prevalent through reserve
- Incredible orchid diversity (incl. *Diurus sulphurea*) – needing management prescriptions
- Adjacent property owners clearing the reserve and cutting trees for views - needs pamphlets for ecological needs of wildlife and land for wildlife registration.
- Why have the neighbours installed a vehicle gate on their boundary with the reserve?
- Aboriginal heritage midden site below big *Eucalyptus viminalis* tree exposed by residents of illegal activity.

Feedback received online regarding Samuel Thorne Reserve

-
- Continued care, ecological restoration by Southern Beaches Coastcare Landcare and acknowledgement of its Threatened vegetation community status and more formal protection of its reservation status. Also with installations to encourage public engagement and education about sharing, respecting and valuing the wildlife habitat and threatened Eucalyptus ecosystem floras.
-
- This reserve is wonderful. It allows residents who do not own waterfront properties to enjoy the awesome views.
 - Removal of weeds and feral species.
-
- We would like to be involved by letting the Landcare groups in the area know of the planning process and how they can be involved in on ground projects.
 - To ensure the reserve meets conservation for fauna and flora whilst being balanced with fire regulations and safety for residents.
 - To ensure that the noxious weeds that currently exist are removed and gazetted regular Council maintenance occurs so that the condition of the reserve meets the Management Plan in place or adopted under a new management plan so that the area can be enjoyed by the public.
 - Currently Southern Beaches attend very sporadically for 2-3 hours for a working bee where they remove some surface weeds and plant additional plants with no follow up to ensure plantings survive causing greater fire hazard for surrounding residents.
 - I would like to see a balance struck.
 - Fire Risk: Given recent discussions and focus on fire prevention / load I would like to see a Management Plan that encompasses protection of adjacent properties given the recent dramatic increase in BAL Ratings in the area as this could dramatically affect the local residents insurance policies.
 - I believe the existing Management Plan notes there are to be no new plantings to occur over 100mm in height ie. ground cover only but note in the past decade there have been groups randomly planting she oaks and other species which has now created a path for the fire to track from the foreshore to adjacent residences.
 - Please keep me updated and included Management Plan progress.
-
- It was always the intention to leave this reserve as a natural reserve with minimum man-made structures...one picnic table. There have been problems in the past with the neighbours clearing and removing trees and vegetation. The neighbours were given keys to remove the bollards on the firebreak and gain access to the rear of their property they have now erected a fence and as far as I am aware the problems have been addressed. I would like to see weeds removed and a more inviting native vegetation entrance to the reserve. I have written to the council about the sign that was erected on site when the reserve was named. The sign with a yellow convict plinth was erected by the council even though it is not part of the convict trail established by the Clarence Council. I have requested that this should be removed and a new sign erected in consultation with the Southern Beaches Historical Society. The sign has weathered badly and there is also a spelling mistake which was pointed out at the time of installation.
-
- Hello, I became involved with the Samuel Thorne reserve when it was made known that the prior owner had donated this land to the community with anticipation it would remain undeveloped and vacant land. This has proved to be an asset in providing Scenic Drive with an open window looking out over Pittwater and beyond, otherwise hidden by the development on all other properties along this foreshore. This land has remained as the donor left it with very few structures to change its own environment and is a useful open space, also enabling access to the foreshore, all reflecting a small picture of the early days of Lewisham.

- This Reserve has also given the opportunity to remember early settlement of the early pioneers, represented by the Thorne family who were closely connected to the area for many years. However the Historical Sign naming the reserve, needs to be updated and the yellow convict sign should be removed as it indicates an incorrect historical reference. A replacement could provide more informative information for the interest of the community and visitors. It is a well recognised reserve in the community and I am sure appreciated for what it is with ongoing Council maintenance and protection. Thank you for the opportunity to comment. Regards, Judy Pearson, Member Southern Beaches Historical Society.

Feedback received online following exhibition of the draft report:

Continued care, ecological restoration by Southern Beaches Coastcare Landcare and acknowledgement of its Threatened vegetation community status and more formal protection of its reservation status. Also with installations to encourage public engagement and education about sharing, respecting and valuing the wildlife habitat and threatened Eucalyptus ecosystem floras.

This reserve is wonderful. It allows residents who do not own waterfront properties to enjoy the awesome views

Removal of weeds and feral species

I will not be able to attend the meeting on the 11th at the surf club because I will be in Melbourne. In the management plan it mentions Sorell School students will assist with weed removal and planting. I am now retired and there is unfortunately no interest from staff to continue the environment and history projects undertaken by the students that were established when I was teaching at the Sorell School. As a founding member of the Southern Beaches Historical Society I would support the removal of the yellow convict plinth and existing sign and the installation of a new sign. Maybe a community event involving all stake holders and students from Dodges Ferry School could be held when a new sign would be installed. I would also like to see a more informative sign at the entrance to the reserve and a more inviting landscaped entrance.

APPENDIX B - VASCULAR FLORA SPECIES LIST

Status codes:

ORIGIN

i - introduced
 d - declared weed WM Act
 en - endemic to Tasmania
 t - within Australia, occurs only in Tas.

NATIONAL SCHEDULE

EPBC Act 1999
 CR - critically endangered
 EN - endangered
 VU - vulnerable

STATE SCHEDULE

TSP Act 1995
 e - endangered
 v - vulnerable
 r - rare

Name	Common name	Status
DICOTYLEDONAE		
AIZOACEAE		
<i>Carpobrotus rossii</i>	native pigface	
ASTERACEAE		
<i>Dimorphotheca fruticosa</i>	trailing daisy	i
<i>Gazania linearis</i>	tufted gazania	i
CASUARINACEAE		
<i>Allocasuarina littoralis</i>	black sheoak	
<i>Allocasuarina verticillata</i>	drooping sheoak	
CHENOPODIACEAE		
<i>Atriplex cinerea</i>	grey saltbush	
<i>Rhagodia candolleana subsp. candolleana</i>	coastal saltbush	
CRASSULACEAE		
<i>Aeonium arboreum</i>	tree aeonium	i
ERICACEAE		
<i>Erica lusitanica</i>	spanish heath	d
<i>Styphelia humifusa</i>	native cranberry	
FABACEAE		
<i>Acacia baileyana</i>	cootamundra wattle	i
<i>Acacia dealbata subsp. dealbata</i>	silver wattle	
<i>Acacia longifolia</i>	coast wattle	
<i>Acacia mearnsii</i>	black wattle	
<i>Bossiaea cinerea</i>	showy bossiaea	
<i>Genista monspessulana</i>	canary broom	d
GERANIACEAE		
<i>Pelargonium Xdomesticum</i>	garden geranium	i
MYRTACEAE		
<i>Eucalyptus amygdalina</i>	black peppermint	
<i>Eucalyptus viminalis</i>	white gum	
PITTOSPORACEAE		
<i>Bursaria spinosa subsp. spinosa</i>	prickly box	
POLYGALACEAE		
<i>Comesperma volubile</i>	blue lovecreeper	

PROTEACEAE

Banksia marginata silver banksia

SAPINDACEAE

Dodonaea viscosa subsp. spatulata broadleaf hopbush

MONOCOTYLEDONAE

AMARYLLIDACEAE

Agapanthus praecox agapanthus i

ASPARAGACEAE

Lomandra longifolia sagg

ASPHODELACEAE

Bulbine bulbosa golden bulbine-lily

CYPERACEAE

Lepidosperma concavum sand sword sedge

HEMEROCALLIDACEAE

Dianella brevicaulis shortstem flaxlily

IRIDACEAE

Freesia hybrid freesia i

POACEAE

Austrostipa aphylla leafless speargrass en

Briza maxima greater quaking-grass i

Dactylis glomerata cocksfoot i

Ehrharta erecta panic veldtgrass i

Poa labillardierei silver tussockgrass



Themeda triandra kangaroo grass




PTERIDOPHYTA



DENNSTAEDTIACEAE

Pteridium esculentum subsp. esculentum bracken

APPENDIX C – PRIORITY WEED SPECIES AND RECOMMENDED CONTROL TECHNIQUES

Common name	Species	Status	Picture	Recommended control technique
<u>DECLARED WEEDS</u>				
Boneseed	<i>Chrysanthemoides monilifera</i>	Declared (Zone B) WONS		Hand pull seedling. Cut and paste larger plants. Fruit should be bagged and disposed of responsibly.
Montpellier broom	<i>Genista monspessulana</i>	Declared (Zone B) WONS		Hand pull seedling. Cut and paste larger plants. Fruit should be bagged and disposed of responsibly.

<p>Spanish heath</p>	<p><i>Erica lusitanica</i></p>	<p>Declared WONS</p>		<p>Hand pull seedling. Cut and paste larger plants. Fruit should be bagged and disposed of responsibly.</p>
<p><u>OTHER ENVIRONMENTAL WEEDS</u></p>				
<p>Winter euryops</p>	<p><i>Euryops abrotanifolius</i></p>			<p>Hand pull or dig out smaller seedlings. Cut and paste larger plants.</p> <p>Note: this species is present on the cliff areas of Crown land along the foreshore. Liaise with Council regarding control. Access to some plants on cliff edges may require specialised contractors with abseiling equipment.</p>
<p>Gazania</p>	<p><i>Gazania</i> sp.</p>	<p>Listed as an environmental weed under Sorell Weed Strategy</p>		<p>Hand pull, dig or spot spray. Mowing should be undertaken prior to flowering.</p>

<p>Cotoneaster</p>	<p><i>Cotoneaster</i> sp.</p>	<p>Listed as an environmental weed under Sorell Weed Strategy</p>		<p>Hand pull seedlings. Cut and paste larger plants. Note: species located on the foreshore of Crown land.</p>
<p>Sweet pittosporum</p>	<p><i>Pittosporum undulatum</i></p>	<p>Listed as an environmental weed under Sorell Weed Strategy</p>		<p>Hand pull seedlings. Cut and paste larger plants. Note: species located on the foreshore of Crown land.</p>