

Gorse Eradication Strategy for Seymour Wetlands Restoration



Seymour Wetlands looking south April 2015

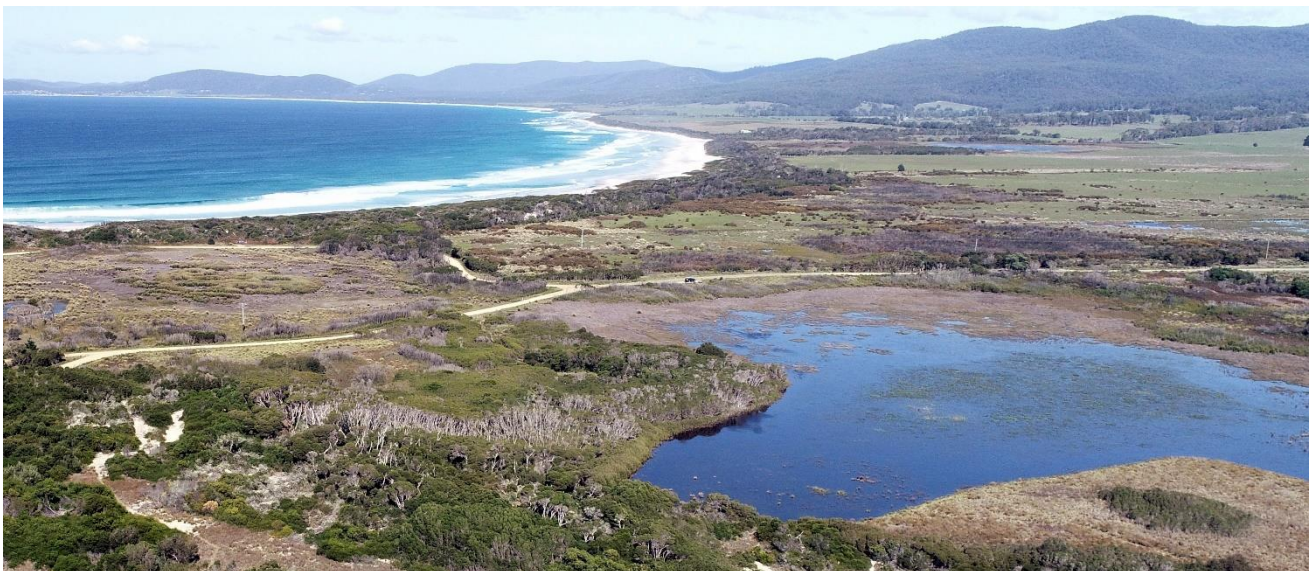
Draft Vol. 2 – Prepared by PWS, SCAGI and NEBN - 8 Oct 2022

all images are sourced from the SCAGI website

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Glossary

BODC	Break O’Day Council
CA	Conservation Area
EON	Earth and Ocean Network
NEBN	North East Bioregional Network Inc
NRE Tas	Department of Natural Resources and Environment, Tasmania
NRM	Natural Resource Management
NVA	Natural Values Atlas
PC	Phytophthora cinnamomi
PWS	Parks and Wildlife Service
RAA	Reserve Activity Assessment
SCAGI	Seymour Community Action Group Inc
VPP	Volunteer Program Plan for SCAGI
WCSR	Winifred Curtis Scamander Reserve
WDMP	Weed and Disease Management Plan
WHS	SCAGI's WHS - Job Risk Assessment Document
WMC	Waste Management Centre

View over the Seymour Freshwater Wetland looking west



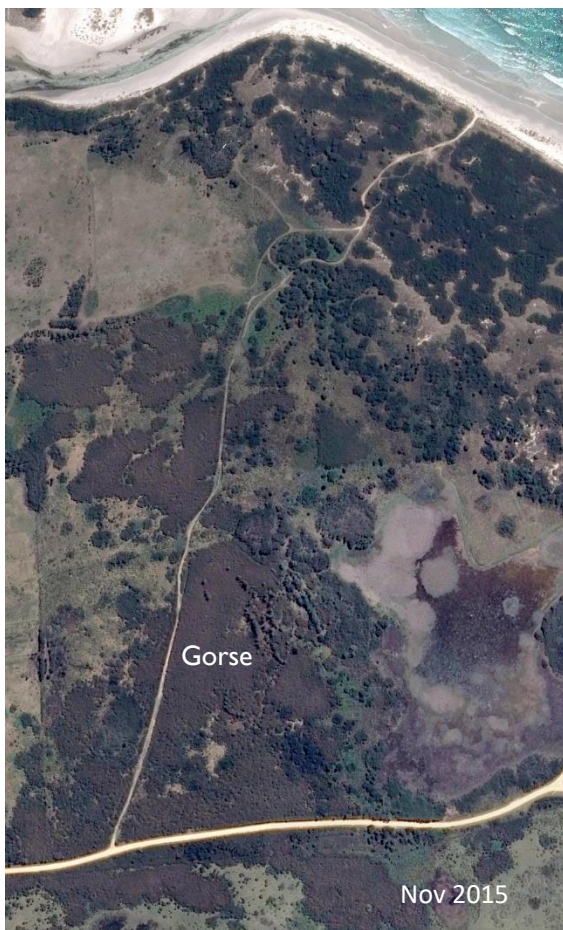
This project has been undertaken on the lands of the leetermairemener people, Long Point was referred to as wuggatena poenta and Doctors Creek as wuggatena menennya

The Seymour Community Action Group Inc acknowledges and pays respect to the palawa (Tasmanian Aboriginal) people as the Traditional Owners of lutruwita (Tasmania).

We remember and honour their Elders, past and present and Tasmanian Aboriginal people as the continuing custodians of the rich cultural heritage of lutruwita.

This document forms the 2nd Volume of the Gorse Eradication Strategy for Seymour Wetlands Restoration for the 5-year period December 2022 through to December 2027.

Volume 1 of the Appendices ([Appendix A](#)) covers the period from May of 2017 through to November of 2022 and provides the history and strategic foundations of this initiative by the members of this small-but-mighty Tasmanian east-coast community of Seymour.



before & after



Site Description and Background

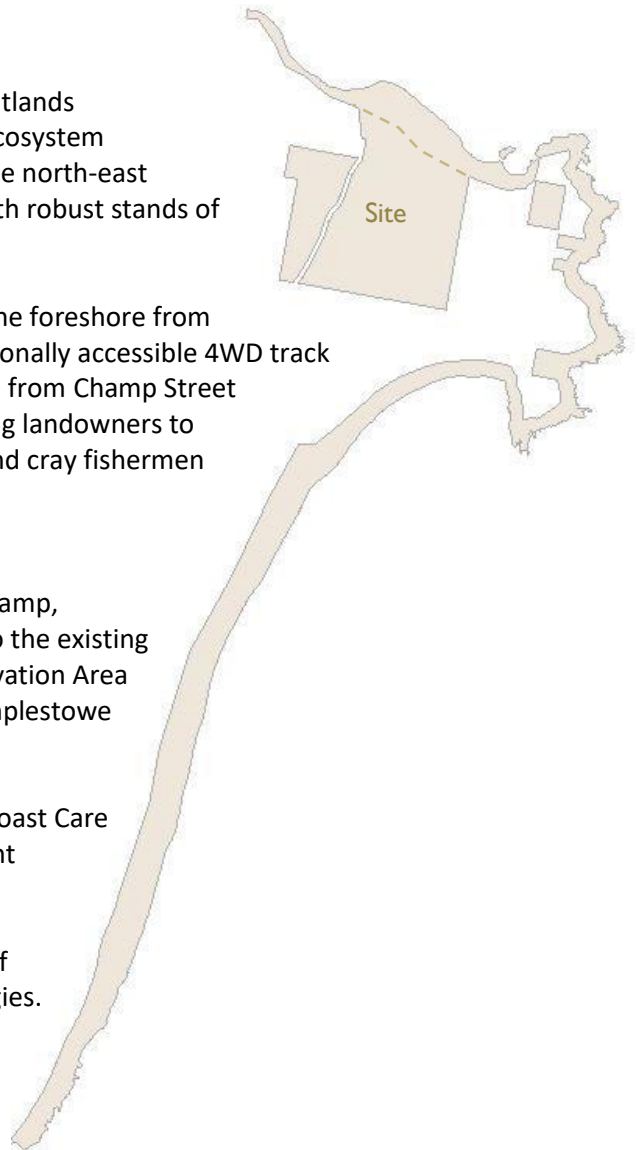
The site consists of 54 ha of coastal heath, freshwater wetlands and coastal grassland. It is part of an important coastal ecosystem with a large saltwater lagoon and a saltwater marsh to the north-east and further wetlands to the south. The area is dotted with robust stands of *Melaleuca ericifolia*.

The site is an important corridor which creates a link to the foreshore from the hinterland. Seymour Wetland is intersected by a seasonally accessible 4WD track that delineates the site from east to west. The track runs from Champ Street through to Templestowe Beach and is utilised by adjoining landowners to access their private property and by recreational users and cray fishermen for access to the beach.

In June of 2022 the SCAGI celebrated a major milestone. The site, 54 ha of crown land then known as Seymour Swamp, received re-classification of its status and was annexed to the existing foreshore Seymour Conservation Area. Seymour Conservation Area now comprises a total of 115 ha which extends from Templestowe Lagoon in the north to the Douglas River in the south.

Requests for reclassification of the site by the Seymour Coast Care Group can be traced backwards as far as 2004. The recent reclassification marks a significant achievement by SCAGI and recognises the generous contribution made by the community through their participation in over six years of diligent weed eradication works and revegetation strategies.

It also highlights SCAGI's ongoing commitment towards the next phase of the project, in conjunction and with the support of the Tasmanian Parks and Wildlife Service.



Marking the restoration and conservation of the Seymour Wetlands site.



Aims & Objectives

- To restore and sympathetically enhance the endemic values of the wetland site with respect to its integration with the adjoining Seymour Conservation Area
- To provide appropriate safe access and opportunity for community stewardship and appreciation of coastal areas and values
- To foster community engagement, pride and health through participation in environmental restoration works
- To continue to work collaboratively with the Parks and Wildlife Service to preserve, protect and manage Tasmania's reserved lands, to enrich our community.





Environmental Characteristics

Landscape

- Links between the headland, dunes, lagoon system and grasslands
- Adjacent land includes public reserves, road reserves, powerlines, residential and rural allotments
- Seasonal 4WD access track through the site is at times impassable due to erosion and debris caused by inundation
- A Crown License agreement provides private access rights
- The beach access point has been classified as “day use only”
- A dog management zone applies to an area of beach north of Long Point and is linked by the seasonal 4WD track

Wetland

- Melaleuca ericifolia swamp forest (NME)
- Freshwater aquatic sedgeland and rushland (ASF)
- Australian grayling *Prototroctes maraena*
- Green and gold frog *Litoria raniformis*
- Pacific Golden Plover *Pluvialis fulva*
- Sharp-tailed Sandpiper *Calidris acuminata*
- Ruddy Turnstone *Arenaria interpres*
- Southern Swampgrass *Amphibromus nessii*
- Leafy Flatsedge *Cyperus lucidus*
- Fluctuation of water levels affects rate of acidification of surrounding landscape

Native Vegetation

- Acacia longifolia and coastal scrub
- Grass Tree *Xanthorrhoea australis*
- Swamp Paperbark *Melaleuca ericifolia*
- Dagger Needlebush *Hakea teretifolia*
- Kangaroo Grass *Themeda triandra*
- Lowland Spiral Orchid *Spiranthes australis*
- Mossy Pennywort *Hydrocotyle muscosa*
- Common Heath *Epacris impressa*
- White Flag Iris *Diplarrena moraea*
- Smooth Parrotpea *Dillwynia glaberrima*
- Milkmaids *Burchardia umbellate*
- Sword Sedge *Lepidosperma concavum*
- Erect Guineaflower *Hibbertia riparia*
- Rosy Heathmyrtle *Eurymyrtus ramosissima*

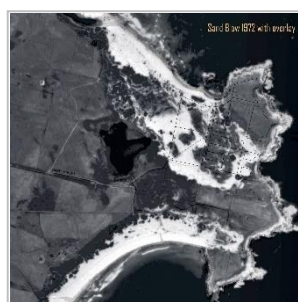
Introduced Vegetation

Declared Weeds

- African Boxthorn *Lycium ferocissimum*
- Blackberry *Rubus fruticosus aggregate*
- Californian Thistle *Cirsium arvense*
- Gorse *Ulex europaeus*
- Montpellier Broom *Genista monspessulana*
- Pampas Grass *Cortaderia spp*
- Spanish Heath *Erica lusitanica*

Environmental Weeds

- Paspalum *dilatatum*
- Rat’s Tail Grass *Sporobolus africanus*
- Sharp Rush *Juncus acutus*
- Tree Lupin *Lupinus arboreus*
- Yorkshire Fog Grass *Holcus lanatus*



Environmental Characteristics continued

Native Fauna

- Tasmanian Devil *Sarcophilus harrisii*
- White Bellied Sea Eagle *Haliaeetus leucogaster*
- Wedge Tailed Eagle *Aquila audax*
- Tasmanian Wombat *Vombatus ursinus*
- Tawny Frogmouth *Podargus strigoides*
- Masked Owl *Tyto novaehollandiae*
- Southern Boobook *Ninox novaeseelandiae*

Introduced Fauna

- Fallow Deer *Dama*
- Feral Cat *Felis catus*
- European Rabbit *Oryctolagus cuniculus*
- Gorse Spider Mite *Tetranychus lintearius*
- European Wasp *Vespula germanica*
- Bumble Bee *Bombus*

Geo-heritage

- Proximity of site to an example of a Holocene Headland Bypass Dunefield system in Tasmania
- The dune system has been subject to destabilisation from rutile test mining, fire, unauthorized vehicles, winds and stock grazing

Infrastructure

- Crude 4WD Access Track
- Carpark near Templestowe St.
- Wetland Interpretation Sign
- Seymour Conservation Area Location Signs
- Shorebird Habitat Interpretation Signs
- Dog management zone signs
- PWS Totem Symbol sign
- Drainage ditches and culverts
- Shared fence lines

Indigenous Heritage

- Desktop survey (2015) prior to management burn
- For further information please contact PWS at Freycinet.

European Heritage

- 1857 site as source of clay for brickmaking for growing coal mining area surrounding the township
- Coal mining began at Seymour in 1861. Vast sums were expended on the building of a railway, storage bins and a long jetty. Mining lasted 17 years.
- Possible remains of old camp site (yet to be surveyed)

Fire

- Nearby wildfires have been recorded previously at Seymour, and Bedgood Hill
- 1970s farmers used fire for sheep grazing
- Fire management burn was undertaken on the site in 2016
- PWS Strategic burning regime is generally an 8-to-15-year cycle following the previous burn
- Possible weed management with fire



Environmental Characteristics continued

Vision

- Site restoration continues
- Facilitate for adjoining neighbours to control their own weed infestations to protect site and enhance landscape values
- Undertake further scientific surveys to capture values, threats & monitor impacts (Flora / Fauna / AHT)
- Stakeholders to acknowledge values
- Raise awareness of impacts of invasive species
- Monitor and record recreational usage
- Provide experiential opportunities for visitors to appreciate wetland values

Challenges

- Climate
- Coastal erosion
- Inundation & Drainage
- Stakeholder participation
- Pathogens
- Invasive species
- Wildfire
- Whale Strandings
- Oil spills and nautical events
- Dumped trailer and Caravans

Stakeholders

- Seymour Residents & Neighbours
- Dept of Natural Resources and Environment Tasmania
- Break O'Day Municipal Council
- NRM North
- Birdlife Tasmania
- Landcare Tasmania
- Recreational Users—fisherman, surfers, beachcombers, bird watchers and walkers
- Tourism Operators?
- Local Primary Industry?



Strategies for Wetland Restoration

To achieve the aims and objectives for the period December 2022 to December 2027 the following strategies have been identified in the NEBN - North East Bioregional Network’s Seymour Swamp Ecological Restoration Project (Phase 2) by Todd Dudley Appendix B to this document -

1. Continue to reduce weed infestation / Hold at current level.
2. Develop and implement a Planting / Maintenance Plan. Maintain slashed tracks for ongoing works.
3. Protect, expand and maintain areas of revegetation.
4. Set up long term monitoring plots to measure effectiveness of strategies, range of diversity and any potential impacts.
5. Increase stakeholders’ knowledge of values and threats relating to the site.
6. Apply tools and actions to identify and mitigate any adverse impacts prior to them occurring.

1 Reduce weed infestation / Hold at current level

- Regular patrolling and geotagging sites with any identifiable re-infestation
- Applying and following well timed sector control plans
- Controlling any grassy weed infestations taking hold due to absence of Gorse
- Continuing to control any Gorse regrowth, also by slashing if necessary.
- Investigate mosaic burns in high density gorse regrowth areas
- Strategically facilitate for neighbours to control their own Gorse infestations according to potential risk imposed to this site.

2 Develop and implement a Planting / Maintenance Plan

- Identify sites and specific species suitable for planting
- Develop action plan working from South to North (to avoid shading)
- Collection of plant material of local provenance for propagation (seed / cuttings)
- Propagate plants
- Revegetate sites including a trial plot utilising direct seeding method
- Organise watering regime (if required) to establish plants on site

3 Protect, expand and maintain areas of revegetation

- Applying and following well timed sector plans
- Selective weeding of sites with good natural regeneration
- Revegetation on outer perimeter of areas of good natural regeneration
- Implement actions to deal with browsing fauna on revegetation sites
- Prioritise boundaries with Sector 1 to enable the Sector 1 boundary to be shifted to the west and south as time passes.

4 Set up long term monitoring points to measure effectiveness of strategies, range of diversity and any potential impacts

- Create snapshot assessment of levels of natural regeneration and weed population / regrowth over the project area.
- Identify a control site outside of the project area.
- Identify and delineate diverse range of monitoring sites
- Implement monitoring regime
- Maintain accurate records of any findings

5 Increase stakeholder's knowledge of values and threats of the site

- Regularly invite neighbours to attend working bees
- Provide onsite mentoring and share text based or electronic media regarding best practice methodology (E.g. Tasmanian Coastal Works Manual)
- Engage environmental consultant to prepare scoping documentation for Reserve Activity Assessment for development of enhanced access to the site for educational and recreational purposes

6 Apply tools and actions to identify and mitigate any adverse impacts prior to them occurring

- Follow hygiene, safety and other considerations as listed at the end of this document
- Review strategies and safety plans regularly for efficacy and adapt if necessary

Appendix C - A detailed Activity Record diarising all actions associated with this plan is attached to this document and can be viewed online on the SCAGI website. <https://scagi7215.wixsite.com/scagi/blank-1>

Sectors 1 – 5 descriptions

Sector 1 – Is the north-eastern part of the site and in the best condition with pockets of weeds in different areas. To the east it extends to private property and to the south and west it forms the boundary to the more infested weed areas.

Sector 2 – Is the south-eastern part of the site to the beach access track in the west and the main drainage channel into to the wetland to the north. This forms the southern and south-eastern buffer to the wetland and includes new tree planting areas.

Sector 3 - Is to the north, bounded by the beach access track and private land to the west and the Sector 1 area to the east. It forms the northern buffer to the wetland and contains the latest tree plantings.

Sector 4 – Is the north-west corner of the site extending to a drainage channel to the south, to the west and north it borders private property. To the east it extends to the beach access track.

Sector 5 – Is the south-western part of the site with a good stand of *Melaleuca ericifolia*. To the east it extends to the beach access track, to the north to a drainage channel and to the west to private property with the greatest threat to future gorse infestation.

Map showing Sectors



Sector Priority Actions Dec 2022—Dec 2023

TIMEFRAME	MANAGEMENT SECTOR	WEED	PRIORITY STRATEGY H = High L = Low	RESOURCES REQUIRED
Dec 2022	-	N/A	H – Seed collection Workshop	Ruth Mollison & Todd Dudley at WCSR
Jan 2023	2,3,4,5	Gorse	H - Cut (or slash) and spray regrowth. Prioritise along boundary to Zone 1	Herbicide / Working bee
Jan 2023	1-5	all	H- Develop sector control plans for weed management with % of coverage	PWS/SCAGI
Mar 2023	1	Yorkshire Fog Grass	H - Cut and spray regrowth along fence line	PWS/SCAGI
Mar 2023	1-5	all	H – Twice yearly review meeting Mar & Aug	PWS/SCAGI
Apr 2023	-	N/A	H – establish propagation nursery in Seymour	SCAGI member residence
Apr 2023	-	N/A	H- seed propagation workshop with Ruth M	Understory Network /SCAGI
Aug 2023	1-5	all	H – Twice yearly review meeting Mar & Aug	PWS/SCAGI
Oct 2023	-	N/A	H – SCAGI AGM	Meeting before end of Oct.
Dec 2022 to Dec 2023	1,2,3,4,5	all	H – border to Sec1 and flowering gorse L- Trees	Monthly working bees
Dec 2022 to Dec 2023	1,2,3,4,5	N/A	H – General SCAGI meeting every 4 months	SCAGI working bee
Dec 2022 to Dec 2023	1,2,3,4,5	all	H – schedule twice yearly working bee with UTAS LS	UTAS LS & SCAGI Working bee
Dec 2022 to Dec 2023	1,2,3,4,5	all	H – schedule annual working bee with Friends of Freycinet	FoF, PWS,SCAGI Working Bee
Dec 2022 to Dec 2023	1,2,3,4,5	N/A	H- WHS briefings prior to all working bees	SCAGI / VPP
Dec 2022 to Dec 2023	1,2,3,4,5	all	H- funding / sponsorship submissions	SCAGI/Parks
Dec 2022 to Dec 2023	1,2,3,4,5	all	H- twice yearly publicity promotions	SCAGI
Dec 2022 to Dec 2023	1,2,3,4,5	all	H – regular website update	SCAGI
Dec 2022 to Dec 2023	-	-	H- Admin tasks updated as required	SCAGI

Sector Priority Actions Dec 2023—Dec 2027

TIMEFRAME	MANAGEMENT SECTOR	WEED	PRIORITY STRATEGY H = High L = Low	RESOURCES REQUIRED
Dec 2023 to Dec 2027	2-5		H - March Report on Monitoring plots 2 - 5	1 Person / 1 day
Aug 2023 to Aug 2027	1-5	Gorse	H – Prepare an Options Analysis to address Gorse contamination potential on western boundary adjoining neighbour’s property	Funding source
Dec 2023 to Dec 2027	1-5	all	H- Develop sector control plans for weed management with % of coverage	PWS/SCAGI
Dec 2023 to Dec 2027	1-5	all	H – Twice yearly review meeting Mar & Aug	PWS/SCAGI
Dec 2023 to Dec 2027	1,2,3,4,5	all	H – border to Sec1 and flowering gorse L- Trees	Monthly working bees
Dec 2023 to Dec 2027	1,2,3,4,5	N/A	H – General SCAGI meeting every 4 months	SCAGI working bee
Dec 2023 to Dec 2027	1,2,3,4,5	all	H – schedule twice yearly working bee with UTAS LS	UTAS LS & SCAGI Working bee
Dec 2023 to Dec 2027	1,2,3,4,5	all	H – schedule annual working bee with Friends of Freycinet	FoF, PWS,SCAGI Working Bee
Dec 2023 to Dec 2027	1,2,3,4,5	N/A	H- WHS briefings prior to all working bees	SCAGI / VPP
Dec 2023 to Dec 2027	1,2,3,4,5	all	H- funding / sponsorship submissions	SCAGI/Parks
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Dec 2023 to Dec 2027	1,2,3,4,5	all	H – regular website update	SCAGI
Oct 2024 to Oct 2027	-	N/A	H – SCAGI AGM	Meeting before end of Oct.
Dec 2023 to Dec 2027	-	-	H- Admin tasks updated as required	SCAGI

Safety, Hygiene & Other Considerations

1. **Safety of Personnel on site**
2. **Weed Hygiene & Phytophthora cinnamomi (PC)**
3. **Pathogens affecting fauna Amphibian Chytrid**
4. **Protection of Heritage**
5. **Erosion**
6. **Heritage considerations**

1. Safety of Personnel on site.

Safety of personnel on site is paramount and every action will be preceded by a safety assessment and briefing referring to Appendix D NRE Tas WHS Form SF-310 Job Risk Analysis Seymour Community Action Group Incorporated Working Bees.

This document is reviewed and updated regularly and its content is reliant upon the feedback from Volunteers and other personnel visiting the site. Feedback can be provided at any time to scagai7215@gmail.com or Fiona.Everts@parks.tas.gov.au

2. Weed Hygiene & Phytophthora cinnamomi (PC)

Washdown vehicles and footwear before and after any works on site

Reduce vehicle and human traffic, park outside the zone

Use existing tracks rather than create new ones

Avoid any disturbance of soil and vegetation to reduce the spread of weeds to areas that are barren of vegetation

Identification of hot spots for the spread of any existing pathogens/disease and limiting travel through or onto those areas. For example, the 4WD track that extends from Champ Street through the swamp area to the coastline, this track is subject to water inundation during winter rainfall and becomes muddy and prone to erosion resulting in an increased risk of transference of weed seeds and other plant material.

3. Pathogens affecting fauna

To reduce the risk of introducing or spreading PC – Phytophthora cinnamomi and Chytrid plan ahead.

Any import of drinking water onto the site should be from a potable council approved supply.

Utilise “frog friendly” herbicides wherever and whenever possible, for example Roundup Biactive[®], Weedmaster Duo[®].

These measures will be implemented to ensure that causing pathogens such as PC and amphibian Chytrid fungus are not introduced to the project area, and if detected, within the project area, that quarantine measures will be instigated to ensure that it is contained.

The main activities at risk of introducing or spreading PC and Chytrid include:

- Through soil, sand gravel or other materials attached to vehicles and machinery used as part of the restoration works.
- Importing water or soil, sand and gravel material for construction purposes (e.g. roading, landscaping, filling, bedding, etc.)
- Spreading the pathogen/disease from infected sites (contaminated) to uninfected (clean) sites.

Safety, Hygiene & Other considerations - continued

4. Protection of Heritage

It is possible that there may still be undiscovered Aboriginal cultural sites and cultural values in this area. All Aboriginal heritage is protected under the Aboriginal Heritage Act 1975. If at any time during works the proponent suspects Aboriginal heritage, they should cease works immediately, contact Aboriginal Heritage Tasmania (AHT) and adhere to the advice within the Unanticipated Discovery Plan—Appendix E

5. Erosion

Track erosion is a big problem as the track converts to a natural drain during heavy rain periods. Track diversions are to be discouraged.

6. Fire

Not permitted without authority from PWS

Legislation

[Nature Conservation Act 2002](#)

<https://www.legislation.tas.gov.au/view/html/inforce/2022-12-08/act-2002-063>

[National Parks and Reserves Management Act 2002](#)

<https://www.legislation.tas.gov.au/view/html/inforce/2022-12-08/act-2002-062>

[Aboriginal Heritage Act 1975](#)

<https://www.legislation.tas.gov.au/view/html/inforce/current/act-1975-081>

Key Contacts

SCAGI President – Quentin Smith	scagi7215@gmail.com
SCAGI Secretary – Kerryn Smith	scagi7215@gmail.com
SCAGI Treasurer – Daniel Steiner	scagi7215@gmail.com
North East Bioregional Network Inc. Ecological Consultant & President – Todd Dudley	telopea_tas@yahoo.com.au
Landcare Tasmania Chief Executive Officer – Peter Stronach	support@landcaretas.org.au
Parks and Wildlife Service – Freycinet Field Centre Ranger Fiona Everts	Fiona.Everts@parks.tas.gov.au
Parks and Wildlife Service – Freycinet Field Centre Acting Ranger In Charge – Alena Hrasky	Alena.Hrasky@parks.tas.gov.au
Break O Day Municipal Council	admin@bodc.tas.gov.au
Break O Day Council NRM Facilitator – Polly Buchhorn	Polly.buchhorn@bodc.tas.gov.au

Links - Important documents

- Link to: [Apr 2022 - LANDCARE Insurance Policies - Product Disclosure Statements and cover summaries](#)
- Link to: [PWS required registration form, for all volunteers working on Reserved Land.](#)
Note: this only has to be done once and Registration will cover you for all authorised volunteer work on reserved land.
- Link to: [Dec 2009 - BREAK O'DAY COASTAL LAGOON ASSESSMENT - by Chris Obst & Phil Barker, North Barker Ecosystem Services \(NBES\).](#)
- Link to: [VPP – Volunteer Program Plan signed 2022 for SCAGI](#)
- Link to: [Attachment 1 - SCAGI Working Bee Communications Plan](#)
- Link to: [SCAGI's WHS - Job Risk Assessment Form](#)
- Link to: [Tasmanian Coastal Works Manual](#)
- Link to: [Tasmanian Reserve Management Code of Practice 2003](#)

Other publications

Link to: [1986/22 The history of coal mining in Tasmania - BACON, C.A. & BANKS, M.R.](#)

Holocene Headland Bypass Dunefield system in Tasmania (Tasmanian Geoheritage Database)

Appendices

[Appendix A](#) - Vol. 1 Gorse Eradication Strategy for Seymour Wetlands Restoration May 2017 to Nov 2022

[Appendix B](#) - North East Bioregional Network's 2nd phase Wetland Ecological Restoration Seymour Swamp by Todd Dudley

[Appendix C](#) - A detailed Activity Record diarising all actions associated with this plan is available on our website

[Appendix D](#) - NRE Tas WHS Form SF-310 Job Risk Assessment Seymour Community Action Group Incorporated Working Bees.

[Appendix E](#) - Aboriginal Heritage Tasmania (AHT) Unanticipated Discovery Plan