



## Furneaux Regional Weed Management Strategy & 5-year Action Plan

**2022-2037**

For Flinders Island Council

2 September 2022

DRAFT

Supported by The Tasmanian State Government and NRM North



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### File Control

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The Project Steering Committee includes Councillor Vanessa Grace (FC), Katriona Hopkins, Sammi Gowthorp (FC), Chris Wilson (FC) and Andrew Carter (BT).

Katriona Hopkins (Kat) provided an insiders recall of the many undocumented achievements and successes of the Furneaux Region Weed Management Strategy which provided the basis for many of the actions included in this plan. Kat with input from Mark Alexander and Wayne Warren provided knowledge of the current status and realistic manageability of many of the weeds which provides the basis for many of the categorisations.

## EXECUTIVE SUMMARY

This weed strategy has been prepared to guide weed management within the Furneaux Region for the next 15 years. It builds on the achievements and strategic concepts outlined in the 2002 Furneaux Region Weed Strategy and is aligned with the re-launching of the *Furneaux Weed Action Group*.

The Furneaux community has long been pro-active in tackling weed issues across the region. This has been achieved through the combined efforts of volunteer community groups and Council staff, with strategic planning in local reserves and a coordinated and sustained level of on-ground works.

Flinders Island Council manages less than 0.5 % of the land, with 28 % managed by indigenous groups, 35 % being Government managed and 37 % in other private hands.

The challenge facing the implementation of an effective Weed Management Strategy is to develop a shared responsibilities to achieve weed management outcomes across the whole of the region.

Over 350 naturalised introduced plants have been recorded across the Flinders Island municipality. Some of these are well established and widespread with impacts ranging from minor to serious. Others are fairly recent introductions currently in small populations. A minority of these weeds threaten environmental, economic and social values. 36 of the 110 declared weeds listed under the *Tasmanian Weed Management Act 1999* have a presence within the region and 10 of these are also Weeds of National Significance (WONS)<sup>1</sup>. An additional 46 weeds of local environmental significance are identified for priority management with 6 provisionally prioritised for eradication.

**Category 1:** Weed with localised infestations or restricted distribution. Naturalised species on WONS or declared WMA. **Eradicate or quarantine** within the term of the Strategy plan (15 years).

**Category 2:** Widespread distribution. Declared WMA. Species requiring strategic control that cannot be practically eradicated from Furneaux. **Eradicate isolated infestations and contain wider infestations** to protect important and sensitive assets and to identify opportunities to limit further spread within the term of the Strategy (15 years).

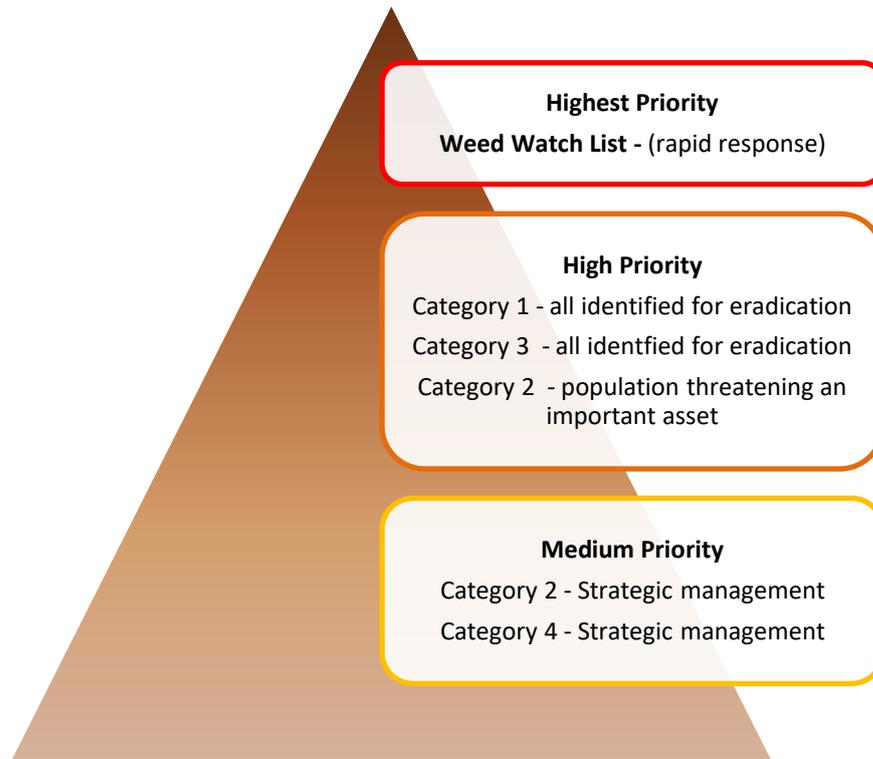
**Category 3:** Environmental and agricultural weeds. Not on WONS or declared WMA. Species with localised infestations or restricted distribution requiring review to determine appropriate management response. **Eradicate or quarantine** within the term of the Strategy plan (15 years).

**Category 4:** Environmental and agricultural weeds. Not on WONS or declared WMA. Species requiring strategic control that cannot be practically eradicated from Furneaux. **Eradicate isolated infestations and contain wider infestations** to protect important and sensitive assets and to identify opportunities to limit further spread within the term of the Strategy (15 years).

**WatchList:** Species currently not present on Furneaux. Non-naturalised species on WONS, Declared or weed alert lists elsewhere. **Immediately eradicate and quarantine** when reported.

<sup>1</sup> based on known records as of March 2014

Weeds relevant to the Flinders municipality control are given a priority rating based on management objectives. Note Category 1 and 3 weeds are identified for eradication so equally are of high priority. Priorities within Category 2 and 4 weeds can be more nuanced. It may be that a particular population of a Category 2 or 4 weed is a high priority due to the value that it threatens.



This strategy identifies six strategic objectives that will underpin weed management into the future.

- Objective 1** – Strategic Planning of Weed Management
- Objective 2** – Stakeholder Engagement and Partnerships
- Objective 3** – Education and Training
- Objective 4** – Best Practice Management
- Objective 5** – Risk Management
- Objective 6** – Monitoring and Review

Weeds have been prioritised into three categories under this strategy for which management responses are defined. A fourth category includes species not known from Flinders but identified elsewhere as a potential threat should they become naturalised.

A set of **Action Plans** under each **Strategic Objective** have been developed.

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## Glossary

BT	Biosecurity Tasmania
FC	Flinders Council
FRWG	Furneaux Regional Weed Group (from FRWS)
FRWS	Furneaux Weed Management Strategy 2002
FWAG	Furneaux Weed Action Group
IWM	Integrated Weed Management
NRE	Department of Natural Resources and Environment Tasmania
NVA	Natural Values Atlas
PWS	Parks & Wildlife Service
TSPA	Tasmanian Threatened Species Protection Act 1995
WCMP	Weed Construction Management Plan
WONS	Weeds of National Significance
WMA	Tasmanian Weed Management Act 1999
WMP	Statutory Weed management Plan under the WMA

## INTRODUCTION

### BACKGROUND

Flinders Council have been awarded a grant through the Tasmanian Weed Action Fund Stage 2 to develop a *Furneaux Weed Management Strategy and Action Plan*. It also has funding for several Weed Action plans which build on weedy grasses mapping work conducted under Stage 1 of the TWAF.

This document will provide strategic direction for the long term prioritisation and management of weeds. It provides context for actions previously identified for year 1 and will also inform priority actions for years 2 and 3 of the Fund.

### SCOPE AND OBJECTIVE

The *Furneaux Regional Weed Management Strategy* aims to deliver a strategic, cost effective and long-term approach to weed management that enhances environmental condition within the Furneaux Group and Flinders Municipality and improves social and economic outcomes for the broader community. It intends to involve all relevant community, industry and government stakeholders working together to reduce the economic, social and ecological impact of weeds within the Furneaux Group. This Strategy also aims to improve communication and collaboration with other weed management agencies and groups.

### DEVELOPMENT AND STRUCTURE OF THE STRATEGY

This Strategy describes the policy framework and legislative obligations and responsibilities for weed management on Furneaux. It prioritises weed species into categories reflective of national and State classifications but also considers the importance of weeds at the regional level.

The document reviews and builds on the achievements of the *Furneaux Region Weed Strategy 2002* which are used to inform a new set of measurable 'Actions'.

*The Furneaux Regional Weed Management Strategy* is intended to operate for 15 years with 5 yearly review and update of the Actions and species categorisations.

## WEEDS, LEGISLATION AND STRATEGIES

### *Australian Weed Strategy 2017-27*

The national weed strategy defines a weed as follows:

*"A weed is considered to be a plant that requires some form of action to reduce its negative effects on the economy, the environment and human health or amenity."*<sup>1</sup>

The annual impact of weeds on the Australian economy was estimated to be \$4 billion nearly twenty years ago<sup>2</sup> and is likely to now be considerably more than that. This cost includes direct weed control, agricultural yield reduction and contamination. This underestimates the true impact of weeds as they exclude the cost to values that are not so easily calculated. For example, impacts to nature conservation, tourism, landscape amenity, poisoning of animals, impacts to waterways or habitat for feral species or impacts to human health such as allergic reactions.

<sup>1</sup> Australian Weeds Strategy 2017-2027, Invasive Plants and Animals Committee (2016)

<sup>2</sup> Sinden *et al.* (2004)

## WEED CATEGORIES

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### Weeds of National Significance

The *Australian Weed Strategy* identifies a list of 32 Weeds of National Significance (WONS) although with some groupings this includes at least 40 plant species. Nomination as a WONS recognises a species as a priority current and future weed threat to Australia, requiring coordinated and strategic management. National and State Strategies have been developed for some of the WONS that are present within the Furneaux Region. Individual landowners and managers should feel obliged to manage WONS although there is no enforcement as such. State governments are responsible for overall legislation and administration through their own listings which generally aim to include all WONS. Federal government funding for weed control is largely informed by the WONS strategic goals.

Eight of the WONS have a recorded presence within the Furneaux Group. These are identified in the full weed list (Appendix A) along with a measure of the number of occurrences which shows most are very localised in extent. WONS on Furneaux include:

- African boxthorn
- Bridal creeper
- Blackberry
- Chilean needle grass
- English broom
- Gorse
- Montpellier broom
- Willows

### National Environmental Alert List

The National Environmental Alert List compiled in 2001 compliments the WONS list, identifying plants that are in the early stages of establishment with the potential to become a significant threat to biodiversity<sup>1</sup>. To date there are 28 species on this list, with 5 having some known potential distribution within Tasmania and being declared under the *Tasmanian Weed Management Act 1999* (Appendix A). The purpose of their listing is to encourage prioritisation in regional weed management. None of these have been recorded on Furneaux.

## LEGISLATION AND REGULATION

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### Tasmanian Weed Management Act 1999

The *Weed Management Act 1999* (WMA) is the core piece of weed management legislation within Tasmania. The Act defines a list of 'declared' weeds that<sup>2</sup>:

- Present a threat to Tasmania but are not yet naturalised,
- Present a threat but are currently of limited distribution,
- Are widely distributed requiring management due to their threat to the native environment and / or agriculture.

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<sup>1</sup> <http://www.environment.gov.au/biodiversity/invasive/weeds/weeds/lists/alert.html>

<sup>2</sup> <https://www.legislation.tas.gov.au/view/html/inforce/current/act-1999-105>

Over 100 weeds have been declared for Tasmania, of which 36 have been recorded within the Flinders municipality / Furneaux region.

The WMA provides a Statutory Weed Management Plan (WMP) for most of these declared weeds. The WMP places each weed into either Zone A or Zone B within each municipality. The management objectives for each zone are:

- Zone A – Eradication (completely remove the presence of the weed)
- Zone B – Containment (prevent weed spreading to other areas)

Under the WMA, landholders are under a legal requirement to control weeds on their land. Weed Inspectors are given powers to enforce the requirements of the Act; they can be employees under state or local government or relevant bodies including community groups. These inspectors must undergo training relating to their responsibilities under the WMA and have the responsibility of enforcing this Act. Failure to abide with the Act can result in on-the-spot fines or a requirement notice issued by an Inspector, requiring a landholder / manager to undertake specific weed management actions. Flinders Council is a Zone A for 32 of the 36 declared weeds recorded from the Furneaux.

#### Tasmanian Biosecurity Act 2019

The new Tasmanian Biosecurity Act 2019 has rationalised biosecurity legislation which was previously managed under seven separate Acts. The Act provides a simple legal framework for the management of pests, diseases and invasive species, imports of plant and animal products, biosecurity emergencies, and monetary reimbursement for biosecurity related loss. The Act provides the capacity to progress actions identified in the Tasmanian Biosecurity Strategy.

The Tasmanian Biosecurity Act 2019 has also established the General Biosecurity Duty (GBD) which gives all people dealing with any animals, plants or related products, a statutory duty of care to properly manage biosecurity risks including preventing the spread of listed species within the State.

#### Tasmanian Agricultural and Veterinary Chemicals Act 1995

The use of agricultural and veterinary chemicals in Tasmania is controlled under the *Agricultural and Veterinary Chemicals Act 1995*. It is a legal requirement that contractors and employees who use these chemicals for weed management are suitably qualified in their application (i.e. Chemcert trained) and are registered with Tasmanian Natural Resource and Environment.

### WEED MANAGEMENT AND OTHER APPLICABLE STRATEGIES

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Tasmania's weed management strategy (*WeedPlan*) is the overarching plan for the state<sup>1</sup>. On a regional level there are three key regional weed strategies within Tasmania. Furneaux falls within the: *Weed Management Strategy – Northern Natural Resource Management Region 2012*.

All of the regional weed strategies are generally based on principles adopted from the *Australian Weeds Strategy 2016* developed by the Australian Weeds Committee<sup>2</sup>. These are:

1. Effective weed management is a responsibility shared between landholders, community, industry and government.

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<sup>1</sup> Tasmanian Weed Management Committee (2005), <https://dpiwwe.tas.gov.au/Documents/WeedPlan.pdf>

<sup>2</sup> Invasive Plants and Animals Committee (2016), <http://www.agriculture.gov.au/pests-diseases-weeds/pest-animals-and-weeds/review-aus-pest-animal-weed-strategy/aus-weeds-strategy>

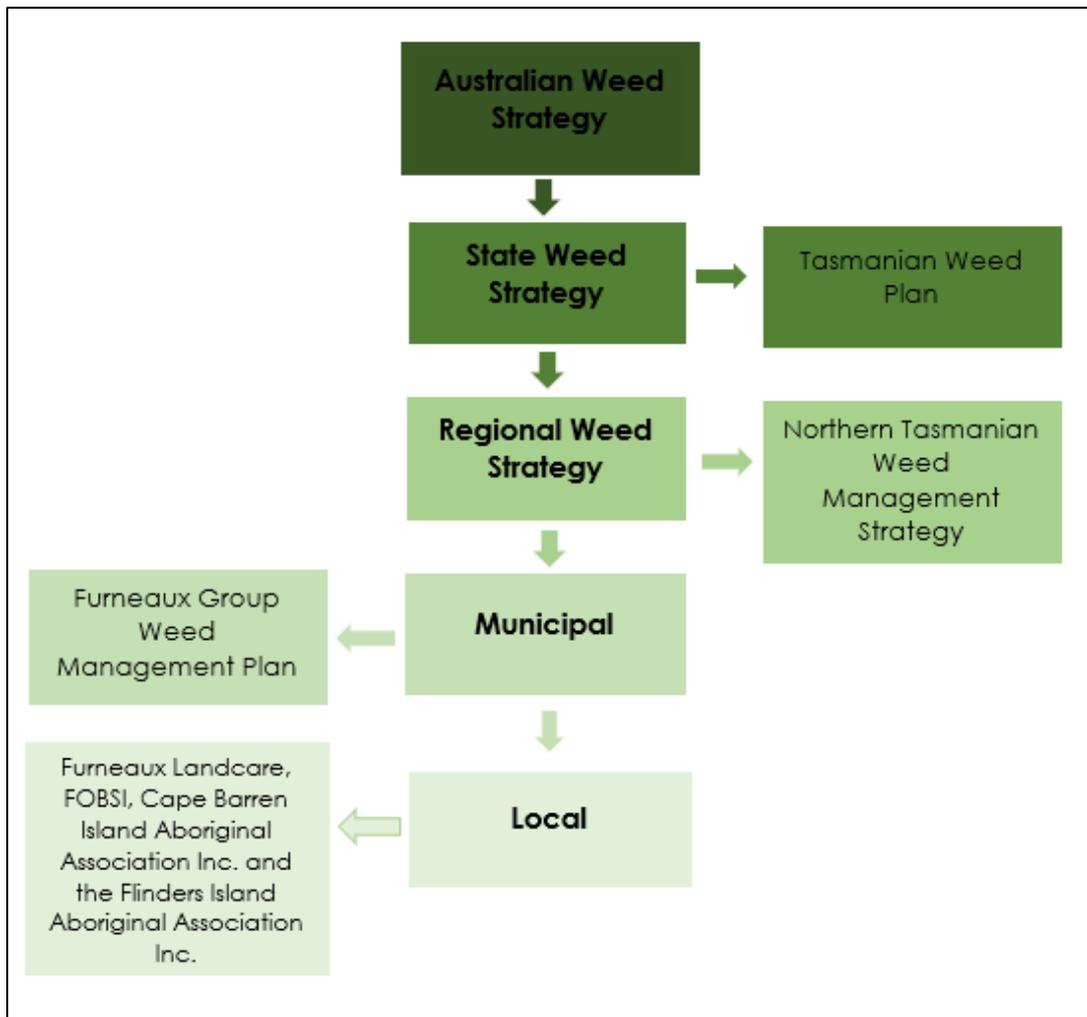
2. Evidence-based decision-making should underpin the approach to weeds.
3. Risk-based prevention and early intervention is generally the most cost-effective approach for managing weeds.
4. Prioritisation of weed management must be informed by a risk-based approach, considering feasibility, likelihood of success and impact.
5. Coordination amongst landholders, community, industry and government is necessary to manage weeds at a landscape scale.
6. Sustaining capability and capacity across landholders, community, industry and government is fundamental to effective weed management.
7. Individuals, organisations and industry groups that create risks that may result in a weed entering, emerging, establishing or spreading in Australia have a role in minimising the impacts and contributing to the costs of management.

Successful implementation of this strategy is underpinned by the following additional principles:

- A. Adequate resources are required to coordinate implementation of the strategy and associated plans.
- B. Communication and coordination with key stakeholders around longer-term actions is essential.
- C. Agreed best practice integrated weed management principles are used to control weeds.
- D. Developing and implementing appropriate hygiene practices is fundamental.

These principles are integrated into the Strategic Objectives of this Strategy.

Figure 1 provides a summary of the hierarchical process that underpins the development of weed strategies within Australia.



**Figure 1: Process that underpins development of Weed Strategies**

Furneaux Resource Management Strategy 2007

This Strategy was prepared as an update to the previous (1999) strategy to align the regional approach to natural resource management with the northern Tasmanian Resource Management Strategy and ultimately to be consistent with national NRM objectives. The Strategy includes short term management actions and targets (5 years) and so-called resource condition targets measurable over the medium term (10-20 years). The Strategy reflects on the Furneaux Weed Strategy 2002 providing general commentary on the state of select weeds and the specifics of their circumstances on Furneaux, including pampas grass, African boxthorn, mirror bush and sea spurge. The document observes that the Furneaux Weed Management Group established in 1999 was not active at the time. It describes active weed projects at that time coordinated by the NRM facilitator and local Landcare groups. The Strategy observes the absence of a code of practice or weed management plan for Flinders Council. More specifically the strategy identifies the importance of the relationship between roadside management practices and the control of weed dispersal. Relevant Management Actions in the Strategy applicable to weed management are:

BA9 - Re-establish the Furneaux Weed Management Committee and continue to implement the Furneaux Weed Management strategy

BA13 – Support coordinated programs / activities to eradicate bridal creeper, asparagus fern and blackberry.

These above actions would contribute to the short term (1-5 year) management action targets:

BM5 – Active Management programs are in place to manage all priority weeds, pest and diseases.

BM6 – mechanisms are in place for the early detection, reporting and management of new weed species, outbreaks of existing weeds and emerging weed problems by 2010.

BM7 – Blackberry, bridal creeper and asparagus fern are reduced or negligible by 2012.

These collectively contribute to the medium term resource condition target:

BR4 – No increase or reduction in the baseline extent and impact of regionally significant weeds, pests and diseases by 2027.

Unfortunately, the Strategy's release coincided with the cessation of the NRM officer position at Flinders Council and the consequent collapse of the Furneaux Weed Management Committee. Without personnel to drive the program none of the above listed action targets or resource condition targets were met.

#### State Roads Weed Management Strategy 2016-26

This State Road Weed Management Strategy<sup>1</sup> was prepared by the Department of State Growth to deliver a strategic and cost effective approach to weed management within the State Road network. Lady Barron Main Road (A1565) linking Whitemark and Lady Barron is the only state road in the Furneaux. To prioritise actions the strategy includes three approaches to managing weeds. A *weed led approach* prioritises infestations of high risk weed species identified for their potential economic and environmental impact. A *site led approach* ranks road links (sections approximately 10 km in length) based on abundance of high priority weeds and proximity to priority management areas. A *stakeholder led approach* aims to provide support to collaborative efforts where stakeholder priorities align with departmental priorities.

Highest priority category weeds species identified in the Strategy known from Lady Barron Main Road include:

asparagus fern,

bridal creeper,

pampas grass

blackberry

The site led approach identifies one section (Link 5) of Lady Barron Main Road (nearest to Lady Barron township) as moderate priority with a rating score of 15 and the two other sections of low priority (rating scores of 4 and 6).

#### FURNEAUX REGION WEED MANAGEMENT STRATEGY 2002

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The Furneaux Region Weed Management Strategy 2002 was prepared by the Flinders NRM Officer and adopted by Flinders Council. A Furneaux Weed Management Group was established, and this operated for several years during which significant achievements towards many of the 73 actions

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<sup>1</sup> Department of State Growth 2016

identified in the Strategy were implemented. The Strategy included two classifications for weeds: Priority Weeds separated into two groups: one for long term management and a second as 'possible to eliminate' i.e. eradication. A second list of 'environmental weeds' was also included. Some of the environmental weeds were also included in the Priority Weeds list. The distinction for environmental weeds was that they were identified as being a threat to native bushland where management was to be directed.

Although the structure for classifying weeds differs in the current strategy consideration has been made of all species listed in the original document. It is interesting (and disappointing) to note that of the 15 species listed as being 'possible to eliminate' none has been successfully eradicated although for two in the list<sup>1</sup> no existing data is available to support their presence now or in the past. The classification provided in the Furneaux Region Weed Management Strategy 2002 are indicated in Appendix D.

A review of the Actions and what has been achieved along with cross reference to the current strategy are provided in Appendix C. The Management Group was not in operation by 2007 although the NRM officer continued to implement some of the actions until the role ceased in 2013.

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## WEED MANAGEMENT IN RECENT TIMES

Since 2013 when centrally coordinated weed management by the NRM officer ended, weed management has continued outside the auspices of the strategy. Major players included Tasmanian Parks & Wildlife Service, Flinders Council, various voluntary groups and private landowners.

Several voluntary groups participated in implementing actions in the Strategy relevant to their areas of interest including Westside Landcare Group (up until xxx), Friends of Bass Straight Islands Wildcare Group (2000 to the present), Memana Landcare Group (xxx), Furneaux Landcare Inc (xxx).

The truwana Rangers' (under the Tasmanian Aboriginal Land Council) have been managing various weed issues on Cape Barren Island, notably boxthorn and sea spurge. Under the Weed Action Fund Stage 2 grant which funded this strategy, an action plan has been developed to support the rangers with gorse control around The Corner township.

The Tasmanian Aboriginal Centre Rangers manage weed infestations on Babel, Big Dog and Chapel Islands.

Much of Flinders Island is under private ownership. The role of landowners in weed management is critical to the management within extensive tracts of agricultural land but also natural areas within or adjoining the properties. Many landowners are very active in managing weeds on their properties. A significant effort of one of the highest priority weeds on Flinders Island has been achieved by John Cooper on property at Emita tackling Chilean needle grass.

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<sup>1</sup> pheasants eye – *Adonis microcarpus* and sand rocket *Diploaxis tenuifolia*

## WEEDS OF FURNEAUX GROUP

### THE SIGNIFICANCE OF WEEDS IN THE FLINDERS ISLAND MUNICIPAL AREA

*A weed is considered as a plant that requires some form of action to reduce what are perceived as harmful effects on the economy, the environment, human health and or amenity. (National Weed Strategy 2017)*

Council has an obligation under the Tasmanian *Weed Management Act 1999* (WMA) to control declared weeds on land it owns or manages. Competing with this obligation is the threat posed by numerous other weeds that are not listed under State or Federal legislation. Often legislation is slower to evolve than local knowledge. Therefore, any weed strategy should prioritise weeds based on threat in conjunction with legislation. Prioritising all known weeds will assist in identifying potential gaps or inconsistencies in existing listings, assist with future funding and aid in the understanding of where to focus time and resources going forward.

Flinders and Furneaux Islands contains a wide range of introduced plants. Just over 350 species are considered to be naturalised in the municipality. Some of these are well established and widespread. Others are more recent introductions, with small populations. Species vary markedly on their threat to environmental, economic and/or social values.

Thirty two of the 110 declared weeds listed under the Tasmanian *Weed Management Act 1999* are naturalised within the Flinders Island municipality, with 8 of these also Weeds of National Significance (WONS). Environmental weeds are also a significant threat to both ecological integrity and economic productivity in the Flinders Island Municipality.

Bridal creeper, Asparagus fern, gorse, blackberry and several weedy grasses are some of the weeds currently presenting significant problems in the Furneaux Group. The coastline and offshore island habitats are particularly vulnerable to African boxthorn, and mirror bush. There is also the threat of new weeds establishing in the region, especially via vehicles and livestock imports.

### PRIORITISING WEEDS FOR CONTROL IN FURNEAUX GROUP

The Tasmanian WMA categorises declared weeds as Zone A or Zone B. In the WMA, Zone A denotes a weed that is not yet present in a municipal area, or is present to a limited extent, and for which eradication is the primary aim. Zone B species are those that are widespread in a municipality and for which control is the primary management objective. As this Strategy is considering weeds within a municipality (rather than between municipalities), the same concept is applied to variation within the WMA zone A and zone B classes - *i.e.* it is reasonable to suggest that some WMA Zone B actually occur at scale at which eradication may be achievable in particular places. There may be sound justification to Zone allocation for some species. Furthermore, there may be weeds that are not listed on the WMA that are considered significant nuisance and worthy of eradication from the region.

### PRIORITISATION METHOD

#### *Declared weeds*

For the purposes of this Strategy, declared weeds and WONS known to occur within the Furneaux Group have been allocated two priority ratings and are classified as Category 1 where the management objective is eradication and Category 2 where the objective is control or local targeted eradication where specific values are under threat. These largely correspond to the Zone A / Zone B approach although the classification has not been driven by classifications give in the Statutory Weed management Plans but rather what is considered most appropriate for Furneaux region. Of the 27 Category 1 weeds, all are Zone A. However, the 9 Category 2 weeds include 5 Zone A and 4 Zone B

weeds. So the strategy is approaching the management of all of these as if they were classified as Zone B.

**Table 1 - Weed Categorisation and Action Plan targets**

Category	Priority	Status	Action Target
<b>1</b>	High	Declared weed with localised infestations (Zone A)  <b>27 species</b>	Eradicate from Furneaux  Prepare and initiate management plan within first period of the Action Plan (5 years)  Eradicate or quarantine within term of the Strategy (15 years)
<b>2</b>	Moderate (High for isolated infestations)	Declared with relatively widespread infestations (typically Zone B but can include Zone A)  <b>9 species</b>	Considered response for all species and infestations  Prepare and initiate management plan within first period of the Action Plan (5 years)  Eradicate the most threatening populations within first period of the Action Plan (5 years)  Contain, contain infestations to ensure no further spread within first term of the Strategy (15 years)
<b>3</b>	High	Furneaux Local Environmental Weeds (FLE) – locally important weeds not declared or rated above  <b>6 species</b>	Eradicate from Furneaux  Prepare and initiate management plan within first period of the Action Plan (5 years)  Eradicate or quarantine within term of the Strategy (15 years)
<b>4</b>	Moderate (High for isolated infestations)	Furneaux Local Environmental Weeds (FLE) – locally important weeds not declared or rated above  <b>40 species</b>	Considered response for all species and infestations  Prepare and initiate management plan within first period of the Action Plan (5 years)  Control and contain were in association with higher priorities or where practical through landowner partnerships/agreements. Target eradication of small infestations during term of the Strategy (15 years)
<b>W</b>	Very High	Declared Zone A not known from Furneaux  <b>73 species</b>	Coordinated rapid response for new infestations in consultation with DPIPWE  Eradicate and prevent establishment

*Environmental weeds*

Non-declared environmental weeds that are included in the Strategy are classified as Category 3 or 4. Species allocated to Category 3 are those that are considered a serious potential nuisance that could be realistically eradicated. Category 3 weeds warrant equal priority as Category 1 weeds. There are 40 species included on this List.

Category 4 weeds are species that are considered of importance that warrant strategic approach to develop local and site-specific attention. These species can present a serious threat to various assets in the Municipality and are known to be invasive.

Some of these occur in domestic gardens but don't necessarily present a threat growing in such an environment if properly managed. Further consideration of some of these species may justify their elevation to Category 3.

#### *Weed watch List*

There are numerous species of weeds that currently are not known to occur on the Furneaux but if introduced are considered likely to have the potential to become invasive. These include several that have been recorded in the past but have been eradicated such as saffron thistle, nodding thistle and tumble weed. All species listed as declared weeds under the TWMA for which Flinders is Zone A are included.

#### **WEED ACTION PLANS**

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Some general principles for species specific weed action plans are listed below. These plans need not be complex documents but should provide clear justification for the actions prescribed.

- Action Plans should consider the specific characteristics and threat posed by each species.
- Action Plans should provide clear priorities and achievable goals.
- Entrenched species requires a 'containment' style of management. Localised species should be controlled in order to protect identified assets from further infestations. Areas currently free of these weeds should also be kept free.
- Garden plants that have the potential to spread should be identified.
- Coastal weeds should not be allowed to establish on beaches (and native coastal communities) that are currently un-infested or only contain light infestations.
- Areas of land managed for nature conservation should be prioritised for control from species that have the potential to displace native component.

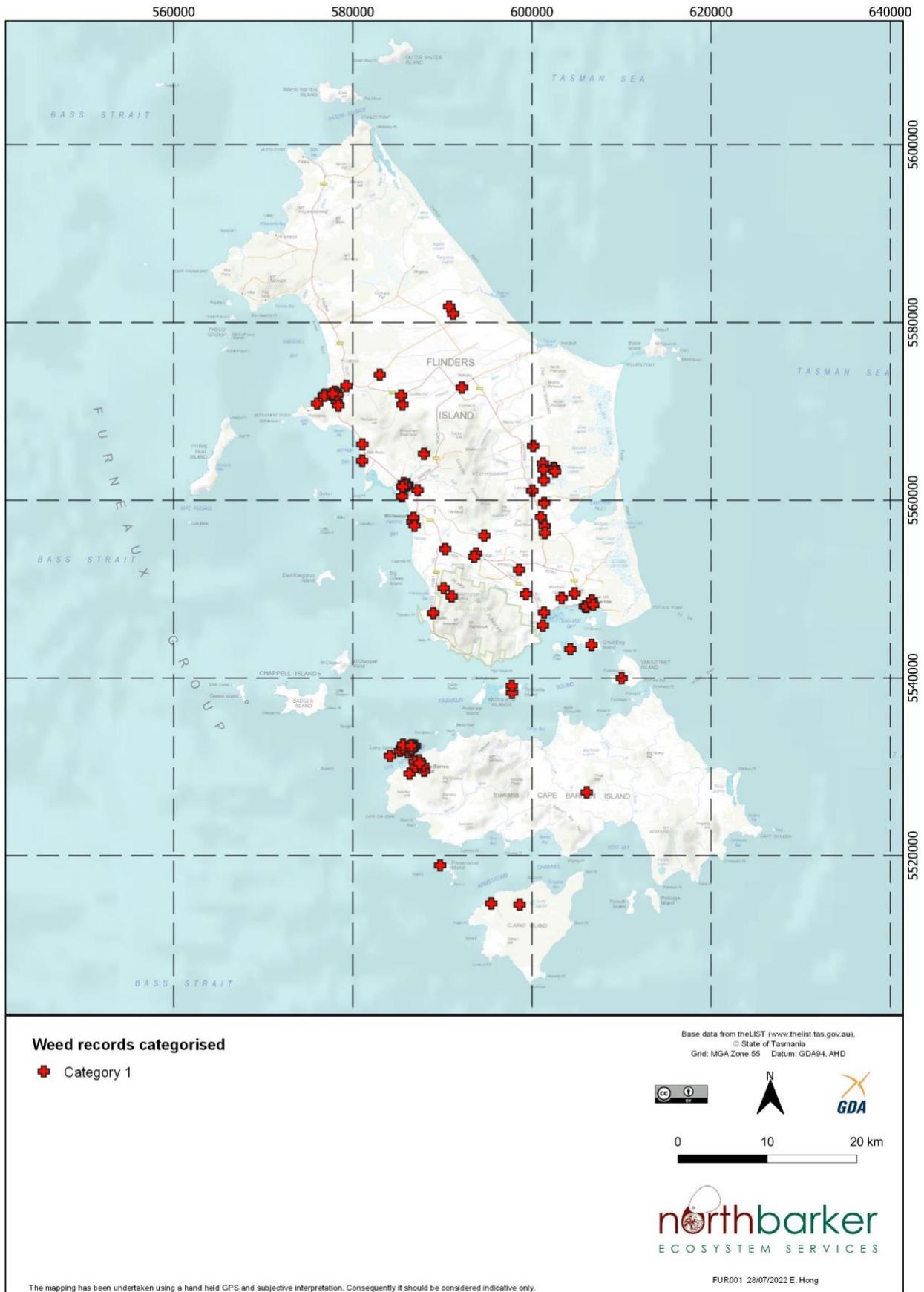


Figure 2 - Extent of Category 1 weeds

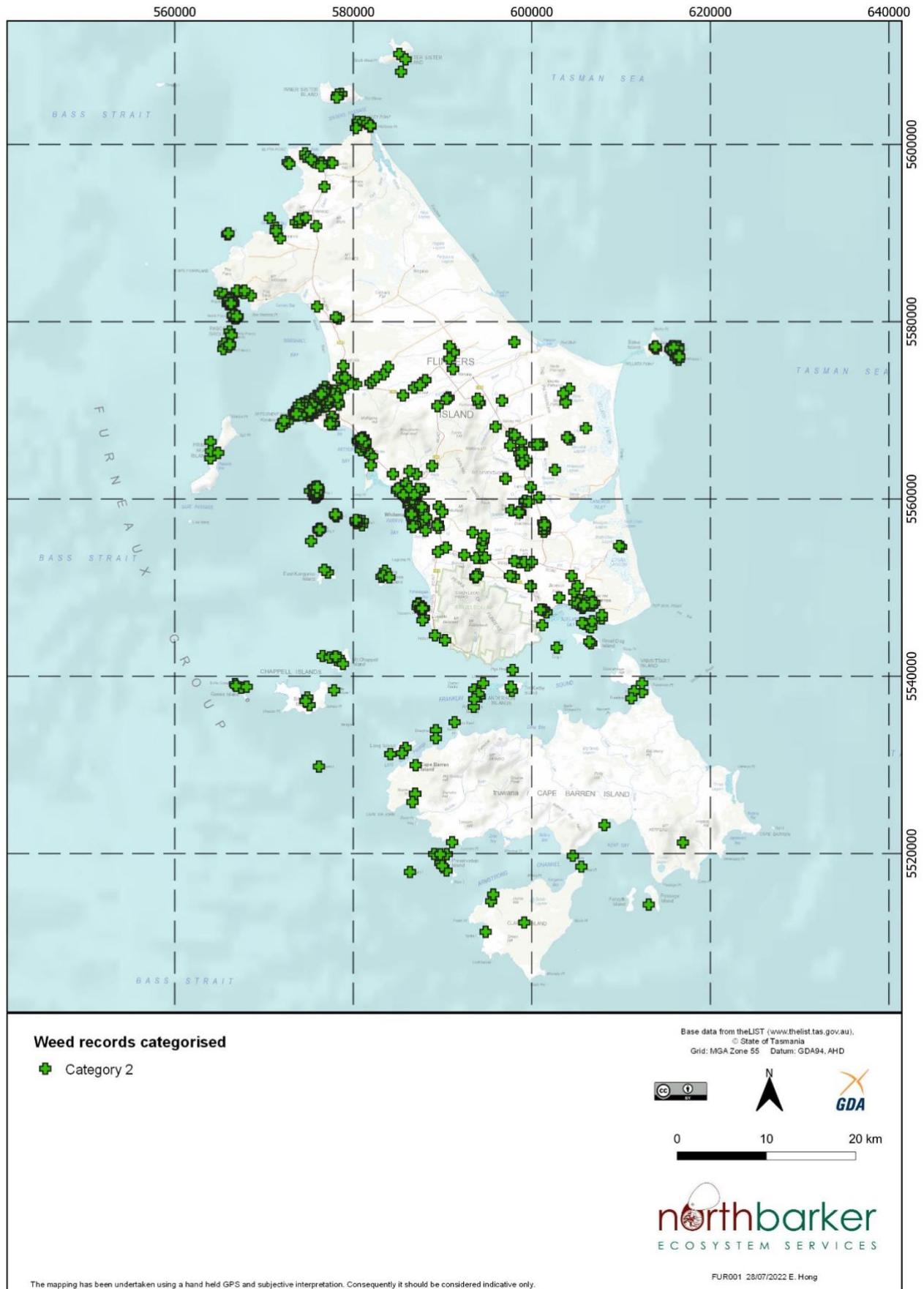


Figure 3 - Extent of Category 2 weeds

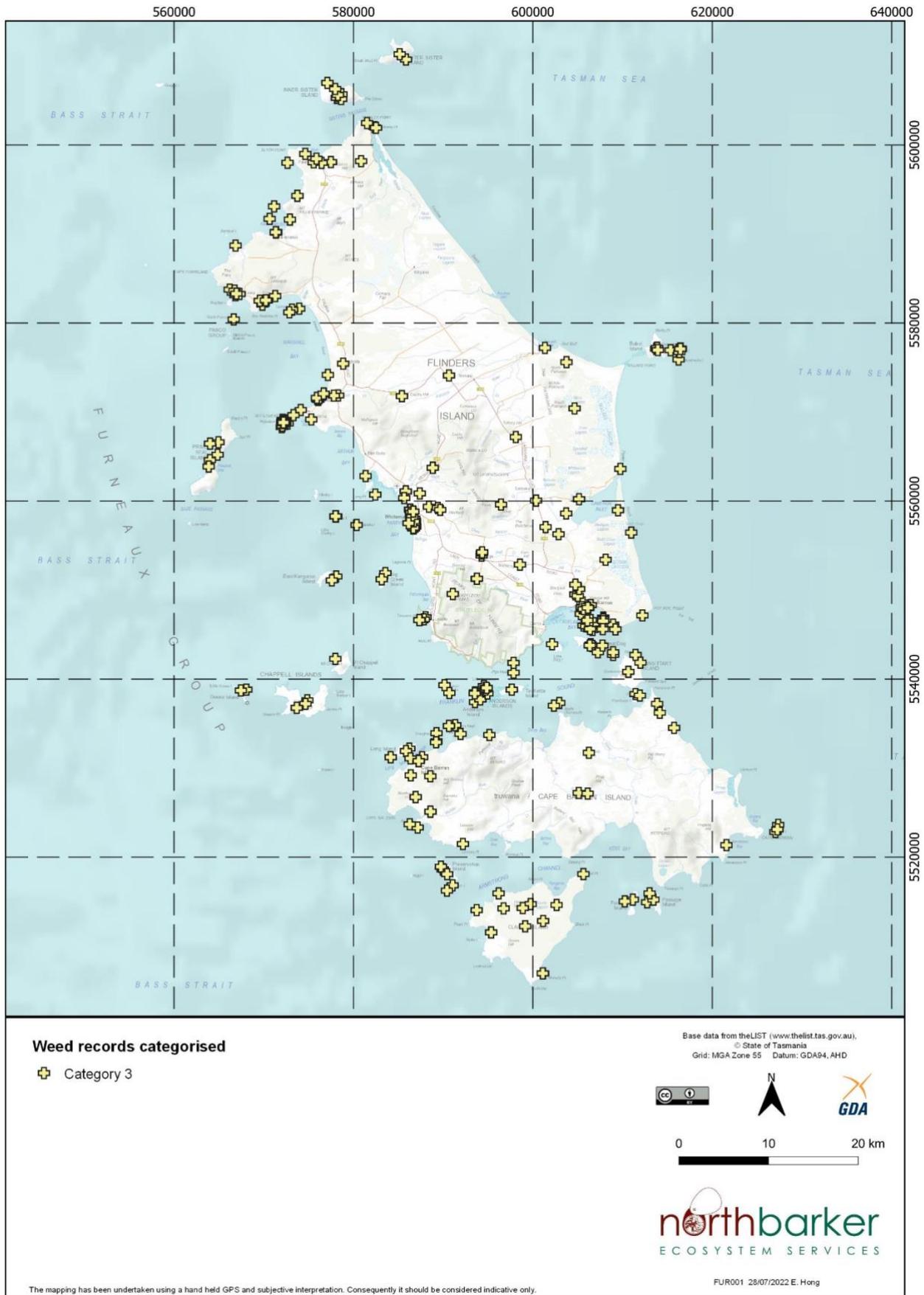


Figure 4 - Extent of Category 3 and 4 weeds

## FURNEAUX WEEDS PLANNING FRAMEWORK- OVERVIEW

Six strategic objectives are identified. Each objective has a set of goals identified to steer future weed management within the municipality towards reducing the level of impacts weeds pose on strategic issues

### OBJECTIVE 1 – STRATEGIC PLANNING

Strategic planning at the highest level provides guidance on the principles of weed management. Planning at the implementation scale provides for delivery of outcomes. Plans need to be pragmatic enough to allow flexibility and be able to accommodate management efforts that are responsive to changing Council priorities and community aspirations.

If planning is too tightly constrained by time or over-ambitious aspirations, then implementation is doomed to fail. Thus, the development and implementation of plans needs to be well considered to accommodate flexibility but also clearly direct works in line with strategic priorities and best practice methods. Monitoring should be included in plans to gauge effectiveness and adherence to plans. In these ways implementation plans become a valuable resource and performance management tool.

The greater the level of consistency between the high level strategic framework and site treatment plans the more likely that success will flow. Consistency between the two levels ensures that managers and practitioners at all levels are working from the same principles toward the same goals.

### WEED ACTION PLANS

A Weed Action Plan (WAP) should be developed for major weed eradication/control projects.

The aim of this early planning is to help maximise the chance for success, ensure correct methods are applied to weed management works and to give further thought to the variety of methods to removal available and to ensure chemical application is limited to the recommendation applications (and selection of correct herbicide).

With so many weeds to choose from, effective use of limited resources to tackle weeds needs to triage the issue at the species level or in some cases at the site level. Newly arrived or localised infestations warrant an early response to prevent any such species establishing themselves to an unmanageable state.

This requires having a reactive approach to new and unexpected circumstances.

### PRIORITISING RESPONSE TO WEED THREATS

Where weeds are well established and eradication would require significant and unsustainable resourcing, a more strategic approach is required to protect important assets such as national parks/nature reserves and high value agricultural land.

The priority weed species on the Furneaux have been classified into three categories which reflect differing approaches. Whilst Category 1 includes a long list of species, these all have a small and localised presence on the island and can be eradicated. Category 2 includes all other declared weeds (WMA) where there may be statutory responsibilities for management. Although some of these are classified a Zone A for Flinders, this Strategy is treating them as Zone B species where containment is the management objective. For each of these there are specific targeted controls that can be justified to protect import assets such as areas of high conservation value. Category 3 are a set of weeds that reflect community concerns, although they are not listed as declared weeds (WMA). For some of

these species, eradication is the objective (as per Category 1 weeds) as they are so localised. For others the objective will need to be more strategic in line with Category 2 weeds.

**Objective 1: Strategic Planning to:  
Prevent establishment of new high risk weed species and  
reduce impacts of widespread weeds:**

1. Commit to the implementation and funding for a fifteen year Weed Action Plan with 5 year targets.
2. Develop a weed alert protocol with Biosecurity Tasmania that includes a process for alerting the community and includes measures such as rapid response procedure for removal when new high risk weeds are identified.
3. Undertake strategic management planning for all priority weeds on Flinders (including all Category 1-4 weeds) to prioritise Weed Action Plans.
4. Develop Weed Action Plans for every Category 1 and category 3 Weeds in first 5 years.

## OBJECTIVE 2 – STAKEHOLDER ENGAGEMENT AND PARTNERSHIPS

The summarised tenure breakdown (Table 2) reflects some of the major stakeholders in the municipality. Three entities manage more than 98 % of the Furneaux Group (Figure xx). The relative values demonstrate the small area that Council has direct control over for managing weeds.

**Table 2: Furneaux Land ownership categories**

Authority	Owners	Area hectares	%
Freehold	Private Parcel	73392	37
Parks & Wildlife Service	Tasmanian Government	64958	33
Tasmanian Aboriginal Land Council		54666	28
Economic Develop	Tasmanian Government	3774	2
Local Authority	Flinders Council	810	0.4
DNRE (Crown Land Services)	Tasmanian Government	574	0.3
Freehold	Hydro Electric Corporation	45	0.02
Dept Education	Tasmanian Government	18	0.01
Freehold	Tas Water	10	0.01
<b>Total</b>		<b>198248</b>	

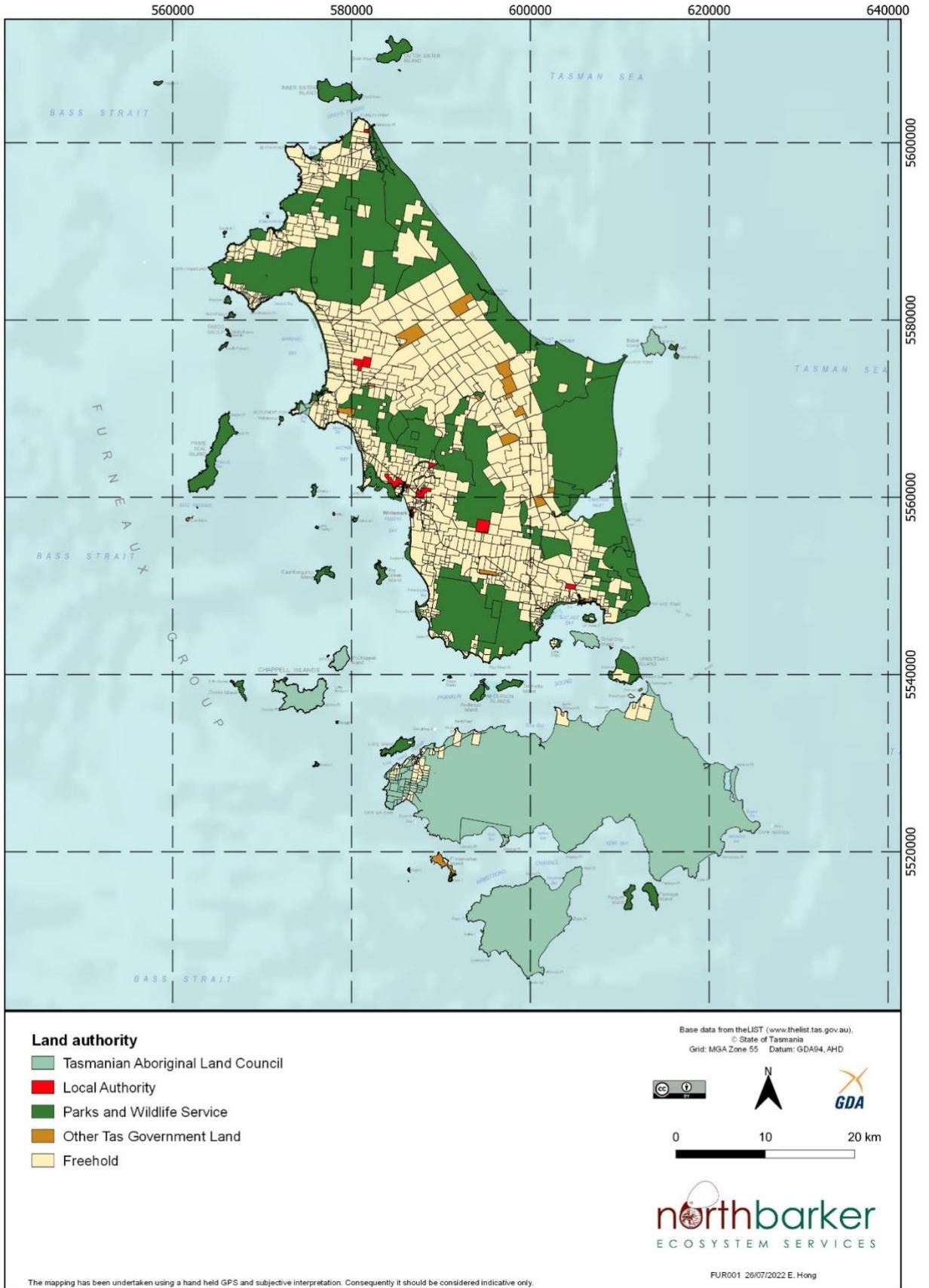


Figure 5: Landownership Furneaux

## DISPERSAL

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Current distributions suggest weed issues are generated in populated areas and spread linearly along roads and other corridors e.g. transmission lines, telecommunications cable routes etc, with spot invasions ahead of fronts also resulting from animal and wind dispersal. New weed populations then establish wherever suitable conditions exist, regardless of tenure. Some invasive weed species will even establish in undisturbed bush. Roadside weed management is a particular concern for Council, because of the varied tenures and highly suitable conditions for weed transport and establishment.

What this means is, weed dispersal vectors and propensity to establish are factors independent of tenure boundaries. In order to provide cost effective weed management that meets landowner expectations, programs need to be integrated across all tenures, private and public. This can also be effective in minimising reinfestation and thus reducing management requirements in the long term.

## AGENCY ENGAGEMENT

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Strong outcomes rely on good stakeholder relationships, good work practices and collaborative weed programs with the respective landowners including agencies. Cooperation is required and there are opportunities to grow mutually beneficial relationships.

It is acknowledged that all agencies face constraints from their financial budgets. Improved financial outcomes can be gained through cooperative service agreements between stakeholders and mandatory monitoring and secondary treatments (thus reducing future costs through more sustained control).

Without mutually beneficial cooperation, independent weed management priorities may diverge and are unlikely to deliver best practice strategic weed management.

On Flinders Island itself the most important agencies are those that participate in operations affecting linear corridors such as Department of State Growth and Flinders Council for roads, TasNetworks for transmission lines, various telecom companies for underground cable networks and TasWater for pipelines. Parks & Wildlife Services manage extensive areas of land on Flinders including kilometres of track network.

The other islands within the Furneaux are largely managed by Parks & Wildlife Services and the aboriginal community (Tasmanian Aboriginal Land Council and Tasmanian Aboriginal Centre. The nature of the infestations and management requirements necessitate coordination to achieve best results.

## PRIVATE LAND HOLDERS

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Private land holders manage a significant portion of the Flinders Island with smaller holdings on truwana Cape Barren Island and some of the inner islands.

Private landowners can be divided between larger agricultural holdings and smaller urban and peri urban lots around some of the various settlements. The nature of weed infestations and priorities vary between these two stakeholder groups.

Cooperative private landholders can partner with council, business and community groups to manage priority weeds and locations.

## COMMUNITY ENGAGEMENT AND PARTNERSHIPS

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The success of a municipal weed management program primarily relies on a facilitator who has technical capacity and can take responsibility for implementation of the strategic plan's actions. This

role is also vital to provide advice and support to existing community groups, foster connections, and to generate external funding through grants or other sources. There are important weed management works being undertaken by landholders, land managers, volunteers and community groups which can be supported and built upon through a broader, strategic weed management program. As Council has limited resources for weed management, collaboration between Council and community groups presents the best opportunity to maximise external funding opportunities. It is important that future efforts are focused on developing new and expanding upon current collaborations across all land tenures (especially private lands as they make up a large proportion of land ownership). As such, a cornerstone of this strategy is the re-establishment of the Furneaux Weed Action Group that includes stakeholders and representatives across the community and local and State Government agencies and land managers.

To encourage all stakeholders to take weed management seriously it is essential that Council and key stakeholder agencies lead by example. Weed infestations on public land includes some of the more visible examples. Likewise, these sites provide opportunities to demonstrate how well coordinated weed management can be successful. There is no better way of encouraging a landowner to become involved than by demonstrating how the issue is taken seriously by Council and government agencies. Landowners may become frustrated and disheartened if they perceive “government” is not doing their bit.

#### **Objective 2 – Stakeholder Engagement**

1. Establish the Furneaux Weed Action Group
2. Foster co-operative projects with the community, government and private landowners to support the development of a shared responsibility towards weed management with the municipality.
3. Investigate further opportunities for external grants and projects that can be shared across land tenures e.g. Weed Action Fund.

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## OBJECTIVE 3 – EDUCATION AND AWARENESS

### EDUCATION

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Community engagement provides an opportunity to educate interested groups and ratepayers generally. This potential for positive engagement is a much under-valued resource.

Community education can make an important contribution to the weed control effort. Much can be gained by awareness and an understanding of what is at risk, where it is at risk and why it is at risk. If the ultimate aim of education is an understanding of the local weed management issues and efforts toward solutions, then more people are more likely to participate in the efforts toward the solution. Even if their participation is indirect, i.e., they no longer contribute to the problem. In this context, the spread of understanding, through education, will produce better weed management outcomes than facts and information alone.

A Weed Communications Strategy can identify implementation of modern communications tools to aid the sharing of weed knowledge and education including a dedicated weed webpage as part of the Council website that is kept up-to-date and holds all the relevant weed information. This can include links to other agencies and act as a central page linking to the other tools such as Facebook/Instagram with an ongoing regularly updated blog. A forum could form part of this website also to act as a central communication tool to aide ease of communication. This is often a good learning tool also for others who may simply read the forums and not contribute, aiding dispersal of key information.

The aim for a Weed Communications Strategy is to provide a tool-box guide to ensuring effective dissemination of information throughout Council and to begin fostering renewed interest throughout the community.

#### **Objective 3 – Education and Awareness**

1. Develop a Weed Communications Strategy that targets increased participation by the community in weed management.
2. Implement community engagement projects to raise awareness of weeds in the community.

## OBJECTIVE 4 – BEST PRACTICE MANAGEMENT

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The opportunity to embrace best practices with a view to greater efficiency and effectiveness of weed control is foremost when it comes to maximising cost effectiveness. Large gains in effectiveness and efficiency should first be sought in the application of proven best practices.

All improvements in efficiency and effectiveness translate directly into savings in time and money. Until an organisation can report that it applies best practice it is not in a place to make effective gains from innovation. Any innovation will be shackled by poor practices. In a sense, the application of best practice is in itself innovation for organisations that do not currently achieve it.

It is recognised that herbicides are a vital component in the weed manager's ability to effectively apply integrated control options. However, it is also recognised that without effective work planning prior to implementation of weed control/eradication projects, there is potential for the excessive/incorrect application of herbicides from weed management.

### CHEMCERT TRAINING AND VOLUNTEER USE OF CHEMICALS

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Staff, contractors and volunteers who regularly undertake work relating to weeds, including earth and plant movement, need to be regularly engaged in training that is specific to the delivery of the weed management strategy.

Over a period of time staff, contractor and voluntary positions have changes in personnel. Procedures, regulations and techniques are updated. Thus, periodic training is required to keep up to date with best practices. Where relevant, training should include ChemCert, equipment use, hygiene principles and practicalities, weed identification, and control techniques.

All Council staff should have ChemCert Accreditation (AQF2 or equivalent) prior to undertaking weed work and where necessary this training should be kept up-to-date. Weed Planning Officer role should be undertaken by someone with ChemCert Supervisors Accreditation (AQF3&4) or equivalent)<sup>1</sup>.

In relation to volunteer groups and to limit the potential for below best practise chemical safe handling and application, it is recommended that volunteers are limited to 'cut and paint' application of lower toxicity S5 herbicides. Volunteers should be excluded from spraying and selected volunteers in each volunteer Group be trained to apply S5 Herbicides under ChemCert (AQF2) framework

### BIOLOGICAL CONTROL

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Biological control can provide an important contribution to any integrated weed management program. It involves the introduction of a living organism to kill or reduce the vigour of the target plant. Typically, these include plant pathogens such as viruses and fungi but more commonly invertebrates such as mites and insects that feed on the plant. Although very rarely does biological control completely eradicate a species from an environment it is most effective where infestations are so extensive as to be prohibitive to manage through other means. An effective biological control agent may prevent or reduce flowering and consequently seed production slowing the spread of the weed and enabling other techniques to have the chance to tackle the infestation.

Biological control agents are only released following extensive research involving laboratory and field trials. Of particular concern is the risk of an agent diverting from the host plants into non-target

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<sup>1</sup> <http://www.chemcert.org.au/>

species. Several biological controls have been trialled or rolled out on the Furneaux region to varying degrees of success<sup>1</sup>. These include:

- Gorse – spider mite
- Horehound – plume moth
- Paterson’s curse – flea beetle
- Bridal creeper –leaf hopper, rust fungus
- Ragwort – flea beetle (Deal island)
- Sea spurge – foliar blight fungus trials 2021-24 (CBI)

Opportunities for future trials should be welcomed. There should also be consideration for the need to support any trails with follow up targeted alternate control techniques (spraying physical removal etc) where opportunity for eradication is real

#### BEST PRACTICE PASTURE MANAGEMENT

Best practice pasture management has the dual benefit of improving productivity whilst reducing bare ground which is offers fertile ground for invasive species such as needlegrasses. Perennial species offer better production, greater resilience, and more reliability across seasons than undesirable annuals. Undesirable species may also have features that cause specific problems such as product contamination, animal health issues, reduced palatability and feed utilisation, deeper feed gaps and increased erosion risks.

Supporting producers with resources, tool and innovation around pasture management as part of an active NRM program is an important part of constant improvement as part of best practice management.

#### **Objective 4 – Best Practice Management**

1. Identify training requirements and statutory WHS obligations
2. Ensure Council weed management practices and operations follow best practice.
3. Support biological control programmes and trials and identify opportunities to coordinate with other traditional means of control.
4. Support best practice pasture management to improve ground cover and reduce weed threats

<sup>1</sup> Ireson et al 2011

## OBJECTIVE 5 – RISK MANAGEMENT

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### PREVENTION AND EARLY DETECTION

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Prevention, early detection/eradication and control or containment are the ultimate risk management objectives. The effective mitigation of risks provides an opportunity to protect important places from weed invasion or spread and minimise the resources needed for weed management. The eradication of weeds from sites detected early is generally more likely to be achievable. However, a challenge for early detection is the ability to identify new weeds that managers are not familiar with.

In this context examples of risk management may include the routine monitoring of public reserves and other assets, as well as selected places at risk of incursions, to ensure that the weed flora is understood and is appropriately prioritised and treated in the works plans. Frequently visited sites accessed by a range of dispersed users act as hubs for the spread of weeds. Notable examples include tips, quarries, show grounds and other public reserves.

Unmonitored environments where weeds are thought to be absent can develop into significant sources of pressure, with subsequent demands on resources. The obvious advantage of an investment in monitoring weed free areas is the opportunity for early detection and efficient low cost weed control or eradication.

Early detection is required for new invasions to Furneaux and for new locations of priority weeds. Those posing the greatest risk are weeds known to be highly invasive elsewhere. However, the circumstances into which a weed invades can be a major determinant of its rate of establishment.

### GENERAL BIOSECURITY

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The most effective way of limiting future introductions of weeds to Flinders Island will be to stop them at the source. Being an island archipelago means there are just a few sources of introduction through seaports and airports.

Wash down stations at the terminals at Welshpool and at Bridport would provide opportunity to reduce the risk of introduction of weeds into Flinders. Vehicles need to be cleaned and washed down.

Bridport Airport is heavily infested with Spanish heath, currently not established on Furneaux. The seed from this weed is extremely fine and could easily be picked up and transported by plane. Opportunity to assist with eradicating, or at least limiting seeding of Spanish heath in the immediate surrounds of Bridport Airport should be encouraged.

Flinders Council has more control at the Flinders Island entry points. Washdown facilities established at Lady Barron where the ferry unloads livestock and vehicles would provide the best location for washdown. All vehicles entering the island could be required to be washed down before proceeding. Invasive grass seeds can build up on vehicle radiators blow down equipment provides the best means of cleaning off grass seed.

### DEVELOPMENT CONTROL

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Future development application approvals should provide more stringent consideration to the implications of the spread of weeds in areas within or adjacent to native vegetation. The approval to build within these areas should include an assessment and planned response that minimises the threat of weeds. The benefits gained by including existing weed control and future management at this early stage significantly reduce the potential costs of weed management that is otherwise only initiated once an infestation becomes established. Compliance checks and enforcement of permit conditions would also improve outcomes.

The capacity for Council to regulate weed management as a condition in planning approval is limited by the Tasmanian Planning Scheme provisions.

The Natural Assets Code includes opportunities to condition weed management as part of a development approval. This is particularly relevant where a development application is sought on land impacted by an existing weed infestation. A condition could include a requirement to manage the weeds for a defined period, ideally 5 years.

There are several examples of how approval conditions to manage weeds can be linked to the Natural Assets Code provisions:

- Development Standards for Buildings and Works (C7.6) in a Waterway and Coastal Protection Area (C7.6.1) include Performance Criteria P2.1 that must “minimise adverse impacts on natural assets”. Weed management can minimise adverse impacts caused by:
  - (a) Erosion, siltation and runoff; and to
  - (b) Riparian and littoral vegetation
- P3 Development involving a new stormwater discharge must minimise adverse impacts by having regard to:
  - (c) the need to mitigate and manage any impacts likely to arise from erosion, sedimentation or runoff.

Weed management can mitigate any adverse impacts.

- C7.6.2 Clearance within a priority vegetation area in Performance Criteria P1.2 must have regard to:
  - (d) any mitigation measures implemented to minimise the residual impacts on priority vegetation

Weed management can mitigate any residual impacts.

## ENFORCEMENT POWERS

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Under the WMA, an Inspector can be appointed by the Secretary of the Department of Natural Resources and the Environment (DNRE). The Inspector is empowered to require a landowner to undertake measures to control, eradicate, reduce spread and reduce the risk of contamination in respect of any declared weed. Although the most effective measures of achieving weed control are collaborative and voluntary, there can be occasion where the unwillingness of a single party to not do the right thing can severely limit outcomes, especially where they require collaboration between several stakeholders.

Weed Inspectors are given powers to enforce the requirements of the WMA; they can be employees under local government bodies such as Flinders Council. Council has previously employed staff trained under the WMA as weed Inspectors. These Inspectors must undergo training relating to their responsibilities under the WMA and have the responsibility of enforcing this Act. Failure to abide with the Act can result in on-the-spot fines or a requirement notice issued by an Inspector, requiring a landholder to undertake specific weed management actions.

Having a Weed Officer empowered as an Inspector under the WMA does not necessarily imply Council will exercise this authority, but it does provide greater clout with any negotiations. Flinders Council should aim to have an employee appointed as an Inspector under the WMA.

## CLIMATE CHANGE

Climate change models of weed distributions generally point to a southerly migration of species as southern latitudes warm. For Tasmania this means that the states biosecurity measures need to include effective measures that minimise the likelihood of “new” weed species penetrating the barriers to importation, both as accidental imports and as permitted imports.

Beyond distribution models, a changing climate may result in what are called novel ecosystems. These are new ecosystems, for example, drier more open woodlands that have niche spaces in them. The niche spaces may subsequently support weed species that include existing or new weed species.

The management of new weeds, novel weedy ecosystems and existing weeds with changed “behaviour” in a changing climate will need to be adaptive. The management principals are likely to be the same as now. However, the existing methods, and combinations of methods in integrated approaches, may need to be adapted to weed growth and behaviour (ecology) that has not previously been experienced.

Perhaps the most important aspect of preparedness for climate change is to expect the unexpected. Our understanding of the ecology of plants is dominated by our observations of realised niches. The unexpected comes from our lack of knowledge of what the potential niches of plants are and hence the potential for unimagined novel ecosystems.

There may be species naturalised on Flinders that are not considered an invasive threat which may become a much more serious issue in the future. Review of the change to the climate in the Furneaux region and any consequential change in the suitability to naturalised non-native species is recommended to better anticipate and respond to future threats.

### **Objective 5 – Risk Management**

1. Investigate improved biosecurity measures to protect Flinders from weed introductions
2. Develop program to monitor key sites for weed invasion, quarries, tips, public reserves
3. Review planning controls and link to regulating weed management
4. Ensure Flinders Council has an appointed Weed Officer under the *Weed Management Act 1999*
5. Review implications from climate change to profile potential weed threats on Flinders Island

## OBJECTIVE 6 – MONITORING AND REVIEW

What does success look like? This is a question that must be asked when the answer is unlikely to be immediately obvious. Very few areas are unlikely to remain entirely free of weeds for perpetuity. It is through consideration of composition, distribution and abundance, in relation to the resources applied, that we can judge success.

Recording and data-basing of weed management efforts and results is an opportunity that should not be lost. As time progresses, the gathering of baseline information and subsequent responses to primary and secondary treatments will develop into a valuable record and planning resource. From baseline data a manager can undertake measurements, set targets and generate performance indicators. Once there is sufficient data to detect change due to management effort, then success can be measured.

Whether a site has previously been treated or not, it is never too late to collect a baseline dataset. These records are an essential reference from which to measure the effectiveness of efforts and plan follow up treatments, including alternative approaches should a treatment prove ineffective.

A database could be designed with failsafe controls that ensure no new record can be entered until the previous one is completed.

The effectiveness of the management plan is dependent on the ability to implement, monitor, respond to information gained, review and update. There is an inherent risk with all strategic planning that relevance and impetus fades with time. Monitoring and evaluation must be incorporated to ensure review and adjustment where necessary. New ideas may originate, current ideas may prove unrealistic. These are normal barriers to success and the ability to respond to these challenges is also important.

Performance indicators are useful measures of progress and compliance with plans. Ideally some level of quantitative or measurable performance is required to track progress and identify strengths and weaknesses. Care should be taken to design PI's that are meaningful and unlikely to result in perverse outcomes.

Thoughtful PI's include leverage. For example, if a weed plan for a site is implemented completely (baseline collected, primary and secondary treatments undertaken, and monitoring completed), the PI is multiplied to return a maximum score. On the other hand, if a greater number of sites have had primary treatment at the expense of secondary treatment, *etc.*, then only the primary treatment is scored and so the multiplier is not applied as a reward. This will encourage managers to stick to the plan. Of course the implementation of the PI process must be part of the process.

A five yearly review is sufficient for PI's such as described to be meaningful.

While some changes or updates will be routinely required to accommodate regulatory changes and the like, other changes should be based on data and respond to the performance measures recommended above.

### **Objective 6 – Monitoring and Review**

1. Develop a set of performance indicators for measuring success of Weed Action Plans
2. Review Strategy every 5 years and redraft the Weed Action Table

## STRATEGY & ACTION PLAN

Fulfillment of the six Strategic Objectives will steer future weed management within the municipality towards reducing the level of impacts weeds pose on strategic issues.

A 5 Year Action Plan has been developed to identify a series of discrete tasks aimed to meet the Strategic Objectives.

Stakeholder responsibilities for each task is identified along with a tie frame to assist with prioritising the tasks.

Many of these actions parallel actions in the previous Furneaux Region Weed Strategy. These have been referenced in the Action table.

The Action Plan table is to be reviewed and updated every 5 years.

## FURNEAUX REGIONAL 5 YEAR ACTION PLAN

Action #	SO Ref	Action	Responsibility	Time Frame	Performance Measure	2002 Strategy Action
<b>Objective 1: Strategic Planning</b>						
1	1.1	Employ Weed Management Officer 0.2 FTE	FI Council	2022	Funding for 0.2 weed officer secured	14
2	1.2	Develop a weed alert protocol with Biosecurity Tasmania for sharing information with community	Weed Officer FI Council - FWAG	2023	Funded and developed	
3	1.2	Develop a rapid response removal procedure for new high-risk weeds	Weed Officer FI Council & BT	2024	Funded and developed	
4	1.3	Create weed maps for all species in Categories 1-3 to inform management priorities and community awareness	Weed Officer FI Council - FWAG	2023	Funded and developed	1 16
5a	1.3	Review Category 1 weed list and prioritise preparation of species' Action Plans	Weed Officer FI Council & FWAG	2023	Prioritisation of all Category 1 species undertaken	
5b	1.3	Review Category 4 weeds to identify suitable species for uplisting to Category 3 (for eradication)	Weed Officer FI Council & FWAG	2023	Review of all Category 3 species undertaken	
6	1.3	Strategic management plans for Category 2 weeds that identify site specific controls to protect key assets	Weed Officer FI Council & FWAG	2027	Category 2 species management plans developed	43
7	1.3	Strategic management plans for Category 4 weeds that are identified as suitable for eradication	Weed Officer FI Council - FWAG	2027	5 action plans developed	

Action #	SO Ref	Action	Responsibility	Time Frame	Performance Measure	2002 Strategy Action
8a	1.4	Action Plans for Category 1 weeds	Weed Officer FI Council & FWAG	2027	Action plans developed	
8b	1.4	Action Plans for Category 3 weeds	Weed Officer FI Council & FWAG	2027	Action plans developed	
9	1.3	Establish procedure to ensure data recorded from weed mapping activities and reporting is uploaded onto NVA	Weed Officer FI Council	Ongoing, annually	Relevant weed project data included in NVA	3, 4
Action #	SO Ref	Action	Responsibility	Time Frame	Performance Measure	2002 Strategy Action
<b>Objective 2: Stakeholder Engagement and Partnerships</b>						
10	2.1	Establish the Furneaux Weed Action Group (FWAG)	FI Council as apart of WAF grant	2022	FWAG in operation	8 9
11	2.1	Establish program for hosting and coordinating regular meetings	Weed Officer FI Council & FWAG	Annually	August meeting attended by stakeholders and community with measurable progress on weed control activities	
12	2.1	Annual report to Council on weed projects and future proposals	Weed Officer FI Council	Annually	Report developed and presented to Council workshop	27
13	2.2	Establish pathway to share weed data with landowners	Weed Officer FI Council & FWAG	Annually	Landholders receive updates about priority weeds	7
14	2.2	Apply for grant funding based on priority Action Plans	Weed Officer FI Council	Annually	One funding application per year	

Action #	SO Ref	Action	Responsibility	Time Frame	Performance Measure	2002 Strategy Action
15	2.3	Implement priority Action Plans through grant funding	Weed Officer FI Council	2027	2 action plans implemented	50
16	2.3	Identify additional funding opportunities for weed management projects	Weed Officer FI Council	Ongoing	Stakeholder contributions increased for co-ordinated weed management	51-54
17	2.3	Identify philanthropic/ESG investment opportunities/ Island Away project synergies	Weed Officer FI Council	Ongoing	Philanthropic/ESG investment opportunities are investigated	
Action #	SO Ref	Action	Responsibility	Time Frame	Performance Measure	2002 Strategy Action
<b>Objective 3: Education and Awareness</b>						
18	3.1	Develop weed communication strategy	Weed Officer FI Council	2023	Funded and developed	10
19	3.2	Utilise modern communication tools such as Facebook to communicate about weeds	Weed Officer FI Council	2023	Facebook weeds group for Furneaux Islands established	
20	3.2	Incorporate 'weed management' page on Flinders Council website with details of key weeds, best practice management and links to useful information	Weed Officer FI Council	2025	Funded and incorporated	11 15 21 39 40
21	3.2	Signage of priority weeds where they occur in publicly accessible areas within the municipality	Weed Officer FI Council	2025	Funded and implemented	
22	3.2	Share weed info in public spaces e.g Council offices, supermarkets, Library, Museum	Weed Officer FI Council	2023	Weed posters developed and shared	6 19 22
23	3.2	Community awareness program on weed threats from nursery and market sales	Weed Officer FI Council	2025	Funded and implemented	20

Action #	SO Ref	Action	Responsibility	Time Frame	Performance Measure	2002 Strategy Action
24	3.2	Community awareness program on dumping of garden waste supported by free green waste sites at tips/transfer stations	Weed Officer & FI Council	2025	Funded and implemented	34
25	3.2	Work with local school to develop content around weed awareness and what students can do to help	Weed Officer FI Council	Annually	Funded and implemented	23
26	3.2	Weed of the month and other weed activity achievement / promotions in local newspaper and social media	Weed Officer FI Council	Monthly	Funded and implemented	13 16 25 37 55
27	3.2	Workshop on control techniques for managing weeds, hand pulling/cut and paste and spraying with a backpack.	Weed Officer FI Council & FWAG	Annually	Funded and delivered	17 18 26
28	3.2	Provide training to community on how to record and log weeds - encourage i-naturalist use, train volunteers to use GPS available from Wildcare	Weed Officer FI Council & FWAG	2026	Funded and delivered	18
Action #	SO Ref	Action	Responsibility	Time Frame	Performance Measure	2002 Strategy Action
<b>Objective 4: Best Practice Management</b>						
29	4.1	Ensure staff and volunteers involved in on-ground weed management have undertaken adequate training (appropriate ChemCert or equivalent)	Weed Officer FI Council & FWAG	Annually	Funded and implemented	
30	4.1	Keep up-to-date with weed management research and incorporate new techniques where relevant	Weed Officer & BT	Ongoing	Weed officer is linked into weed management networks and has access to relevant journals	
31	4.2	Develop Council Procedures Plan for roadside management to reduce spread of weeds	FI Council as apart of WAF grant	2023	Procedures plan developed and implemented	31 33

Action #	SO Ref	Action	Responsibility	Time Frame	Performance Measure	2002 Strategy Action
32	4.2	Undertake regular monitoring of known roadside weed sites, treatment and reporting	Weed Officer FI Council	Annually	Written report on effectiveness of control	35
33	4.2	Review the effectiveness, functionality and adequacy of the mobile wash down across the municipality	Weed Officer FI Council	2026	Funded and report developed	28
34	4.2	Undertake a feasibility study for washdown station at Lady Barron and Whitemark		2027	Funded and report developed	
35	4.2	Develop a No Spray Register for those sensitive to use of chemicals. (Example: <a href="https://www.ccc.tas.gov.au/living/home-property/no-spray-register/">https://www.ccc.tas.gov.au/living/home-property/no-spray-register/</a> )	Weed Officer FI Council	2025	Funded, developed and implemented	
36	4.3	Collaborate with Biosecurity Tasmania on biological control trials and projects	Weed Officer FI Council & BT	Annually	Evidence of communications with BT seeking collaboration and documentation of any trials undertaken	44
37	4.4	Promote best practice pasture management to improve ground cover and productivity and reduce weed threat	Weed Officer FI Council and NRM North	2025	Ag best practice program funded and implemented	
Action #	SO Ref	Action	Responsibility	Time Frame	Performance Measure	2002 Strategy Action
<b>Objective 5: Risk Management</b>						
38	5.1	Develop inspection and reporting procedure for key weed hub sites – i.e., rec grounds, quarries to be undertaken annually	Weed Officer FI Council	2022	Funded and developed	32
39	5.1	Key weed hub sites – i.e., rec grounds, quarries to be inspected and reported upon annually	Weed Officer FI Council	Annually from 2023	Funded and implemented	
40	5.2	Develop voluntary code of practice for biosecurity containment of livestock before release	Weed Officer	2023	Funded and implemented	29

Action #	SO Ref	Action	Responsibility	Time Frame	Performance Measure	2002 Strategy Action
			FI Council, Livestock Productivity Group & BT			
41	5.2	Develop voluntary code of practice to minimise the spread of weeds on machinery in agriculture	Weed Officer FI Council	2023	Funded and implemented	30
42	5.3	Review Tasmanian Planning Scheme (Flinders Council) to understand Council capacity to regulate weed management	Weed Officer FI Council	2023	Funded and presented to Council workshop	
43	5.3	Develop guidelines for weed management conditions in planning control	Weed Officer FI Council	2023	Funded and developed	
44	5.4	Appoint Statutory Weed Officer status to Council staff	Weed Officer FI Council	2024	2 council staff have completed weed officer training	64
45	5.5	Promote biosecurity planning and preparedness for producers to minimise risk of impacts associated with weeds, pests and diseases under climate change	Weed Officer FI Council & BT	2027	10 biosecurity plans funded and developed	
Action #	SO Ref	Action	Responsibility	Time Frame	Performance Measure	2002 Strategy Action
<b>Objective 6: Monitoring and Review</b>						
46	6.2	Review Strategy every 5 years and redraft the Weed Action Table	Weed Officer FI Council	2027	Assess progress on KPIs outlined in this action table, report on achievements	65
47	6.2	Review success of Weed Action Plan implementation	Weed Officer FI Council	2027	2 projects assessed	
48	6.3	Coordinate weed management data and report on annual weed management activity undertaken by FWAG and other parties	Weed Officer FI Council	Ongoing	<ul style="list-style-type: none"> <li>• Ensure data is uploaded to NVA</li> <li>• Annual meetings attended and weed control outcomes achieved</li> </ul>	

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## APPENDIX A: PRIORITY WEEDS FURNEAUX WEED MANAGEMENT STRATEGY

<b>CATEGORY 1</b>	<b>High Priority</b>	Declared weed with localised infestations (Zone A)	Eradicate or quarantine within term of the Strategy (15 years)
<b>CATEGORY 2</b>	<b>Moderate Priority</b>	Declared with relatively widespread infestations (typically Zone B but can include Zone A)	Eradicate isolated infestations, contain infestations to ensure no further spread within first term of the Strategy (15 years). Target eradication of small and important infestations during term of the Strategy (15 years)
<b>CATEGORY 3</b>	<b>High Priority</b>	Furneaux Local Environmental Weeds (FLE) – locally important weeds not declared or rated above	Eradicate or quarantine within term of the Strategy (15 years)
<b>CATEGORY 4</b>	<b>Moderate Priority</b>	Furneaux Local Environmental Weeds (FLE) – locally important weeds not declared or rated above	Control and contain where in association with higher priorities or where practical through landowner partnerships/agreements within first term of the Strategy (15 years)

Weeds of National Significance are highlighted in **bold**

A\* - Recently listed declared weeds lacking published Statutory Weed management Plan

Botanical name	Common Name	Declared Zone	NVA Records	Category
<i>Acacia longifolia</i> subsp. <i>longifolia</i>	Sydney coast wattle		10	4
<i>Acacia paradoxa</i>	Thorn wattle		2	4
<i>Acacia pycnantha</i>	Golden wattle		1	4
<i>Achillea millefolium</i>	Yarrow		3	4
<i>Agapanthus praecox</i> subsp. <i>orientalis</i>	Agapanthus		8	4
<i>Allium triquetrum</i>	Triangular garlic		3	4
<i>Amaranthus powellii</i>	Green pigweed		2	3
<i>Amaranthus retroflexus</i>	Hogweed			3
<i>Amelichloa caudata</i>	Espartillo	A	17	1
<i>Amsinckia calycina</i>	Hairy fiddleneck	A	1	1
<i>Anredera cordifolia</i>	Madeira vine	A*	1	1
<i>Arctotheca calendula</i>	Cape weed		27	1
<b><i>Asparagus asparagoides</i></b>	<b>Bridal creeper</b>	A	132	2
<b><i>Asparagus scandens</i></b>	<b>Asparagus fern</b>	A	11	2
<i>Asphodelus fistulosus</i>	Onion weed	A	4	1

Botanical name	Common Name	Declared Zone	NVA Records	Category
<i>Brassica rapa subsp. silvestris</i>	Wild turnip		1	4
<i>Carduus pycnocephalus</i>	Slender thistle	B	21	2
<i>Carduus tenuiflorus</i>	Winged thistle	B	52	2
<i>Cenchrus clandestinus</i>	Kikuyu grass		19	4
<i>Cenchrus longisetus</i>	Feathertop	A	7	1
<i>Cirsium arvense</i>	Creeping thistle	A	10	1
<i>Cirsium vulgare</i>	Spear thistle		62	4
<i>Coprosma repens</i>	Mirror bush		72	4
<i>Coprosma robusta</i>	Karamu	A	1	1
<i>Cortaderia jubata</i>	Pink pampas grass	A	1	1
<i>Cortaderia selloana</i>	Silver pampas grass	A	8	1
<i>Cortaderia sp.</i>	Pampas grass	A	220	1
<i>Cotoneaster spp.</i>	Cotoneaster		?	4
<b><i>Cytisus scoparius</i></b>	<b>English broom</b>	<b>A</b>	<b>3</b>	<b>1</b>
<i>Delairea odorata</i>	Cape ivy		2	4
<i>Digitalis purpurea</i>	Foxglove		1	3
<i>Dipogon lignosus</i>	Dolichos pea		11	4
<i>Echium candicans</i>	Pride of Madeira		2	4
<i>Echium plantagineum</i>	Paterson's curse	A	163	2
<i>Echium vulgare</i>	Viper's bugloss	A	1	1
<i>Ehrharta calycina</i>	Perennial veldt grass		4	3
<i>Elodea canadensis</i>	Canadian pondweed	A	1	1
<i>Emex australis</i>	Prickly jacks	A	3	1
<i>Eragrostis curvula</i>	African lovegrass	A	1	1
<i>Euphorbia paralias</i>	Sea spurge		46	4
<i>Foeniculum vulgare</i>	Fennel	A	3	1
<i>Fuchsia magellanica</i>	Fuchsia		2	3
<i>Genista monspessulana</i>	Montpellier broom	A	10	1
<i>Glaucium flavum</i>	Horned poppy		7	4
<i>Gomphocarpus fruticosus subsp. fruticosus</i>	Swanplant		15	4
<i>Iris foetidissima</i>	stinking iris		5	4
<i>Kennedia rubicunda</i>	Dusky coralpea		5	4

Botanical name	Common Name	Declared Zone	NVA Records	Category
<i>Lupinus arboreus</i>	Tree lupin			4
<b><i>Lycium ferocissimum</i></b>	<b>African boxthorn</b>	<b>B</b>	<b>348</b>	<b>2</b>
<i>Marrubium vulgare</i>	Horehound	B	136	2
<i>Moraea flaccida</i>	Cape tulip	A	1	1
<b><i>Nassella neesiana</i></b>	<b>Chilean needlegrass</b>	<b>A</b>	<b>5</b>	<b>1</b>
<i>Paraserianthes lophantha</i>	Cape wattle			4
<i>Passiflora tarminiana</i>	Banana passionfruit			4
<i>Pinus radiata</i>	Radiata pine			4
<i>Pittosporum undulatum</i>	Sweet pittosporum		2	4
<i>Podalyria sericea</i>	Silky sweetpeabush			4
<i>Polygala myrtifolia</i>	Myrtleleaf milkwort		6	4
<i>Psoralea pinnata</i>	Blue butterflybush			4
<i>Reseda luteola</i>	Weld		1	4
<i>Romulea rosea var. australis</i>	Lilac oniongrass			4
<b><i>Rubus anglocandicans</i></b>	<b>Blackberry</b>	<b>A</b>	<b>6</b>	<b>1</b>
<b><i>Rubus fruticosus</i> subsp. agg</b>	<b>Blackberry</b>	<b>A</b>	<b>9</b>	<b>1</b>
<b><i>Rubus polyanthemus</i></b>	<b>Blackberry</b>	<b>A</b>	<b>2</b>	<b>1</b>
<b><i>Salix fragilis nothovar. fragilis</i></b>	<b>crack willow</b>	<b>A</b>	<b>1</b>	<b>1</b>
<i>Salix</i> spp.	willow species	A		2
<i>Senecio jacobaea</i>	Ragwort	A	3	1
<i>Silybum marianum</i>	Variegated thistle			4
<i>Sporobolus africanus</i>	Parramatta grass			4
<b><i>Ulex europaeus</i></b>	<b>Gorse</b>	<b>A</b>	<b>46</b>	<b>1</b>
<i>Verbascum thapsus</i>	Great mullein		4	3
<i>Vinca major</i>	Blue periwinkle			4
<i>Watsonia meriana var. bulbillifera</i>	Bulbil watsonia			4

## APPENDIX B: FURNEAUX WEED WATCH LIST

All species listed as declared weeds under the Tasmanian Weed Management Act 1999 not recorded for Furneaux are included. Species not listed as a declared weed are either Weeds of National Significance (WONS) which are highlighted in **bold** or, are weeds on the National Environmental Alert List (underlined). Those highlighted in a light colour have been identified in Tasmania. Records have been taken from the Department of Natural Resources and Environment Tasmania (2019) <sup>1</sup>, or from the Natural Values Atlas of Living Australia<sup>2</sup>.

The National Environmental Alert list identifies plant species that are in the early stages of establishment and have the potential to become a significant threat to biodiversity if they are not managed<sup>3</sup>. There have been 5 weeds on the alert list recorded in Tasmania, two of which have been eradicated. No weeds identified on this list have been identified in the Furneaux Region.

Thirty-two Weeds of National Significance (WONS) have been agreed by Australian governments based on an assessment process that prioritised weeds based on their invasiveness, potential for spread and environmental, social and economic impacts<sup>4</sup>. Thirteen WONS have been recorded in Tasmania, of which 5 are not known from the Furneaux Group. Those present in the Furneaux Group are highlighted in bold and the darker colour.

Botanical name	Common Name	Recorded in Mainland Tasmania	Category FRWS 2002	Flinders Declared Zone
<b><i>Acacia nilotica ssp. indica</i></b>	<b>Prickly Acacia</b>	Prickly acacia does not occur in Tasmania.		
<u><i>Acroptilon repens</i></u>	Creeping Knapweed	Creeping knapweed has not managed to establish in Tasmania. However, it has occasionally been found as a contaminant of imported animal feed grain.		A
<b><i>Allium vineale</i></b>	<b>Crow Garlic</b>	Crow garlic occurs in several isolated agricultural areas throughout Tasmania, including the Clarence, Sorell and Launceston Municipality's. Crow garlic has not been recorded in the Flinders municipality.		A

<sup>1</sup> Department of Natural Resources and Environment Tasmania

<sup>2</sup> Atlas of Living Australia, ala.org.au

<sup>3</sup> <http://www.environment.gov.au/biodiversity/invasive/weeds/weeds/lists/alert.html>

<sup>4</sup> <https://www.environment.gov.au/biodiversity/invasive/weeds/weeds/lists/wons.html>

Botanical name	Common Name	Recorded in Mainland Tasmania	Category FRWS 2002	Flinders Declared Zone
<i>Alternanthera philoxeroides</i>	<b>Alligator Weed</b>	Alligator weed has not naturalised in Tasmania. However, the weed has been recorded in domestic gardens in both the north and south of the state.		A
<i>Amaranthus albus</i>	Tumble Weed	Tumbleweed has been recorded in multiple locations in the north and the south of Tasmania. All occurrences have been associated with railway lines. Tumble weed has not been recorded in the Flinders municipality.		A
<i>Amsinckia calycina</i>	Hairy Fiddle-neck	Amsinckia occurs in southern and northern Tasmania, particularly in the Derwent Valley and Central Highlands. Amsinckia grows in a wide range of soil types and climates, but prefers disturbed, dry and open situations.	2	A
<i>Andropogon gayanus</i>	<b>Gamba Grass</b>	Gamba grass is considered to be a low climate match for Tasmania.		
<i>Anredera cordifolia</i>	<b>Madeira Vine</b>	Madeira vine has naturalised in Victoria, Tasmania, South Australia and Western Australia where isolated areas of infestation are expanding.	2	A
<i>Anthemis cotula</i>	Stinking Mayweed	Widely distributed in Tasmania, especially in the north and north-west. Prefers heavy soils on disturbed sites. Tumbleweed as not been recorded in the Flinders municipality.		
<i>Annona glabra</i>	Pond Apple	Pond apple does not occur in Tasmania.		
<i>Asparagus africanus</i>	Climbing Asparagus	Currently known to be in a limited number of sites in Tasmania, climate modelling indicates that all asparagus weeds have considerable potential to spread further across temperate southern Australia or sub-tropical eastern Australia.	2	
<i>Asparagus aethiopicus</i>	Ground Asparagus	Considered a threat to Tasmania.		
<i>Asparagus declinatus</i>	<b>Bridal Veil</b>	Bridal veil is considered a threat to Tasmania.		
<i>Austroderia richardii</i>	Toetoe	Pampas is widespread in Tasmania, occurring in coastal and bushland vegetation, silvicultural operations, quarries, neglected areas, road and rail corridors, and creek and swamp verges.		A
<i>Asystasia gangetica</i>	<u>Chinese / Philippine Violet</u>	No known populations.		
<i>Barleria prionitis</i>	<u>Barleria / Porcupine Flower</u>	No known populations.		

Botanical name	Common Name	Recorded in Mainland Tasmania	Category FRWS 2002	Flinders Declared Zone
<i>Bassia scoparia</i>	Copper Saltbush/ Kochia	Copper saltbush has not naturalised in Tasmania. Several crop infestations have occurred around the Deloraine area in northern Tasmania as the result of carrot seed contamination; however, all infestations have been successfully eradicated.		A
<i>Berberis darwinii</i>	Darwin's Barberry	Isolated occurrences of Darwin's barberry has been recorded from Scottsdale in the north, Fern Tree and Cockle Creek in the south, and Williamsford in the west. All populations are relatively small.		A
<i>Berkheya rigida</i>	African Thistle	African thistle established a population on King Island but has since been eradicated. African thistle has not naturalised elsewhere Tasmania.		A
<i>Bifora testiculata</i>	Bifora	Bifora has not naturalised in Tasmania. However, the weed is recorded as an occasional contaminant of imported feed grain.		
<i>Calluna vulgaris</i>	Heather	Localised infestations occur in the Kingborough and Huon Valley municipalities. Heather has the potential to grow in a range of Tasmanian environments and elevations.		A
<i>Cabomba caroliniana</i>	Cabomba	Cabomba has not naturalised in Tasmania. However, the plant has been recorded in aquaria in the state.		
<i>Cardaria draba</i>	Hoary cress			A
<i>Carex albula</i>	Frosted curls			A
<i>Carex buchananii</i>	Leather Leaf Sedge	There are no known populations in Tasmania.		A
<i>Carduus nutans</i>	Nodding Thistle	Nodding thistle occurs in isolated occurrences and localised infestations throughout Tasmania, however it is not known to Flinders Island or the Furneaux Group.		A
<i>Carex albula</i>	Frosted Curls / New Zealand Hair Sedge	Limited to the Hobart area. It is not known to the Flinders or Furneaux Island group.		
<i>Carex buchananii</i>	Leather Leaf Sedge	There are no known populations in Tasmania.		
<i>Carex flagellifera</i>	NZ Sedge	Recorded in number of locations in the Huon Valley. Several infestations occur in native vegetation and is a potentially serious environmental weed in Tasmania.		A

Botanical name	Common Name	Recorded in Mainland Tasmania	Category FRWS 2002	Flinders Declared Zone
<i>Carex testacea</i>	NZ Sedge / Redbase Sedge	Recorded around Hobart, although all populations have been eradicated.		A
<i>Carthamus lanatus</i>	Saffron Thistle	Occurs in isolated instances and localised infestations in several municipalities within Tasmania.		A
<i>Cenchrus incertus</i>	Spiny Burrgrass 1	Spiny burrgrass has not managed to establish in Tasmania.		A
<i>Cenchrus longispinus</i>	Spiny Burrgrass 2	Spiny burrgrass has not managed to establish in Tasmania.		A
<i>Cenchrus macrourum</i>	African Feather Grass	Limited distribution in Tasmania, mainly in the Huon and Derwent Valleys.		A
<i>Centaurea calcitrapa</i>	Star Thistle	Star thistle has not naturalised in Tasmania.		A
<i>Centaurea eriophora</i>	Mallee Cockspur	Mallee cockspur has not naturalised in Tasmania.		A
<i>Ceratophyllum demersum</i>	Hornwort	Hornwort has not naturalised in Tasmania.		A
<i>Chondrilla juncea</i>	Skeleton Weed	Skeleton weed has not managed to establish in Tasmania.		A
<i>Chromolaena odorata</i>	<u>Siam Weed</u>	Not present in Tasmania.		
<b><i>Chrysanthemoides monilifera ssp monilifera</i></b>	<b>Boneseed</b>	In Tasmania, boneseed has invaded coastal, estuarine and near-coastal areas in the north-west, the east and the south-east of Tasmania however, it there are no known occurrences in the Furneaux Group.		A
<b><i>Chrysanthemoides monilifera ssp rotundata</i></b>	<b>Bitou Bush</b>	Bitou Bush has not naturalised in Tasmania.		
<i>Crupina vulgaris</i>	Common Crupina	Common crupina does not occur in Tasmania.		A
<b><i>Cryptostegia grandiflora</i></b>	<b>Rubber Vine</b>	Rubber vine does not occur in Tasmania.		
<i>Cuscuta sp.</i>	Dodder	All <i>Cuscuta</i> sp. are declared weeds in Tasmania. All previous records have been eradicated in Tasmania. The distribution of dodders in Tasmania is		A

Botanical name	Common Name	Recorded in Mainland Tasmania	Category FRWS 2002	Flinders Declared Zone
		limited. <i>Cuscuta epithymum</i> or <i>C. campestris</i> has been recorded in the south of Tasmania.		
<i>Cynara cardunculus</i>	Artichoke Thistle	Artichoke thistle has not naturalised in Tasmania. Artichoke thistle has been recorded as a contaminant of imported agricultural products and as a garden plant. Artichoke thistle has been recorded at McRobies Gully tip in Hobart and at the former Bridgewater Railway Station.		A
<u><i>Cynoglossum creticum</i></u>	<u>Blue Hound's Tongue</u>	No known populations.		
<i>Cyperus bracheilema</i>	Cyperus sp.	No known populations.		
<i>Cyperus esculentus</i>	Yellow Nut Grass / Yellow Nut Sedge	Yellow nut grass has not managed to establish in Tasmania.		A
<i>Cyperus rotundus</i>	Purple Nut Grass	Purple nut grass has not managed to establish in Tasmania.		A
<u><i>Cytisus multiflorus</i></u>	<u>White Spanish Broom</u>	May be well adapted to Tasmania's climate. White Spanish broom is not naturalised in Tasmania at present.		A
<i>Datura ferox</i>	Longspine Thornapple	The distribution of datura in Tasmania is limited. Datura occurs as an occasional weed of roadsides and neglected areas on the north-west coast and in the north-east.	2	A
<u><i>Dittrichia viscosa</i></u>	<u>False Yellowhead</u>	False yellowhead has not naturalised in Tasmania. It has potential to grow in warmer regions of Tasmania.		A
<b><i>Dolichandra unguis-cati</i></b>	<b>Cat's Claw Creeper</b>	Cat's claw creeper is considered to be a low climate match for Tasmania.		
<i>Echium vulgare</i>	Viper's Bugloss	Viper's bugloss is less common in Tasmania and is generally restricted to dry banks in the south of the State. Viper's Bugloss has not been recorded in Furneaux.	2	A
<i>Egeria densa</i>	Egeria	Egeria is recorded as an occasional weed of ponds and slow-moving streams in Tasmania. Egeria is also occasionally found in aquaria.		A
<b><i>Eichhornia crassipes</i></b>	<b>Water Hyacinth</b>	Water hyacinth has not managed to establish in Tasmania. However, the weed has been recorded in aquaria.		A
<i>Eleocharis parodii</i>	Parodi	Parodi can invade irrigated agricultural operations. It has potential to grow in a number of Tasmanian regions.		A

Botanical name	Common Name	Recorded in Mainland Tasmania	Category FRWS 2002	Flinders Declared Zone
<i>Eloдея canadensis</i>	Canadian Pondweed	Canadian pondweed occurs at several sites in southern, central and northern Tasmania. It has not been recorded in the Flinders municipality.	2	A
<i>Equisetum sp.</i>	<u>Horsetail</u>	Horsetails are not widely distributed in Tasmania, known only to an isolated infestation in Launceston.		A
<i>Erica arborea</i>	Tree Heath	Widespread in Tasmania.		
<i>Erica baccans</i>	Berry Heath	Widespread in Tasmania.		
<i>Erica caffra</i>	Water Heath	Recorded in Tasmania.		
<i>Erica carnea</i>	Winter Heath	The potential distribution of most Erica in Australia is largely unknown. Climate match assessments Erica range from moderate through to very high climate suitability for Tasmania.		
<i>Erica ciliaris</i>	Dorset Heath	The potential distribution of most Erica in Australia is largely unknown. Climate match assessments for Erica range from moderate through to very high climate suitability for Tasmania.		
<i>Erica cinerea</i>	Bell Heather	The potential distribution of most Erica in Australia is largely unknown. Climate match assessments for Erica range from moderate through to very high climate suitability for Tasmania.		
<i>Erica discolor</i>	Bicolored Heath	Recorded in Tasmania.		
<i>Erica erigena</i>	Irish Heath	The potential distribution of most Erica in Australia is largely unknown. Climate match assessments for Erica range from moderate through to very high climate suitability for Tasmania.		
<i>Erica glandulosa</i>	Erica species	The potential distribution of most Erica in Australia is largely unknown. Climate match assessments for Erica range from moderate through to very high climate suitability for Tasmania.		
<i>Erica holosericea</i>	Erica species	Recorded in Tasmania.		
<i>Erica lusitanica</i>	Spanish Heath	Unconfirmed record in the Flinders Municipality but not considered valid. Extensive spanish heath patches at the Bridport airport where flinders aviation is based.	2	A

Botanical name	Common Name	Recorded in Mainland Tasmania	Category FRWS 2002	Flinders Declared Zone
<i>Erica melanthera</i>	Erica species	The potential distribution of most Erica in Australia is largely unknown. Climate match assessments for Erica range from moderate through to very high climate suitability for Tasmania.		
<i>Erica quadrangularis</i>	Angled Heath	The potential distribution of most Erica in Australia is largely unknown. Climate match assessments for Erica range from moderate through to very high climate suitability for Tasmania.		
<i>Erica Scoparia</i>	Besom Heath	Recorded in Tasmania.		
<i>Erica terminalis</i>	Corsican Heath	The potential distribution of most Erica in Australia is largely unknown. Climate match assessments for Erica range from moderate through to very high climate suitability for Tasmania.		
<i>Erica tetralix</i>	Cross-leaved Heath	The potential distribution of most Erica in Australia is largely unknown. Climate match assessments for Erica range from moderate through to very high climate suitability for Tasmania.		
<i>Erica vagans</i>	Cornish Heath	The potential distribution of most Erica in Australia is largely unknown. Climate match assessments for Erica range from moderate through to very high climate suitability for Tasmania.		
<i>Fallopia japonica</i>	Japanese Knotweed	Japanese knotweed is a significant weed in riparian areas, disturbed coastal habitats, wetlands and roadsides and occurs in isolated patches in the North and South of Tasmania.		A
<i>Festuca gautieri</i>	Bear-Skin Fescue	Not naturalised in Tasmania.		A
<i>Galium spurium</i>	False Cleavers	False cleavers have not naturalised in Tasmania.		A
<i>Galium tricornutum</i>	Three-horned Bedstraw	Three-horned bedstraw has not naturalised in Tasmania.		A
<b><i>Genista linifolia</i></b>	<b>Flax leaf broom</b>	Flax-leaf broom is known to be naturalised in several locations in the south and north-west of Tasmania.		
<u><i>Gymnocoronis spilanthoides</i></u>	<u>Senegal Tea Plant</u>	There are no known naturalised Senegal tea plant populations in Tasmania.		A
<i>Heracleum mantegazzianum</i>	Giant Hogweed	Giant hogweed is not naturalised in Tasmania at present.		A

Botanical name	Common Name	Recorded in Mainland Tasmania	Category FRWS 2002	Flinders Declared Zone
<i>Hydrilla verticillata</i>	Hydrilla	Hydrilla has not naturalised in Tasmania.		A
<b><i>Hymenachne amplexicaulis</i></b>	<b>Hymenachne</b>	Hymenachne is considered to be a low climate match for Tasmania.		
<b><i>Hymenachne x calamitosa</i></b>	<b>Hymenachne</b>	Hymenachne is considered to be a low climate match for Tasmania.		
<i>Hypericum perforatum</i>	St John's Wort	Widely distributed in small populations across Tasmania, mainly on disturbed sites such as roadsides and pasture.		A
<i>Hypericum tetrapterum</i>	Square-Stemmed St John's Wort	Localised infestation in the Huon valley. Not known in any other municipality.		A
<i>Ilex aquifolium</i>	Holly	Tolerant of summer drought, modelling indicates very strong year-round suitability to much of Tasmania, with several known naturalised holly populations in parts of the state.		
<b><i>Jatropha gossypifolia</i></b>	<b>Bellyache Bush</b>	Modelling indicates bellyache bush is a low climate match for Tasmania.		
<u><i>Koelreuteria elegans subsp. formosana</i></u>	<u>Chinese Rain Tree</u>	Not present in Tasmania.		
<u><i>Lachenalia reflexa</i></u>	<u>Yellow Soldier</u>	Not present in Tasmania.		
<u><i>Lagarosiphon major</i></u>	<u>Oxygen Weed</u>	All previous records are believed to have been eradicated; however, Tasmania is within its potential distribution range.		A
<b><i>Lantana camara</i></b>	<b>Lantana</b>	Lantana has not naturalised in Tasmania.		A
<i>Lepidium draba</i>	Whiteweed	Whiteweed occurs in localised infestations throughout Tasmania.		
<i>Miconia calvescens</i>	Miconia	Miconia does not occur in Tasmania.		
<b><i>Mimosa pigra</i></b>	<b>Mimosa</b>	Mimosa does not occur in Tasmania.		
<i>Myriophyllum aquaticum</i>	Parrotfeather	Localised infestations occur throughout Tasmania, mainly in the North and North-west of the state.		A

Botanical name	Common Name	Recorded in Mainland Tasmania	Category FRWS 2002	Flinders Declared Zone
<i>Nassella charruana</i>	<u>Lobed (Uruguay) needle grass</u>	Potential distribution includes north-eastern Tasmania.		
<i>Nassella hyalina</i>	<u>Cane Needle Grass</u>	Potential Distribution is not yet known but is closely related to serrated tussock and Chilean needle grass, care should be taken in Tasmania.		
<i>Nassella leucotricha</i>	Texas Needle Grass	One infestation of Texas needle grass in Tasmania was discovered in a paddock near Rokeby, southern Tasmania in late 2010.		A
<i>Nassella tenuissima</i>	Mexican Feathergrass	Mexican feather grass has been recorded in Tasmania several times as an ornamental or garden plant.		
<b><i>Nassella trichotoma</i></b>	<b>Serrated Tussock</b>	Large established populations exist in Tasmania, mainly in the south-east, with outlier populations known on the east coast and, more recently through the midlands. A local infestation occurs on King Island.		A
<i>Onopordum acanthium</i>	Cotton Thistle	The main infestations of cotton thistle in Tasmania occur on improved pastures in the lower rainfall areas of the Midlands.		
<i>Oenanthe pimpinelloides</i>	Meadow Parsley	Meadow parsley has been identified in one location in northern Tasmania. Identification was confirmed in late 2013 and this is the first record of meadow parsley occurring in Tasmania. Meadow parsley is not naturalised in Tasmania at present.		A
<i>Onopordum sp.</i>	Onopordum Thistle	Recorded in several Tasmanian municipalities across Tasmania as isolated occurrences. Establishes quickly on disturbed sites in low rainfall areas on improved pasture.		A
<i>Orobanche sp.</i>	Broomrape	Broomrape is not naturalised in Tasmania.		A
<b><i>Opuntia spp (excluding O. ficus-indica)</i></b>	<b>Opuntoid Cacti</b>	Known to have limited populations in Tasmania.		
<b><i>Parkinsonia aculeata</i></b>	<b>Parkinsonia</b>	Parkinsonia does not occur in Tasmania. Low climatic suitability.		
<b><i>Parthenium hysterophorus</i></b>	<b>Parthenium Weed</b>	Parthenium weed does not occur in Tasmania. Low climatic suitability.		
<u><i>Pelargonium alchemilloides</i></u>	<u>Garden Geranium</u>	Does not occur in Tasmania. Low climatic suitability.		
<b><u><i>Pereskia aculeata</i></u></b>	<b><u>Leaf Cactus</u></b>	Does not occur in Tasmania.		

Botanical name	Common Name	Recorded in Mainland Tasmania	Category FRWS 2002	Flinders Declared Zone
<i>Pilosella aurantiaca</i> subsp. <i>aurantiaca</i>	Orange Hawkweed	Occurs in isolated and localised infestations in Tasmania, however not in the Furneaux Group.		
<i>Pilosella officinarum</i> (syn. <i>Hieracium pilosella</i> )	Mouse-ear Hawkweed	Had established at one site in Tasmania but has now been eradicated.		
<i>Pilosella</i> sp. HIERACIUM (syn. PILOSELLA) species	<u>Hawkweeds</u>	Hawkweed has been found in open woodland and grasslands, poor pastures, roadsides and neglected areas in the Southern Midlands, Central Highlands and around Hobart.		
<i>Piptochaetium montevidense</i>	<u>Uruguayan Rice Grass</u>	Tasmania not thought to be within potential distribution range.		
<i>Praxelis clematidea</i>	<u>Praxelis</u>	Does not occur in Tasmania. Low climatic suitability.		
<b><i>Prosopis</i> sp.</b>	<b>Mesquite</b>	Mesquite does not occur in Tasmania. Low climatic suitability.		
<i>Retama raetam</i>	<u>White Weeping Broom</u>	White Weeping Broom is similar to other WoNS brooms, and is an aggressive invader which spreads by seed, each plant producing a large number of seeds. Recorded in Tasmania around Hobart.		
<i>Rorippa sylvestris</i>	Creeping Yellow Cres	Creeping Yellowcress is naturalised in the Huon Valley municipality.		A
<i>Sagittaria montevidensis</i>	Arrowhead	Arrowhead has not naturalised in Tasmania.		A
<b><i>Sagittaria platyphylla</i> (syn. <i>Sagittaria graminea</i>)</b>	<b>Sagittaria</b>	Sagittaria has not naturalised in Tasmania.		
<i>Salpichroa origanifolia</i>	Pampas Lilly-of-the Valley	Distribution of Pampas Lilly-of-the-Valley in Tasmania is limited at this time.		A
<i>Salvinia molesta</i>	Salvinia	Salvinia has not naturalised.		A
<i>Senecio glastifolius</i>	<u>Holly Leaved Senecio / pink Ragwort</u>	Holly leaved senecio is not naturalised in Tasmania at present.		A
<b><i>Senecio madagascariensis</i></b>	<b>Fireweed</b>	Fireweed does not occur in Tasmania.		
<i>Senegalia catechu</i>	<u>Cutch Tree</u>	Cutch tree does not occur in Tasmania.		

Botanical name	Common Name	Recorded in Mainland Tasmania	Category FRWS 2002	Flinders Declared Zone
<i>Solanum elaeagnifolium</i>	<b>Silver-Leaf Nightshade</b>	Not naturalised in Tasmania.		A
<i>Solanum marginatum</i>	White-Edged Nightshade	White-Edged nightshade is not widely distributed in Tasmania.		A
<i>Solanum sodomaicum</i>	Apple-Of-Sodom	There are no known naturalised apple-of-Sodom populations in Tasmania.		A
<i>Solanum triflorum</i>	Cut-Leaf Nightshade	Cut-leaf Nightshade has the potential to be a serious agricultural weed in Tasmania. Currently it is contained to a few localised infestations in the south.		A
<i>Striga sp.</i>	Witchweed	There are no naturalised populations of witchweed in Tasmania.		A
<b><i>Tamarix aphylla</i></b>	<b>Athel Pine</b>	There are no naturalised populations of Athel Pine in Tasmania.		A
<i>Thunbergia grandiflora</i>	<u>Laurel Clock Vine</u>	Laurel clock vine does not occur in Tasmania.		
<i>Tipuana tipu</i>	<u>Rosewood</u>	Rose wood does not occur in Tasmania.		
<i>Trapa sp.</i>	Floating Water Chestnut	There are no known naturalised caltrop populations in Tasmania.		A
<i>Trianoptiles solitaria</i>	<u>Subterranean Cape Sedge</u>	Does not occur in Tasmania.		
<i>Tribulus terrestris</i>	Caltrop	There are no known naturalised caltrop populations in Tasmania.		A
<i>Urospermum dalechampii</i>	False Dandelion	Mediterranean daisy occurs in Tasmania's south, with the largest infestations occurring in the Hobart and Clarence municipalities.		A
<i>Vachellia karroo</i>	<u>Karoo Acacia / Karoo Thorn</u>	Karoo thorn does not occur in Tasmania.		
<i>Xanthium spinosum</i>	Bathurst Burr	Isolated occurrences of Bathurst burr occur in the Hobart, Clarence, Meander Valley and Launceston municipalities.		A
<i>Zizania sp.</i>	Wild Rice	Wild rice has not naturalised anywhere in Australia.		A

\* No status given on Statutory Weed Management Plan -stated to occur on Flinders Island though not on NVA

## APPENDIX C: FURNEAUX REGION WEED STRATEGY 2002 - ACTIONS

No.	Action	Who	Priority	Time-frame	Comment	Further Work	SO This Plan
1	Annual review of weed mapping data to determine gaps and priorities for mapping	FWMG / FC / DPIWE	H	Annually (Sept-Oct)	Unknown No hard copy or database of mapping	Rely on NVA . Upload regularly and review 5 yearly	1.3
2	Develop and maintain a system for weed mapping which involves all stakeholders and the general community	FWMG / DPIWE / Community	H	Ongoing	Unknown unnecessary to maintain separate system	Rely on existing platforms NVA, ALA an i-naturalist Seek opportunities to log data	1.3
3	Continue weed mapping program (roadsides, outer islands, remnant vegetation)	FWMG / DPIWE / FC / Westside Landcare	H	Ongoing	NRM funded roadside mapping in early 2000s. Hard copies with Mick Sherriff Repeated for weedy grasses in 2020. KH MA. +African boxthorn, Pampas. Outer islands also mapped (Hamish Saunders report)	Ensure data recorded and reported is uploaded onto NVA	1.3
4	Convert existing weed data to digital data.	FWMG	H	By Jan 2003	Unknown	Ensure data recorded and reported is uploaded onto NVA	1.3
5	Ensure that information and data sharing exists between FWMG and DPIWE (Regional Weed Officer). All weed mapping data should be placed on DPIWE's Reticle Database.	FWMG / DPIWE	H	Ongoing	Some data was shared	Ensure data recorded and reported is uploaded onto NVA, Report process to Biosecurity Tas	1.3
6	Train, support and encourage community participation in mapping (particularly landholders) and in	FWMG / Community	H	Ongoing	NRM Weed of The Month Worked with groups e.g Coastcare gorse removal	Promote weed poster, encourage i-naturalist use,	3.2

No.	Action	Who	Priority	Time-frame	Comment	Further Work	SO This Plan
	recording management activities (refer Appendix 5).				early 2000s Westside Landcare - pampas Memana-Leckrana Landcare - agricultural weeds	Train volunteers to use GPS available from Wildcare	
7	Ensure all weed data is collated, digitized and made available for land managers.	DPIWE / FC / FWMG	H	Ongoing	Occurred whilst Council NRM officer in place	FWAG to establish process	2.2
8	Establish a formal Furneaux Weed Management Group with stakeholder representation to oversee the implementation of this weed strategy and organize regular meetings.	FNRMS	H	By Jan 2003	FWMG formed and operated for 4 years whilst NRM officer support	Set up new FWAG	2.1
9	Involve additional agencies/community groups in the FWMG where appropriate.	FWMG	H	ASAP	FWMG was representative of all stakeholders	FWAG to be representative of all stakeholders	2.1
10	Increase the awareness and understanding of land managers/stakeholders in relation to weed management in order to ensure weed management decisions and actions occur in a cooperative manner.	FWMG	H	Ongoing	Likely achieved to a degree. Landowners are more aware than ever. Difficult to measure	Reframe objective with an expanded communication strategy with measurable aims and objectives	3.1
11	Establish and make available, a list of accessible weed management resources.	FWMG	H	By June 2002	Hard copies of some documents made available at NRM office	Move to on line links	3.1
12	Provide progress reports to stakeholders.	FWMG	H	Annually May	Unknown	Unnecessary	-

No.	Action	Who	Priority	Time-frame	Comment	Further Work	SO This Plan
13	Organize regular articles in local newspaper providing information on relevant weed management issues and detailing forthcoming events.	FWMG	H	Monthly	Weed of the Month was released for period	Repeat Weed of the month and have ongoing to keep in front of people's minds	3.2
14	Investigate staffing requirements for coordination of weed management activities.	FWMG	H	By Dec 2002	NRM officer for 200s. Currently 1 weed operator 1 day per week	Promote increase in resources 0.2 FTE + external project funding	1.1
15	Provide and make accessible a broad range of current weed management information for stakeholders, land managers and the general community. Resources should specifically include: <ul style="list-style-type: none"> <li>A quick reference for chemical control of Furneaux weeds</li> <li>A control calendar for significant Furneaux weeds</li> </ul>	FWMG / DPIWE / FC	H	Ongoing	Weed calendar Furneaux - Alan Reed, Env'tl educator  Recent release of <i>Invasive Weeds of Furneaux Islands</i> poster	Promote new poster Provide links to Biosecurity Tas Investigate more Furneaux specific issues	3.1
16	Involve all stakeholders, land managers and the general community in weed mapping and make maps available, to illustrate priorities for on-ground activities.	FWMG / DPIWE / FC	H	Maps available by March 2003	Unknown	Produce maps of each species from NVA data Include maps in Weed of The Month	1.3 3.1 3.2
17	Organize field days as appropriate, to demonstrate various weed control methods and results.	FWMG / TFGA / LC	M	6 monthly	Asparagus Weeds field day	NRM North Field days (Peter Hedding?)	4.2
18	Develop and implement weed management education and training relevant to the Furneaux Group involving the Regional Weed Management Officer (North), Weed Plan Education	FWMG / DPIWE / Schools / LC / TFGA	M	Develop by Dec 2002 for ongoing	Unknown	Would require a NRM officer at Council Identify subset of actions for external funding	4.2

No.	Action	Who	Priority	Time-frame	Comment	Further Work	SO This Plan
	Officer (DPIWE), schools and other community groups (e.g. Council works crew, Landcare groups, landholders, recreational groups). Areas of interest could include weed identification, integrated weed management, prevention of weed spread, roadside management, chemical use etc.			implemen tation			
19	Develop and distribute a weed identification kit suitable for the Furneaux region.	FWMG / FC	M	Dec 2002	Unknown' Recent activity <i>Invasive Weeds of Furneaux Islands</i> poster	Promote poster	3.2
20	Create and distribute a list of weeds (and potential weeds) that are now being sold as garden plants in order to make people aware of the threat of establishing new weed problems in the region (send to community and plant sellers in the region).	FWMG	M	Dec 2002	Unknown	Incorporate in communication strategy . Monitor plant sales. Promote list of likely weeds eg garden varieties of broom	3.2
21	Incorporate weed information into proposed FNRMS internet site.	FWMG / FNRMS	M	October 2002	Not progressed	Incorporate weed page on FC website with links to external resources	3.1
22	Incorporate weed information into proposed Furneaux Natural Resource Management Information Centre.	FWMG	M	October 2002	Visitor Info centre closed	Investigate future opportunities for sharing info in public spaces	3.2
23	Incorporate weed education into relevant components of the curriculum at FDHS and CBS. Emphasis to be placed on involving them in local action.	FWMG / FDS / CBS	H	Ongoing	Not thought to have got into curriculum Science Dep did a Bush BioBlitz, Trowunna Ranger	Requires someone to champion this with schools	3.2

No.	Action	Who	Priority	Time-frame	Comment	Further Work	SO This Plan
					Room (CBS) includes plenty of resources.		
24	<p>Increase awareness of local weeds, weed impacts and weed management techniques by:</p> <ul style="list-style-type: none"> <li>• Face to face contact</li> <li>• Letterbox drops</li> <li>• Displays in public places (e.g. Walkers Supermarket / Flinders Show)</li> <li>• Placement of leaflets in shops, offices, etc</li> <li>• Signage at key locations (e.g. airport, start of Mt Strzelecki walking track, Council tips)</li> <li>• Radio programs/interviews</li> <li>• Field days</li> <li>• Newspaper articles</li> </ul>	FWMG / DPIWE / FC / TFGA	H	Ongoing	<p>Much was achieved in this space in the early 2000s whilst FWMG and NRM Officer in place.</p> <p>Weed of The Month NHT signs on pampas</p> <p>Info at airport and Whitemark Tip</p> <p>Supermarket foyer was used for displays</p>	<p>Current locations that could be used:</p> <p>Council offices</p> <p>Whitemark supermarket</p> <p>Library</p> <p>Museum</p> <p>Radio -N Tas morning show</p>	3.1 3.2
25	Produce media articles to publicize forthcoming weed management activities and to provide regular progress reports to the community.	FWMG	M	Ongoing	Much was achieved in this space in the early 2000s whilst FWMG and NRM Officer in place.	Use Social media. review various platforms Eg Facebook,	3.2
26	Hold annual educational / promotional event during Weed Busters Week.	FWMG	M	October annually	Occurred in early 2000s whilst FWMG and NRM Officer in place	Require funded position	3.2
27	Provide a report to and address Flinders Council regularly about weed management issues.	FWMG	H	6 monthly	Occurred in early 2000s whilst NRM Officer in place	FWAG to report annually to Council	2.1

No.	Action	Who	Priority	Time-frame	Comment	Further Work	SO This Plan
28	Establish a working group with Flinders Council to investigate the strategic location of wash-down facilities in the region for road maintenance vehicles and any other vehicle likely to be spreading weeds.	FWMG	M	By Dec 2002	Public washdown established Whitemark Fire Station Mobile washdown trailer since 2013	Vehicle washdown at Bridport Incorporate management of run-off at Fire station Incorporate use of existing facilities in Council Work procedures	4.2
29	Develop voluntary code of practice for livestock and transport through TFGA to reduce likelihood of spreading weed seeds.	FWMG / FC / TFGA	M	By Dec 2002	Unknown	Liaise with FI Productivity Group Investigate procedures to have imported animals yarded up for period before release.	5.2
30	Work with Flinders Council, agricultural contractors and other relevant groups (e.g. seed industry) to develop voluntary code of practice to minimize the spread of weeds on machinery.	FWMG / FC / TFGA	M	By Dec 2002	Unknown - not likely	Important priority to develop Code of Practice	5.2
31	Ensure that Municipal works and maintenance activities minimize the risk of weeds spreading into new areas.	FC	H	Ongoing	Nothing put in place	Council Work procedures	4.2
32	Ensure that active quarries carry out effective weed management.	FC	H	Ongoing	In place Council quarries Not known for private quarries – ask Andrew Wakefield	Promote Code of Practice for all quarries and annual inspections. Work with Biosecurity Tas	5.1
33	Establish working group to develop integrated approach to roadside management of weeds	FC / DPIWE / Aurora / Telstra	H	By June 2003	Nothing put in place	Develop cross agency procedures for all roads	4.2

No.	Action	Who	Priority	Time-frame	Comment	Further Work	SO This Plan
34	Educate and inform community about risk of spread of weeds from recreational activities (e.g. 4-WDs, bush walkers) and activities such as disposal of garden rubbish (Refer Action 22).	FWMG / DPIWE / FC	H	Ongoing	Unknown	Garden rubbish dumping – public awareness	3.2
35	Ensure ongoing mapping and monitoring of roadside weeds.	FC / Aurora	H	Ongoing	Overlap with Action 3. 2020 WAF Round 1 mapping of weedy grasses on roadsides	Extend mapping to other priority weeds Repeat mapping every 5 years	4.2
36	Annual survey of tip sites and vacant Crown land managed by Council to identify weed problems, prioritise and target infestations appropriately.	FC / DPIWE	H	Annually Nov	No formal process but undertaken by Council weed management staff	Council to formalise procedures and reporting	5.1
37	Continue to be an active member of State Weed Alert Network and encourage community to become involved.	DPIWE / FWMG	H	Ongoing	Operated for short period successfully in early 2000s	Be available to join future networks if/when they establish	-
38	Provide regular information to community about emerging weeds.	FWMG	H	Ongoing	Unknown	Important. Establish procedure for sharing new and emerging weed reports/ advice.	3.2
39	Collate information on the various methods of weed control and make available to the community.	FWMG	H	Ongoing	Unknown	Provide links to existing on line resources	3.2
40	Develop and maintain a database showing available resources for integrated weed management.	FWMG	M	By June 2002	No	Provide links to existing on line resources	3.2

No.	Action	Who	Priority	Time-frame	Comment	Further Work	SO This Plan
41	Organise a workshop on integrated weed management dealing with a high priority weed.	DPIWE	M	By June 2003	Asparagus Weed	Seek opportunities through external projects	-
42	Encourage landholders to incorporate integrated weed management into existing whole farm plans.	FWMG / TFGA	M	Ongoing	Property management plans NRM North	Important. Encourage landowners. Seek opportunities through external projects	-
43	Ensure that projects and works being undertaken in the region by land managers are incorporating integrated weed management where appropriate.	FC / DPIWE	M	Ongoing	Evidence of some landowners working n this space successfully		-
44	Investigate opportunities for use of appropriate biological controls to control weeds as part of integrated pest management, particularly on outer islands (e.g. Paterson's Curse weevil, Gorse spider mite, Horehound Plume Moth)	FWMG / DPIWEM	M	Ongoing	Gorse – spider mite Horehound – plume moth Paterson's curse – flea beetle Bridal creeper – rust Ragwort – beetle Deal island Sea spurge – fungus trials 2022 CBI	Seek opportunities and foster partnerships	4.3
45	Develop local action plan for Bridal Creeper.	DPIWE	H	March 2002	Yes early 2000s	Review status of bridal creeper for Action Plan	1.3
46	Develop local action plan for Emita township involving detailed mapping and guidelines for control and containment.	DPIWE / Westside Landcare / landholder / FNRMS	H	July 2002	Unknown GreenCorps worked on African boxthorn in early 2000s FOBSI work ongoing.	Dedicated Emita Weed Action Plan?	1.3

No.	Action	Who	Priority	Time-frame	Comment	Further Work	SO This Plan
					Council support on roadsides.		
47	Develop Local Action Plan for Cape Barren Island.	DPIWE /CBAA	H	Dec 2002	Yes - Now managed by Trowunna Rangers	Support Trowunna Rangers funding opportunities / grants	1.3
48	Develop Local Action Plan for Outer Islands.	DPIWE / OIA / leaseholders	M	June 2003	Yes - FOBSI	Support FOBSI funding opportunities / grants	1.3
49	Develop Local Action Plan for Wybalenna	FIAA	M	Aug 2002	Yes – TAC FOBSI implemented	FOBSI ongoing	1.3
50	Implement Local Action Plans.	DPIWE / FC / landholders	H	Ongoing	Yes – examples?		2.3
51	Prepare a list of components of the FRWS that will require financial and in-kind support.	FWMG	H	By Dec 2002	Likely to have been worked on by NRM officer.	This WMS Seek Future Action Plans for funding	2.3
52	Determine what resources are needed to carry out actions outlined in the FRWS and associated Local Action Plans.	FWMG	H	By Dec 2002			2.3
53	Identify potential sources of financial and in-kind support.	FWMG	H	By Dec 2002			2.3
54	Encourage representatives of the business sector and Government instrumentalities to attend field days, displays.	FWMG	M	Ongoing			2.3

No.	Action	Who	Priority	Time-frame	Comment	Further Work	SO This Plan
55	Produce media articles to provide regular progress reports and to publicise weed management activities.	FWMG	M	Ongoing			3.2
56	Approach the business sector and Government instrumentalities, encouraging them to provide sponsorship for weed management activities.	FWMG	M	Ongoing			2.3
57	Develop and maintain a database showing resources, location, availability, and contact details.	FWMG	M	By Jan 2002			2.3
58	Identify appropriate funding programs and prepare applications to enable the implementation of weed management activities	FWMG	M	Jan 2003			2.3
59	Initiate and maintain contact with representatives from organisations dealing with development and implementation of policy, legislation, and strategies relevant to weed management.	FWMG	H	Ongoing			
60	Provide a channel of communication between legislators and the community on weed management issues.	FWMG	H	Ongoing	Likely to have been worked on by NRM officer.	Too non-specific	
61	Maintain communication with State and Regional Weed Management Officers (DPIWE) to ensure that the FRWS remains consistent with the National and State weed strategies.	FWMG	H	Ongoing			

No.	Action	Who	Priority	Time-frame	Comment	Further Work	SO This Plan
62	Organize presentations at appropriate forums to explain landholder responsibilities under the Weed Management Act 1999 and the FRWS.	FWMG / FC / DPIWE / Landcare Groups	M	By July 2002	Unknown - not likely	Role falls to Biosecurity Tasmania	
63	Ensure mapping activities are carried out to meet needs of Weed Management Act 1999 (mapping and risk assessment is a requirement of declaration)	FWMG / DPIWE / Community	H	Ongoing	Mapping promoted in other actions.	Respond to direction from Biosecurity Tasmania	1.3
64	Investigate the appointment of a gazetted weed inspector under the Weed Management Act 1999 within the Furneaux region.	FWMG	H	Appointm ent by July 2002	Previously staff gazetted. None now gazetted.	Council should have a gazetted Weed Officer.	5.4
65	Review the Furneaux Region Weed Strategy to ensure that it remains relevant to the needs of the region and consistent with the Tasmanian Weed Management Act 1999 and any new/revised policy or legislation.	FWMG	M	Annually April	No	Currently part of this strategy	

## APPENDIX D - ALL INTRODUCED PLANTS NATURALISED IN FLINDERS

From Natural Values Atlas 28/7/2022

Family	Species names	Preferred common names	Category
<b>Monocotyledons</b>			
Agapanthaceae	Agapanthus praecox subsp. orientalis	agapanthus	
Agapanthaceae	Agapanthus sp.	african lily	
Alliaceae	Allium ampeloprasum	wild leek	
Alliaceae	Allium triquetrum	triangular garlic	
Araceae	Zantedeschia aethiopica	arum lily	
Asparagaceae	Agave americana	century plant	
Asparagaceae	Asparagus asparagoides	bridal creeper	
Asparagaceae	Asparagus scandens	asparagus fern	
Asphodelaceae	Aloe maculata	soap aloe	
Asphodelaceae	Asphodelus fistulosus	onion weed	
Cyperaceae	Carex divulsa	grey sedge	
Cyperaceae	Cyperus eragrostis	drain flatsedge	
Cyperaceae	Isolepis levynsiana	fan clubsedge	
Cyperaceae	Isolepis setacea	bristle clubsedge	
Hyacinthaceae	Scilla peruviana	cuban lily	
Hydrocharitaceae	Elodea canadensis	canadian pondweed	
Iridaceae	Chasmanthe bicolor		
Iridaceae	Gladiolus communis subsp. byzantinus	byzantine gladiolus	
Iridaceae	Gladiolus undulatus	wild gladiolus	
Iridaceae	Iris foetidissima	stinking iris	
Iridaceae	Moraea flaccida	oneleaf cape tulip	
Iridaceae	Romulea rosea var. australis	lilac oniongrass	
Iridaceae	Watsonia sp.		
Juncaceae	Juncus acutiflorus	sharpflower rush	
Juncaceae	Juncus articulatus	jointed rush	
Juncaceae	Juncus capitatus	capitate rush	
Poaceae	Agrostis capillaris var. aristata	awned browntop bent	
Poaceae	Agrostis capillaris var. capillaris	browntop bent	
Poaceae	Agrostis capillaris	bentgrass	
Poaceae	Agrostis stolonifera	creeping bent	
Poaceae	Aira caryophyllea subsp. caryophyllea	silvery hairgrass	
Poaceae	Aira caryophyllea	silvery hairgrass	
Poaceae	Aira cupaniana	leafy silvery hairgrass	
Poaceae	Aira elegantissima	delicate hairgrass	
Poaceae	Aira praecox	early hairgrass	
Poaceae	Alopecurus geniculatus	marsh foxtail	
Poaceae	Amelichloa caudata	espartillo	
Poaceae	Ammophila arenaria subsp. arenaria	marram grass	

Poaceae	<i>Ammophila arenaria</i>	marram grass	
Poaceae	<i>Anthoxanthum odoratum</i>	sweet vernalgrass	
Poaceae	<i>Arrhenatherum elatius</i> var. <i>bulbosum</i>	bulbous oatgrass	
Poaceae	<i>Avena barbata</i>	bearded oat	
Poaceae	<i>Avena fatua</i>	wild oat	
Poaceae	<i>Avena sativa</i>	cereal oat	
Poaceae	<i>Avena strigosa</i>	bristle oat	
Poaceae	<i>Briza maxima</i>	greater quaking-grass	
Poaceae	<i>Briza minor</i>	lesser quaking-grass	
Poaceae	<i>Bromus catharticus</i>	prairie grass	
Poaceae	<i>Bromus diandrus</i>	great brome	
Poaceae	<i>Bromus hordeaceus</i>	soft brome	
Poaceae	<i>Bromus sterilis</i>	barren brome	
Poaceae	<i>Catapodium marinum</i>	stiff sandgrass	
Poaceae	<i>Catapodium rigidum</i>	ferngrass	
Poaceae	<i>Cenchrus clandestinus</i>	kikuyu grass	
Poaceae	<i>Cenchrus longisetus</i>	feathertop	
Poaceae	<i>Cortaderia jubata</i>	pink pampasgrass	
Poaceae	<i>Cortaderia selloana</i>	silver pampasgrass	
Poaceae	<i>Cynodon dactylon</i> var. <i>dactylon</i>	couchgrass	
Poaceae	<i>Cynosurus cristatus</i>	crested dogstail	
Poaceae	<i>Cynosurus echinatus</i>	rough dogstail	
Poaceae	<i>Dactylis glomerata</i>	cocksfoot	
Poaceae	<i>Digitaria sanguinalis</i>	summergrass	
Poaceae	<i>Ehrharta calycina</i>	perennial veldtgrass	
Poaceae	<i>Ehrharta erecta</i> var. <i>erecta</i>	panic veldtgrass	
Poaceae	<i>Ehrharta villosa</i>	pyp grass	
Poaceae	<i>Eragrostis curvula</i>	african lovegrass	
Poaceae	<i>Festuca arundinacea</i>	tall fescue	
Poaceae	<i>Glyceria declinata</i>	small sweetgrass	
Poaceae	<i>Glyceria fluitans</i>	floating sweetgrass	
Poaceae	<i>Hainardia cylindrica</i>	thintail barbgrass	
Poaceae	<i>Holcus lanatus</i>	yorkshire fog	
Poaceae	<i>Holcus mollis</i>	creeping fog	
Poaceae	<i>Hordeum glaucum</i>	bluish barleygrass	
Poaceae	<i>Hordeum hystrix</i>	mediterranean barleygrass	
Poaceae	<i>Hordeum leporinum</i>	long-anther barleygrass	
Poaceae	<i>Hordeum marinum</i>	sea barleygrass	
Poaceae	<i>Hordeum murinum</i> subsp. <i>leporinum</i>	long-anther barleygrass	
Poaceae	<i>Hordeum murinum</i>	shortflower barleygrass	
Poaceae	<i>Lagurus ovatus</i>	haretail grass	
Poaceae	<i>Lolium loliaceum</i>	stiff ryegrass	
Poaceae	<i>Lolium multiflorum</i>	italian ryegrass	
Poaceae	<i>Lolium perenne</i>	perennial ryegrass	
Poaceae	<i>Lolium rigidum</i>	wimmera ryegrass	

Poaceae	<i>Nassella neesiana</i>	chilean needlegrass	
Poaceae	<i>Parapholis incurva</i>	coast barbgrass	
Poaceae	<i>Parapholis strigosa</i>	slender barbgrass	
Poaceae	<i>Paspalum dilatatum</i>	paspalum	
Poaceae	<i>Paspalum distichum</i>	water couch	
Poaceae	<i>Phalaris aquatica</i>	toowoomba canarygrass	
Poaceae	<i>Piptatherum miliaceum</i>	rice millet	
Poaceae	<i>Poa annua</i>	winter grass	
Poaceae	<i>Poa compressa</i>	flatstalk meadowgrass	
Poaceae	<i>Poa infirma</i>	early meadowgrass	
Poaceae	<i>Poa pratensis</i>	kentucky bluegrass	
Poaceae	<i>Polypogon maritimus</i> var. <i>subspatheaceus</i>	coast beardgrass	
Poaceae	<i>Polypogon maritimus</i>	coast beardgrass	
Poaceae	<i>Polypogon monspeliensis</i>	annual beardgrass	
Poaceae	<i>Puccinellia distans</i>	reflexed saltmarshgrass	
Poaceae	<i>Rostraria cristata</i>	annual catstail	
Poaceae	<i>Secale cereale</i>	rye	
Poaceae	<i>Setaria parviflora</i>	slender pigeongrass	
Poaceae	<i>Setaria verticillata</i>	whorled pigeongrass	
Poaceae	<i>Sporobolus africanus</i>	ratstail grass	
Poaceae	<i>Stenotaphrum secundatum</i>	buffalo grass	
Poaceae	<i>Thinopyrum elongatum</i>	tall wheatgrass	
Poaceae	<i>Thinopyrum junceiforme</i>	sea wheatgrass	
Poaceae	<i>Vulpia bromoides</i>	squirreltail fescue	
Poaceae	<i>Vulpia muralis</i>	wall fescue	
Poaceae	<i>Vulpia myuros</i> f. <i>megalura</i>	foxtail fescue	
Poaceae	<i>Vulpia myuros</i> f. <i>myuros</i>	ratstail fescue	
Poaceae	<i>Vulpia myuros</i>	rat's tail fescue or fox tail fescue	
Typhaceae	<i>Typha latifolia</i>	great reedmace	
Adoxaceae	<i>Sambucus nigra</i>	black elderberry	
Adoxaceae	<i>Viburnum tinus</i>	laurustinus	
Aizoaceae	<i>Aptenia cordifolia</i>	heartleaf iceplant	
Aizoaceae	<i>Carpobrotus edulis</i> subsp. <i>edulis</i>	yellow pigface	
Aizoaceae	<i>Galenia pubescens</i> var. <i>pubescens</i>	carpetweed	
Aizoaceae	<i>Lampranthus glaucus</i>	noonflower	
Aizoaceae	<i>Mesembryanthemum cordifolium</i>	heartleaf iceplant	
Aizoaceae	<i>Mesembryanthemum crystallinum</i>	common iceplant	
Amaranthaceae	<i>Amaranthus powellii</i>	green pigweed	
Amaranthaceae	<i>Atriplex prostrata</i>	creeping orache	
Amaranthaceae	<i>Atriplex semibaccata</i>	berry saltbush	
Amaranthaceae	<i>Beta vulgaris</i> subsp. <i>maritima</i>	sea beet	
Amaranthaceae	<i>Chenopodium album</i>	fat hen	
Amaranthaceae	<i>Chenopodium glaucum</i>	pale goosefoot	
Amaranthaceae	<i>Chenopodium murale</i>	nettleleaf goosefoot	
Amaranthaceae	<i>Dysphania pumilio</i>	small crumbweed	

Amaranthaceae	Suaeda maritima subsp. maritima	annual seablite	
<b>Dicotyledons</b>			
Apiaceae	Conium maculatum	hemlock	
Apiaceae	Foeniculum vulgare	fennel	
Apiaceae	Petroselinum crispum	parsley	
Apocynaceae	Vinca major	blue periwinkle	
Araliaceae	Hedera helix	ivy	
Asclepidaceae	Gomphocarpus fruticosus subsp. fruticosus	swanplant	
Asteraceae	Achillea millefolium	yarrow	
Asteraceae	Arctotheca calendula	capeweed	
Asteraceae	Arctotheca populifolia	coast capeweed	
Asteraceae	Arctotis stoechadifolia	african daisy	
Asteraceae	Argyranthemum frutescens		
Asteraceae	Calendula officinalis	garden marigold	
Asteraceae	Carduus pycnocephalus	slender thistle	
Asteraceae	Carduus tenuiflorus	winged thistle	
Asteraceae	Centaurea melitensis	malta thistle	
Asteraceae	Cichorium intybus	chicory	
Asteraceae	Cirsium arvense var. arvense	creeping thistle	
Asteraceae	Cirsium vulgare	spear thistle	
Asteraceae	Conyza bonariensis	flaxleaf fleabane	
Asteraceae	Cotula coronopifolia	water buttons	
Asteraceae	Crepis capillaris	smooth hawksbeard	
Asteraceae	Delairea odorata	cape ivy	
Asteraceae	Dimorphotheca fruticosa	trailing daisy	
Asteraceae	Dittrichia graveolens	stinkweed	
Asteraceae	Erigeron sumatrensis		
Asteraceae	Felicia petiolata	Blue Felicia	
Asteraceae	Gamochaeta calviceps	grey cudweed	
Asteraceae	Gamochaeta purpurea	spike cudweed	
Asteraceae	Gazania linearis	tufted gazania	
Asteraceae	Helminthotheca echioides	bristly oxtongue	
Asteraceae	Hypochaeris glabra	smooth catsear	
Asteraceae	Hypochaeris radicata	rough catsear	
Asteraceae	Leontodon saxatilis	hairy hawkbit	
Asteraceae	Onopordum sp.		
Asteraceae	Senecio angulatus	scrambling groundsel	
Asteraceae	Senecio elegans	purple groundsel	
Asteraceae	Sigesbeckia orientalis	indian weed	
Asteraceae	Silybum marianum	variegated thistle	
Asteraceae	Sonchus asper	prickly sowthistle	
Asteraceae	Sonchus oleraceus	common sowthistle	
Asteraceae	Symphotrichum subulatum	asterweed	
Asteraceae	Tanacetum parthenium	feverfew	

Asteraceae	Tragopogon porrifolius		
Asteraceae	Vellereophyton dealbatum	white cudweed	
Asteraceae	Xerochrysum bracteatum	golden paperdaisy	
Basellaceae	Anredera cordifolia	madeira vine	
Berberidaceae	Berberis thunbergii	barberry	
Boraginaceae	Amsinckia calycina	hairy fiddleneck	
Boraginaceae	Echium candicans	pride-of-madeira	
Boraginaceae	Echium plantagineum	patersons curse	
Boraginaceae	Echium vulgare	vipers bugloss	
Boraginaceae	Myosotis discolor	changing forgetmenot	
Brassicaceae	Brassica rapa	turnip	
Brassicaceae	Brassica tournefortii	mediterranean turnip	
Brassicaceae	Cakile edentula	american searocket	
Brassicaceae	Cakile maritima subsp. maritima	searocket	
Brassicaceae	Capsella bursa-pastoris	shepherds purse	
Brassicaceae	Diplotaxis muralis	wall rocket	
Brassicaceae	Erophila verna	spring whitlowgrass	
Brassicaceae	Hornungia procumbens	oval purse	
Brassicaceae	Lepidium africanum	common peppergrass	
Brassicaceae	Lepidium didymum	lesser swinegrass	
Brassicaceae	Lepidium latifolium	perennial peppergrass	
Brassicaceae	Lobularia maritima	sweet alice	
Brassicaceae	Nasturtium officinale	two-row watercress	
Brassicaceae	Raphanus raphanistrum	wild radish	
Brassicaceae	Sinapis arvensis	charlock	
Brassicaceae	Sisymbrium officinale	hedge-mustard	
Brassicaceae	Sisymbrium orientale	indian hedge-mustard	
Caprifoliaceae	Lonicera sp.		
Caryophyllaceae	Cerastium balearicum	scarious mouse-ear	
Caryophyllaceae	Cerastium fontanum subsp. vulgare	common mouse-ear	
Caryophyllaceae	Cerastium glomeratum	sticky mouse-ear	
Caryophyllaceae	Cerastium semidecandrum	little mouse-ear	
Caryophyllaceae	Cerastium vulgare	common mouse-ear	
Caryophyllaceae	Minuartia mediterranea	fineleaf sandwort	
Caryophyllaceae	Moenchia erecta	erect chickweed	
Caryophyllaceae	Petrorhagia dubia	velvet pink	
Caryophyllaceae	Petrorhagia nanteuillii	proliferous pink	
Caryophyllaceae	Polycarpon tetraphyllum	fourleaf allseed	
Caryophyllaceae	Sagina apetala	annual pearlwort	
Caryophyllaceae	Sagina maritima	sea pearlwort	
Caryophyllaceae	Sagina procumbens	spreading pearlwort	
Caryophyllaceae	Silene gallica var. gallica	french catchfly	
Caryophyllaceae	Silene gallica var. quinquevulnera	spotted catchfly	
Caryophyllaceae	Silene gallica	french catchfly	
Caryophyllaceae	Silene nocturna	mediterranean catchfly	

Caryophyllaceae	<i>Spergula arvensis</i>	corn spurrey	
Caryophyllaceae	<i>Spergularia bocconeii</i>	lesser sandspurrey	
Caryophyllaceae	<i>Spergularia marina</i>	lesser seaspurrey	
Caryophyllaceae	<i>Spergularia rubra</i>	greater sandspurrey	
Caryophyllaceae	<i>Stellaria media</i>	garden chickweed	
Caryophyllaceae	<i>Stellaria pallida</i>	lesser chickweed	
Convolvulaceae	<i>Convolvulus arvensis</i>	field bindweed	
Crassulaceae	<i>Crassula natans</i> var. minus	floating stonecrop	
Euphorbiaceae	<i>Euphorbia characias</i>	Mediterranean Spurge	
Euphorbiaceae	<i>Euphorbia lathyris</i>	caper spurge	
Euphorbiaceae	<i>Euphorbia paralias</i>	sea spurge	
Euphorbiaceae	<i>Euphorbia peplus</i>	petty spurge	
Euphorbiaceae	<i>Euphorbia</i> sp.		
Euphorbiaceae	<i>Ricinus communis</i>	castor bean	
Fabaceae	<i>Acacia paradoxa</i>	thorn wattle	
Fabaceae	<i>Acacia pycnantha</i>	golden wattle	
Fabaceae	<i>Acacia retinodes</i>	hills wirilda	
Fabaceae	<i>Chamaecytisus palmensis</i>	tree lucerne	
Fabaceae	<i>Cytisus scoparius</i>	english broom	
Fabaceae	<i>Dipogon lignosus</i>	dolichos pea	
Fabaceae	<i>Genista monspessulana</i>	montpellier broom or canary broom	
Fabaceae	<i>Kennedia rubicunda</i>	dusky coralpea	
Fabaceae	<i>Lathyrus tingitanus</i>	tangier pea	
Fabaceae	<i>Lotus subbiflorus</i>	hairy birdsfoot-trefoil	
Fabaceae	<i>Lotus uliginosus</i>	greater birdsfoot-trefoil	
Fabaceae	<i>Medicago arabica</i>	spotted medick	
Fabaceae	<i>Medicago arborea</i>	tree medick	
Fabaceae	<i>Medicago lupulina</i>	black medick	
Fabaceae	<i>Medicago minima</i>	little medick	
Fabaceae	<i>Medicago polymorpha</i>	burr medick	
Fabaceae	<i>Melilotus albus</i>	white melilot	
Fabaceae	<i>Melilotus indicus</i>	sweet melilot	
Fabaceae	<i>Paraserianthes lophantha</i> subsp. <i>lophantha</i>	cape wattle	
Fabaceae	<i>Podalyria sericea</i>	silky sweetpeabush	
Fabaceae	<i>Psoralea arborea</i>	scented butterflybush	
Fabaceae	<i>Psoralea pinnata</i>	blue butterflybush	
Fabaceae	<i>Trifolium alexandrinum</i>	berseem clover	
Fabaceae	<i>Trifolium angustifolium</i>	narrowleaf clover	
Fabaceae	<i>Trifolium arvense</i>	haresfoot clover	
Fabaceae	<i>Trifolium campestre</i>	hop clover	
Fabaceae	<i>Trifolium cernuum</i>	nodding clover	
Fabaceae	<i>Trifolium dubium</i>	suckling clover	
Fabaceae	<i>Trifolium fragiferum</i>	strawberry clover	

Fabaceae	<i>Trifolium glomeratum</i>	cluster clover	
Fabaceae	<i>Trifolium lappaceum</i>	bristly clover	
Fabaceae	<i>Trifolium ornithopodioides</i>	birdsfoot clover	
Fabaceae	<i>Trifolium repens</i>	white clover	
Fabaceae	<i>Trifolium resupinatum</i>	reversed clover	
Fabaceae	<i>Trifolium stellatum</i>	star clover	
Fabaceae	<i>Trifolium subterraneum</i>	subterranean clover	
Fabaceae	<i>Trifolium suffocatum</i>	suffocated clover	
Fabaceae	<i>Trifolium tomentosum</i>	woolly clover	
Fabaceae	<i>Ulex europaeus</i>	gorse	
Fabaceae	<i>Vicia hirsuta</i>	hairy vetch	
Fabaceae	<i>Vicia sativa</i> subsp. <i>nigra</i>	narrowleaf vetch	
Fabaceae	<i>Vicia sativa</i>	spring vetch	vetch
Fumariaceae	<i>Fumaria bastardii</i>	bastards fumitory	
Fumariaceae	<i>Fumaria muralis</i> subsp. <i>muralis</i>	wall fumitory	
Gentianaceae	<i>Centaurium erythraea</i>	common centaury	
Gentianaceae	<i>Centaurium tenuiflorum</i>	slender centaury	
Gentianaceae	<i>Cicendia filiformis</i>	slender cicendia	
Geraniaceae	<i>Erodium cicutarium</i>	common heronsbill	
Geraniaceae	<i>Erodium moschatum</i>	musky heronsbill	
Geraniaceae	<i>Geranium dissectum</i>	cutleaf cranesbill	
Geraniaceae	<i>Geranium molle</i>	soft cranesbill	
Geraniaceae	<i>Geranium rotundifolium</i>	roundleaf cranesbill	
Geraniaceae	<i>Pelargonium capitatum</i>	scented geranium	
Geraniaceae	<i>Pelargonium x asperum</i>	rose-oil geranium	
Geraniaceae	<i>Pelargonium x domesticum</i>	garden geranium	
Hydrangeaceae	<i>Hydrangea macrophylla</i>	bigleaf hydrangea or garden hydrangea	
Lamiaceae	<i>Lavandula stoechas</i> subsp. <i>stoechas</i>	topped lavender	
Lamiaceae	<i>Leonotis leonurus</i>	lions ear	
Lamiaceae	<i>Marrubium vulgare</i>	white horehound	
Lamiaceae	<i>Mentha pulegium</i>	pennyroyal	
Lamiaceae	<i>Prunella vulgaris</i>	selfheal	
Lamiaceae	<i>Salvia verbenaca</i> var. <i>verbenaca</i>	wild sage	
Lamiaceae	<i>Salvia verbenaca</i>	wild sage	
Lamiaceae	<i>Stachys arvensis</i>	field woundwort	
Linaceae	<i>Linum bienne</i>	pale flax	
Malvaceae	<i>Malva arborea</i>	tree mallow	
Malvaceae	<i>Malva neglecta</i>	dwarf mallow	
Malvaceae	<i>Malva nicaeensis</i>	mallow-of-nice	
Malvaceae	<i>Malva parviflora</i>	smallflower mallow	
Malvaceae	<i>Malva sylvestris</i>	tall mallow	
Malvaceae	<i>Modiola caroliniana</i>	redflower mallow	
Myrsinaceae	<i>Lysimachia arvensis</i>	scarlet pimpernel	
Myrtaceae	<i>Eucalyptus globulus</i> subsp. <i>bicostata</i>		

Myrtaceae	<i>Kunzea ericoides</i>	burgran	
Oleaceae	<i>Fraxinus excelsior</i>		
Onagraceae	<i>Fuchsia magellanica</i>	fuchsia	
Onagraceae	<i>Oenothera stricta</i> subsp. <i>stricta</i>	fragrant evening-primrose	
Orobanchaceae	<i>Bartsia trixago</i>	mediterranean lineseed	
Orobanchaceae	<i>Bellardia viscosa</i>		
Orobanchaceae	<i>Orobanche minor</i>	lesser broomrape	
Orobanchaceae	<i>Parentucellia latifolia</i>	broadleaf glandweed	
Oxalidaceae	<i>Oxalis articulata</i>	bent woodsorrel	
Oxalidaceae	<i>Oxalis corniculata</i> subsp. <i>corniculata</i>	yellow woodsorrel	
Oxalidaceae	<i>Oxalis pes-caprae</i>	soursob	
Oxalidaceae	<i>Oxalis purpurea</i>	largeflower woodsorrel	
Papaveraceae	<i>Glaucium flavum</i>	yellow poppy	
Pittosporaceae	<i>Pittosporum bicolor</i> x <i>undulatum</i>	hybrid pittosporum	
Pittosporaceae	<i>Pittosporum crassifolium</i>	karo	
Pittosporaceae	<i>Pittosporum undulatum</i>	sweet pittosporum	
Plantaginaceae	<i>Antirrhinum majus</i>	common snapdragon	
Plantaginaceae	<i>Callitriche stagnalis</i>	mud waterstarwort	
Plantaginaceae	<i>Digitalis purpurea</i>	foxglove	
Plantaginaceae	<i>Plantago coronopus</i> subsp. <i>commutata</i>	stout buckshorn plantain	
Plantaginaceae	<i>Plantago coronopus</i> subsp. <i>coronopus</i>	slender buckshorn plantain	
Plantaginaceae	<i>Plantago coronopus</i>	plantain or buck's horn plantain	
Plantaginaceae	<i>Plantago lanceolata</i>	ribwort plantain	
Plantaginaceae	<i>Plantago major</i>	great plantain	
Plantaginaceae	<i>Veronica arvensis</i>	wall speedwell	
Plantaginaceae	<i>Veronica speciosa</i>		
Plumbaginaceae	<i>Limonium sinuatum</i>	wild statice	
Polygalaceae	<i>Polygala myrtifolia</i>	myrtleleaf milkwort	
Polygonaceae	<i>Acetosella vulgaris</i>	sheep sorrel	
Polygonaceae	<i>Emex australis</i>	prickly jacks	
Polygonaceae	<i>Fallopia convolvulus</i>	black bindweed	
Polygonaceae	<i>Persicaria prostrata</i>	creeping waterpepper	
Polygonaceae	<i>Polygonum arenastrum</i>	small wireweed	
Polygonaceae	<i>Polygonum aviculare</i>	creeping wireweed	
Polygonaceae	<i>Rumex crispus</i>	curled dock	
Polygonaceae	<i>Rumex pulcher</i> subsp. <i>pulcher</i>	fiddle dock	
Ranunculaceae	<i>Adonis microcarpa</i>	pheasants eye	
Ranunculaceae	<i>Ranunculus repens</i>	creeping buttercup	
Resedaceae	<i>Reseda alba</i>	white mignonette	
Resedaceae	<i>Reseda lutea</i>	cutleaf mignonette	
Resedaceae	<i>Reseda luteola</i>	weld	
Rosaceae	<i>Aphanes arvensis</i>	parsley piert	
Rosaceae	<i>Malus</i> sp.		
Rosaceae	<i>Rosa rubiginosa</i>	sweet briar	
Rosaceae	<i>Rubus anglocandicans</i>	blackberry	

Rosaceae	<i>Rubus fruticosus</i>	blackberry	
Rosaceae	<i>Rubus loganobaccus</i>	loganberry	
Rosaceae	<i>Rubus polyanthemus</i>	blackberry	
Rosaceae	<i>Sanguisorba minor</i> subsp. <i>muricata</i>	salad burnet	
Rosaceae	<i>Sanguisorba minor</i>	salad burnet	
Rubiaceae	<i>Coprosma repens</i>	mirrorbush	
Rubiaceae	<i>Coprosma robusta</i>	karamu	
Rubiaceae	<i>Galium divaricatum</i>	slender bedstraw	
Rubiaceae	<i>Galium murale</i>	small bedstraw	
Rubiaceae	<i>Sherardia arvensis</i>	field madder	
Salicaceae	<i>Salix x fragilis</i> nothovar. <i>fragilis</i>	crack willow	
Scrophulariaceae	<i>Verbascum thapsus</i>	great mullein	
Scrophulariaceae	<i>Verbascum virgatum</i>	twiggy mullein	
Solanaceae	<i>Datura ferox</i>	longspine thornapple	
Solanaceae	<i>Lycium barbarum</i>	chinese boxthorn	
Solanaceae	<i>Lycium ferocissimum</i>	african boxthorn	
Solanaceae	<i>Physalis peruviana</i>	cape gooseberry	
Solanaceae	<i>Solanum nigrum</i>	blackberry nightshade	
Solanaceae	<i>Solanum pseudocapsicum</i>	winter cherry	
Urticaceae	<i>Urtica urens</i>	stinging nettle	
Valerianaceae	<i>Valerianella eriocarpa</i>	italian cornsalad	
<b>Gymnosperms</b>			
Cupressaceae	<i>Cupressus arizonica</i>	arizona cypress	
Cupressaceae	<i>Hesperocyparis macrocarpa</i>	monterey cypress	
Pinaceae	<i>Pinus pinaster</i>	maritime pine	
Pinaceae	<i>Pinus radiata</i>	radiata pine	