

GLAMORGAN SPRING BAY

WEED MANAGEMENT PLAN 2015 - 2020

Including progress to 2010 and 2014 and amendments to January 2016



Boneseed *Chrysanthemoides monilifera* subsp. *monilifera*
Zone A declared weed



African boxthorn *Lycium ferocissimum*
Zone B declared weed



Mirrorbush *Coprosma repens*
Environmental weed



Glamorgan Spring Bay Natural Resource Management Committee
A Section 24 Committee of the Glamorgan Spring Bay Council
under the Local Government Act 1993.



EXECUTIVE SUMMARY

VISION

A “Weed-Free” Municipality

MISSION

The Glamorgan Spring Bay Weed Management Plan (GSB WMP) will provide a coordinated and cost-effective approach to weed management issues within the Glamorgan Spring Bay Municipality.

The Council will work in partnership with the community to achieve Local, Regional, State and National NRM weed management priorities.

GOALS

The goals of the GSB WMP have been redefined to reflect Municipal and community goals for weed management in GSBC as well as the desired outcomes in the Southern Tasmanian Weed Strategy (STWS).

- To identify local priorities for action that are consistent with regional, state and national priorities.
- To provide a framework for consistency in all relevant strategies and plans that have implications for weed management.
- To increase awareness of weed control responsibilities and specific threats in the Municipality on the part of all public and private land managers and the wider community.
- To provide leadership in and examples of strategic and cost-effective weed management.
- To provide opportunities for partnerships and relationships to encourage coordinated weed management, including with neighbouring municipalities.

The plan outlines weed management requirements and all land managers within the municipality are urged to comply.

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INTRODUCTION

Weed Issues

- **Definition:**

The definition of a weed, as adopted by the latest STWS, is: "... considered pragmatically as a plant that requires some form of action to reduce its harmful effects on the economy, the environment, human health and amenity."

- **Impacts of Weeds:**

Weeds are among the most serious threats to Tasmania's primary production and natural environment. They reduce farm and forest productivity, displace and degrade native species and communities, and contribute significantly to land and water degradation.

The effects of weeds may be direct, such as:

- The loss of agricultural production as a result of weed competition with crops.
- The time spent by land managers, including home owners, controlling weeds.
- The loss of conservation values when native bushland is replaced by weeds.

Or indirect, for example:

- The higher price of food due to increased production costs caused by weeds.
- Off-site contamination of water from herbicide application.
- Increased severity of bushfires due to flammable weeds.

- **Current and Future Potential Weed Problems:**

In GSBC many of our current weed problems come from plants that were deliberately introduced to the area for a variety of reasons. A classic example is gorse which was planted for hedgerows and stock fodder. Our future weeds may be some of the plants that we are currently planting in our gardens and may become 'garden escapees'. An example is gazanias which are already rapidly naturalizing along the coast.

- **Preventative Weed Management:**

The STWS 2011-2016 states that "Prevention and early intervention are the most cost effective strategies for dealing with weeds. Preventative weed management requires coordination and cooperation of all levels of government, industry, land managers and the community. Actions need to prevent introduction and spread of weeds. There is more to be done to address issues such as hygiene, transportation, appropriate weed disposal and incorporating weed issues into management practices and protocols."

- ***Landowner Responsibilities:***

All landowners in the State, including private and public landowners and managers, have legal responsibilities to manage and control 'Declared Weeds' which are listed under the Tasmanian *Weed Management Act 1999*. These responsibilities are described in more detail in Section 1 (pages 12 and 15).

- ***The Challenge of Weed Management:***

A long, spread out Municipality such as GSB has many challenges with weed management due to a diverse range of environments and a diverse population with different understandings of what the issues are and different capacities to manage existing and emerging problem weeds.

The GSB WMP provides a strategic approach to addressing these complex issues.

Area Covered

The Glamorgan Spring Bay Municipality comprises the former Municipalities of Spring Bay and Glamorgan (the oldest Municipality in Australia). These two Councils amalgamated in 1993.

The region consists of six towns, from Orford and Triabunna on the coast in the south, Coles Bay, Swansea and Bicheno on the coast in the north and Buckland at the south-western end of the Municipality in the Prosser Valley. Smaller settlements within the area include Swanwick, Cranbrook, Nine Mile Beach, Little Swanport, Pontypool and Saltworks. Many of these towns and settlements consist of holiday shacks and accommodation that fill over the summer months.

The Municipality is comprised largely of a rural coastal community with the main industries traditionally being farming, fishing and forestry. The combination of stunning scenery, natural beauty and extremely mild weather ensures that a stream of holiday makers from Tasmania and the rest of the world visit the area. Tourism is a significant contributor to the economy of the local community (Attwater, 1993).

Large areas that are significant for biodiversity conservation also occur within the Municipality. These include the Moulting Lagoon and Apsley Marshes RAMSAR wetlands, Freycinet National Park, Maria Island National Park, the southern section of Douglas Apsley National Park and a number of State Forest Reserves and Reserves on private land.



Background

The Glamorgan Spring Bay Natural Resource Management Committee (GSB NRMCM) is a special committee of the Glamorgan Spring Bay Council (GSBC). A key activity of the GSB NRMCM is to review the Glamorgan Spring Bay Weed Management Plan (GSB WMP) every five years.

History of the GSB NRMCM and the GSB WMP in context of the evolution of Natural Resource Management in Australia and Tasmania.

1999-2000 - The GSB WMP was developed over 1999 / 2000 and was an initiative of The Glamorgan Spring Bay Landcare Management Committee and the East Coast Weed Strategy Group. It was adopted by the Glamorgan Spring Bay Council and a number of actions from the plan were implemented by the GSB Landcare Management Committee.

2003 - With the end of Natural Heritage Trust 1 (NHT 1) the GSBC Landcare Management Committee was disbanded in early 2003. Many of the Natural Resource Management initiatives in GSB were halted as a national move towards strategic Natural Resource Management evolved.

2004-2005 - The *Southern NRM Strategy* (SNRMS) was developed by the Southern Regional NRM Committee (NRM South), in consultation with the community at large over 2004/2005. It provides a strategic, integrated framework for natural resource management in the Southern Region of Tasmania.

2005 - The development of the *Southern Tasmanian Weed Strategy 2005-2010* (STWS) (Schrammeyer 2005) was a priority project identified in the SNRMS. It '....tackles the management and control of terrestrial and freshwater weeds and is an important foundation for the practical implementation of the regional NRM strategy'.

2006 – Establishment of the GSB NRMCM as a special committee of the GSBC.

2008-2010 – In light of the SNRMS and the STWS documents, and with an increased understanding of weed issues in GSBC, the GSB WMP was revised in 2008 by a sub-committee of the GSB NRMCM. The resultant document was the 'GSB WMP 2008-2013 – Progress to May 2010 Version 2'.

2013 – The Draft *Southern Tasmanian Weed Strategy 2011-2016* (Temple-Smith 2011) became available.

2014 – This current five year review (see next section).

The Current Review and Consultation Process

This current revision of the GSB WMP covers the five year period of 2015-2020. It is aligned to the latest revision of the STWS (STWS 2011-2016 draft version). It incorporates our increased knowledge of significant weed species, including species not recorded in the previous revision, and their distribution within the Municipality. It also documents the progress made over the past five years in terms of strategic and operational objectives.

The GSB NRM sub-committee members involved in this review are:

- David Tucker (Chair, GSBC Natural Resource Management Committee).
- Mel Kelly (Manager, Natural Resource Management Department, GSBC).
- Nicky Meeson (Biodiversity Officer, Natural Resource Management Department, GSBC).
- Terry Higgs (Catchment to Coast Coordinator, Natural Resource Management Department, GSBC).
- Karen Stewart (Regional Weed Management Officer (South), Invasive Species Branch, DPIPW).
- Rob Connell (Ranger, Parks & Wildlife Service).

Additional contributions to this review were provided by Michael Askey-Doran (Principal Policy Advisor (Invasive Pests), Invasive Species Branch, DPIPW) and Amanda Brooks (On-Ground Works Officer, Natural Resource Management Department, GSBC).

The draft Plan has been advertised in all the local newsletters and the Council newsletter and a public presentation was given at the GSBNRM meeting in February 2014. Copies were available at the Council Offices, local libraries and on the GSBC website.

The sub-committee will review all submissions on the draft Plan. The final plan will be presented to Council for adoption.

Stakeholders will continue to be involved in the development of specific Action Plans as opportunities arise.

Structure of the Plan

This document focuses on action planning. Much of the background information in the STWS 2011-2016 is directly relevant to the GSB WMP and therefore is not included in the document.

The Plan is divided into 4 sections:

Section One – The Weeds, Prioritisation of Weed Control Actions and Management Aims

- Lists all the weeds that are considered to be a significant problem in the Municipality, including declared weeds under the Tasmanian *Weed Management Act 1999* (WMA), Weeds of National Significance (WoNS) and agricultural, environmental and garden escape weeds.
- Provides a broad description of their abundance and distribution within the Municipality.
- Describes the prioritization process for weed control actions.
- Outlines the management aims for each weed species.

Section Two – Strategic Objectives

- Strategic Objectives are classified under eight Component headings broadly reflecting the Key Areas in the STWS 2011-2016.
- Each Component includes a number of detailed Actions that are specifically relevant to the local situation in GSBC.

For each Action the following are provided:

- Prioritisation as HIGH, MEDIUM or LOW.
- Indication of the individual(s) or organization(s) recommended to implement / coordinate the action.
- Recommended time frame.
- Indication of a direct link to a Strategic Action in the STWS 2011-2016 (where applicable).
- Documents the progress on each Action up to 2010 and also up to 2014.

Appendix

Provides photographs of all the weeds listed in Tables 1, 2 and 3 of Section One.

Key Stakeholders

NAME	ACRONYM	NAME	ACRONYM
<i>Municipal Council</i>		<i>Regional Groups</i>	
Glamorgan Spring Bay Council	GSBC	Landcare Tasmania Inc. (formally Tasmanian Landcare Association)	TLA
Glamorgan Spring Bay Natural Resource Management Committee	GSBNRMC	Natural Resource Management South	NRMSouth
GSBC Natural Resource Management Manager	NRMMan	Southern Tasmania Weed Strategy Project Manager	STWSPM
GSBC Natural Resource Management Department	NRMDpt	NRM Technical and Facilitation Support Officers	NRM TaFS
GSBC Works Department	WorksDpt	<i>Educational Institutions</i>	
<i>State Agencies</i>		Schools	S
Department of Primary Industries, Parks, Water & Environment	DPIPWE	University of Tasmania	UTas
Department of State Growth	DSG	TAFE	TAFE
Parks & Wildlife Service	PWS	Adult Education	AE
Crown Land Services (part of Parks and Wildlife Service)	CLS	<i>Local Groups</i>	
Forestry Tasmania	FT	Little Swanport Catchment Committee	LSCC
Tasmania Fire Service, including local brigades	TFS	East Coast Primary Producers Association	ECPPA
Aurora Energy	AE	Earth Ocean Network (Bicheno)	EON
TasNetworks	TasNet	Freycinet Association Inc.	FA
TasWater	TasWat	Friends of Rocky Hills	FRH
<i>Spray / Vegetation management contractors</i>	SVC	Orford Community Group	OCG
<i>Private Industry</i>	PI	<i>Others who are not necessarily land or water focused, including:</i>	
<i>Landholders</i>	LH	Bushwalking clubs	
<i>State Representative Groups</i>		Guides / Scouts	
Tasmania Farmers and Graziers Association	TFGA	Horse riding clubs	
Tasmanian Weed Society	TWS	Surf clubs	

Section One

THE WEEDS,

PRIORITISATION OF WEED CONTROL ACTIONS

and MANAGEMENT AIMS

The Weeds

The weed species listed in the following tables (Tables 1, 2, 3 and 4) are considered a significant problem, or have the potential to become a significant problem, within the Glamorgan Spring Bay Municipality. The weeds are 'Declared Weeds' under the Tasmanian *Weed Management Act 1999* (WMA), (including Weeds of National Significance or WoNS¹), and significant agricultural and environmental weeds. Tables 1 and 2 lists the Declared Weeds and Table 3 lists the agricultural and environmental weeds. Table 4 lists weeds that are not currently known to be present in the Municipality but which are present in Tasmanian and have the potential to spread to the Municipality and become problem weeds.

The weed lists have been compiled based upon acquired knowledge of staff from the GSBC NRM Department, GSB NRM Committee members, DPIPW and PWS over a number of years, Natural Values Atlas records and recent surveys of GSBC managed coastal reserves.

Prioritisation of Weed Control Actions

Priority areas for weed control will be determined according to the following criteria (or a combination of):

Weed-led:

Certain weeds are considered by the general and scientific community to be of significant economic and environmental concern. Declared Weeds, including WoNS, will remain a primary focus and priority for control action (or eradication when applicable) where they exist within the Municipality. A number of environmental and agricultural weeds that are specifically of concern in Glamorgan Spring Bay will also have a high priority for control.

Site-Led:

Specific sites within the Municipality may be identified as a priority for control action depending on specific values associated with them. These values may be natural, cultural, economic or social. This will assist in determining priority areas but is to be used as a guideline only. Common sense, communication and available resources need to be taken into account.

Community-Led:

Programs and activities currently being undertaken by the community will be a priority focus for support and complementary on-ground action as identified in the GSB WMP. Numerous programs and activities have and are currently being undertaken within the Municipality. Community-led priority areas are to be regularly reviewed to ensure that they continue to reflect the needs and expectations of the community.

¹ Weeds of National Significance (WoNS) are weeds that are considered to require national action for their management by all state and territories because of their degree of invasiveness, high potential to spread, and their high social, environmental and economic impacts. All WoNS are declared under the Tasmanian *Weed Management Act 1999* (Temple-Smith 2011).

Management Aims - Definitions

A management aim is provided in relation to each weed species listed in the following tables (Tables 1, 2, 3 and 4). These aims are defined as follows:

Prevention – the primary aim

The management aim is to prevent weeds that are not currently present from establishing in Glamorgan Spring Bay Municipality. This includes keeping a close check on known weeds around the periphery of the Municipality.

Eradication

The management aim is to remove all known infestations from the Municipality and to continue to remove infestations as they are found. These are generally weeds that are currently present in low numbers or occur within relatively small and discrete areas.

Control

The management aim is to contain infestations within a site or property at their current level, and preferably reduce their extent, and prevent any further spread. This usually applies to weed infestations that are broad and extensive throughout the Municipality or where the costs associated with eradication would outweigh the benefits received.

Monitor

Monitoring is used: to assess the success of the eradication and control aims; as a tool to achieve the prevention aim; and in determining or revising a weed's management aim status.

NOTES: These notes relate to the weeds listed in Tables 1, 2, 3 and 4 below.

- 1 Common names are in accordance with 'The Little Book of Common Names for Tasmanian Plants' (Wapstra, Wapstra & Gilfedder 2005). Common names in brackets are other names by which the plant may be known.
- 2 Scientific names are in accordance with the 2014 census of vascular plants (de Salas & Baker 2014).
- 3 The distribution for each 'declared' weed is as stated in the statutory Weed Management Plans up to January 2011. These distributions are defined as follows:
 - "Widespread infestations" = the species is very common in the Municipality, with many populations present. The number of plants present is generally large and/or populations cover large areas.
 - "Localised infestations" = the species is present in the Municipality in moderate proportions, with populations numbering several. The number of plants is also moderate and/or populations cover moderate-sized areas.
 - "Isolated occurrences" = the species is uncommon in the Municipality, with populations limited to one or a few. The number of plants is generally small and/or populations cover small areas.
 - "None recorded" = the species is not known to be naturalized in the Municipality either from the records of the Tasmanian Herbarium or from DPIPW databases.
- 4 Management aim as stated in the statutory Weed Management Plans as at January 2011.
- 5 New weeds added since the previous Plan (GSBWMP 2008-2013). These are not necessarily new to the Municipality but may have been recorded recently.
- 6 Weed type: a = agricultural weed; e = environmental weed; g = garden escape.
- 7 The distribution for each environmental and agricultural weed is based on observations and records in the GSBC NRM weed database.
- 8 See: <http://dpiuwe.tas.gov.au/invasive-species/weeds/weeds-index/weeds-index-declared-weeds>

Table 1: Declared Weeds – Zone A

The Glamorgan Spring Bay Municipality is considered **Zone A** for the following Declared Weeds under the Tasmanian *Weed Management Act 1999*. Zone A Municipalities are those in which any infestation of a Declared Weed **must** be eradicated in line with the relevant Statutory Weed Management Plan.

Common name ¹	Scientific name ²	WoNS	As per STATUTORY WMP January 2011		As per LOCAL ASSESSMENT 2014	
			Distribution in GSB ³	Management Aim ⁴	Distribution in GSB	Management Aim
African lovegrass ⁵	<i>Eragrostis curvula</i>		None recorded	Prevention and early detection	Isolated occurrences – recently recorded on roadsides between Orford and Triabunna and south of Swansea township.	Eradication / Monitor
Amsinckia (fiddleneck) ⁵	<i>Amsinckia</i> spp.		None recorded	Implement integrated control program for eradication and prevent future occurrences	Isolated occurrences – recently introduced in contaminated soil.	Eradication / Monitor
Boneseed	<i>Chrysanthemoides monilifera</i> ssp. <i>monilifera</i>	WoNS	Localised infestations	Eradication / Monitor	Bicheno - Localised infestations Elsewhere – Isolated occurrences	Eradicate / Monitor
Bridal creeper	<i>Asparagus asparagoides</i>	WoNS	Localised infestations	Eradication / Monitor	Localised infestations	Eradicate / Monitor
Brooms – Montpellier (Canary) broom	<i>Genista monspessulana</i>	WoNS	Localised infestations	Eradication / Monitor	Localised infestations	Eradicate / Monitor
Brooms - English broom	<i>Cytisus scoparius</i>	WoNS	Localised infestations	Eradication / Monitor	Localised infestations	Eradicate / Monitor
Himalayan honeysuckle (Elisha's tears)	<i>Leycesteria formosa</i>		Isolated occurrences	Eradication / Monitor	Requires investigation	If present: Eradicate / Monitor
Feathertop	<i>Cenchrus longisetus</i> (formerly <i>Pennisetum villosum</i>)		Previously recorded, none now known	Monitor	Isolated occurrences	Eradicate / Monitor
Fennel	<i>Foeniculum vulgare</i>		Isolated occurrences	Eradication - subject to more detailed mapping	Isolated occurrences / requires more mapping	Control / Monitor

Common name ¹	Scientific name ²	WoNS	As per STATUTORY WMP January 2011		As per LOCAL ASSESSMENT 2014	
			Distribution in GSB ³	Management Aim ⁴	Distribution in GSB	Management Aim
Hoary cress (White weed) ⁵	<i>Lepidium draba</i>		None recorded	Eradication / Monitor	Isolated occurrences / requires more mapping	Eradicate / Monitor
Pampas grass	<i>Cortaderia</i> spp.		Isolated occurrences	Eradication / Monitor	Isolated occurrences	Eradication / Monitor
Paterson's curse	<i>Echium plantagineum</i>		Isolated occurrences	Eradication / Monitor	Isolated occurrences	Eradication / Monitor
Ragwort	<i>Senecio jacobaea</i>		Isolated occurrences	Eradication / Monitor	Isolated occurrences	Eradication / Monitor
Serrated tussock	<i>Nassella trichotoma</i>	WoNS	Localised infestations	Eradication / Monitor	Localised infestations	Eradication / Monitor
Spanish heath	<i>Erica lusitanica</i>		Isolated occurrences	Eradication / Monitor	Localised infestations	Eradicate / Monitor
Thistles – Creeping (Californian) thistle	<i>Cirsium arvense</i>		Isolated occurrences	Control - subject to more detailed mapping	Localised infestations but requires more mapping	Control / Monitor / Education
Thistles – Nodding thistle ⁵	<i>Carduus nutans</i>		None recorded	Prevention and early detection	Isolated occurrences – Two Natural Values Atlas records (1993). Requires further investigation	If present: Eradicate / Monitor
Thistles - Saffron thistle	<i>Carthamus lanatus</i>		Localised infestations	Eradication / Monitor	Requires more mapping	Control / Monitor / Education
Thistles – Scotch (Cotton) thistle ⁵	<i>Onopordum acanthium</i>		None recorded	Prevention and early detection	Isolated occurrences – Five Natural Values Atlas records (1988 to 2002). Requires further investigation	If present: Eradicate / Monitor

Common name ¹	Scientific name ²	WoNS	As per STATUTORY WMP January 2011		As per LOCAL ASSESSMENT 2014	
			Distribution in GSB ³	Management Aim ⁴	Distribution in GSB	Management Aim
White-edged nightshade ⁵	<i>Solanum marginatum</i>		Localised infestations	Implement integrated control program for eradication and prevent future occurrences	Apparently reported from Swansea and Maria Island ⁸ . Requires further investigation.	Eradicate / Monitor
Willows – crack willow	<i>Salix x fragilis</i> var. <i>fragilis</i>	WoNS	Localised infestations	Implement integrated control program for eradication and prevent future occurrences	Localised infestations / requires more mapping	Control / Monitor
Willows – basket willow	<i>Salix x rubens</i>	WoNS	Localised infestations	Implement integrated control program for eradication and prevent future occurrences	Localised infestations / requires more mapping	Control / Monitor
Willows – golden willow ^{**}	<i>Salix sepulcralis</i> var. <i>chrysocoma</i>	WoNS	None recorded	-	Isolated occurrences. Currently known only from Triabunna. Requires more mapping.	Control / Monitor

^{**} Amendment: January 2016

Table 2: Declared Weeds – Zone B

The Glamorgan Spring Bay Municipality is considered **Zone B** for the following Declared Weeds under the Tasmanian *Weed Management Act 1999*. There is a statutory requirement in Glamorgan Spring Bay that these weeds are:

- Prevented from spreading from an existing infestation into an area free of the weed. (This is normally applied at the property level.)
- Contained within the Municipal boundaries (except where a property straddles more than one municipality).

A Zone B weed's status may change where:

- A management plan for that weed is in place (at the property or municipal level), or
- The infestation adjoins a Zone A property or municipality, or
- The infestation has the potential to affect natural values listed under legislation.

Common name ¹	Scientific name ²	WONS	As per STATUTORY WMP January 2011		As per LOCAL ASSESSMENT June 2014	
			Distribution in GSB ³	Management Aim ⁴	Distribution in GSB	Management Aim
African boxthorn	<i>Lycium ferocissimum</i>	WoNS	Localised infestations	Control	Localised infestations / requires more mapping	Eradicate / Monitor
Blackberries	<i>Rubus fruticosus</i> aggregate	WoNS	Widespread infestations	Eradication / Monitor	Localised infestations / requires more mapping	Control / Monitor
Gorse	<i>Ulex europaeus</i>	WoNS	Widespread infestations	Control	Widespread infestations	Eradicate in strategic locations / Control elsewhere
Thistles - Slender thistle	<i>Carduus pycnocephalus</i>		Widespread infestations	Containment within municipality, protection of specified areas, prevention of spread to zone A municipalities	Requires more mapping	Control / Monitor / Education
Thistles – Winged thistle	<i>Carduus tenuiflorus</i>		Widespread infestations	Eradication - subject to more detailed mapping	Requires more mapping	Control / Monitor / Education
White horehound ⁵	<i>Marrubium vulgare</i>		Widespread infestations	Containment within municipality, protection of specified areas, prevention of spread to zone A municipalities	Requires more mapping	Control / Monitor

Table 3: Environmental and Agricultural Weeds

In describing the distribution of the following weeds, the same general terminology is used as in the Tasmanian *Weed Management Act 1999* (i.e. widespread infestations, localised infestations, isolated occurrences). However, this terminology is used here to describe distributions within specific areas, as opposed to the whole Municipality.

Common name ¹	Scientific name ²	Weed type ⁶			Distribution ⁷	Management Aim
Agapanthus	<i>Agapanthus praecox</i>		e	g	Isolated occurrences in and around urban areas.	Control / Monitor / Education
Arum lily ⁵	<i>Zantedeschia aethiopica</i>		e	g	Isolated occurrences in and around urban areas.	Control / Monitor / Education
Banana passionfruit	<i>Passiflora tarminiana</i>		e	g	Isolated occurrences in and around urban areas.	Control / Monitor / Education
Blackberry nightshade ⁵	<i>Solanum nigrum</i>	a	e		Isolated occurrences in urban and agricultural areas.	Monitor
Bluebell creeper	<i>Billardiera heterophylla</i>		e	g	Localised infestations in and around urban areas.	Control / Monitor / Education
Blue butterflybush	<i>Psoralea pinnata</i>		e	g	Bicheno - Localised infestations. Elsewhere - Isolated occurrences in and around urban areas.	Bicheno – Control / Monitor Elsewhere – Eradication / Monitor
Blue periwinkle	<i>Vinca major</i>		e	g	Isolated occurrences in urban and agricultural areas.	Control / Monitor / Education
Cape ivy	<i>Delaiera odorata</i>		e	g	Bicheno - Localised infestations. Elsewhere - Isolated occurrences in and around urban areas.	Control / Monitor / Education
Cape wattle	<i>Paraserianthes lophantha</i>		e	g	Isolated occurrences in and around urban areas.	Control / Monitor / Education
Capeweed	<i>Arctotheca calendula</i>	a	e		Widespread infestations across the Municipality.	Control / Monitor / Education
Cootamundra wattle ⁵	<i>Acacia baileyana</i>		e	g	Isolated occurrences in and around urban areas.	Control / Monitor / Education

Common name ¹	Scientific name ²	Weed type ⁶			Distribution ⁷	Management Aim
Cotoneaster	<i>Cotoneaster spp</i>		e	g	Isolated occurrences in and around urban areas, notably East and West Shelley Beach, Orford and Bicheno.	Control / Monitor / Education
Dolichos pea ⁵	<i>Dipogon lignosus</i>		e	g	Bicheno - Localised infestations. Elsewhere - Isolated occurrences in and around urban areas.	Control / Monitor / Education
Drain flatsedge ⁵	<i>Cyperus eragrostis</i>	a	e		Localised infestations particularly in roadside drains.	Control / Monitor / Education
Evening primrose ⁵	<i>Oenothera spp.</i>		e		Localised infestations along roadsides.	Control / Monitor
Firethorn ⁵	<i>Pyracantha spp.</i>		e	g	Isolated occurrence near Orford (junction of Weilangta & Rheban Roads)	Eradication / Monitor
Flaxleaf fleabane ⁵	<i>Conyza bonariensis</i>		e	g	Isolated occurrences in and around urban areas.	Control / Monitor / Education
Gazanias	<i>Gazania spp.</i>		e	g	Localised infestations in and around urban areas.	Control / Monitor / Education
Great mullein ⁵	<i>Verbascum thapsus</i>	a	e		Localised infestations on particularly on roadsides.	Control / Monitor
Great reedmace (Cumbungi)	<i>Typha latifolia</i>	a	e		Localised infestations in dams and creeks.	Control / Monitor
Hawthorn ⁵	<i>Crataegus monogyna</i>	a	e	g	Urban areas - Isolated occurrences Rural areas - Localised infestations.	Control / Monitor
Howitts (sticky) wattle ⁵	<i>Acacia howittii</i>		e	g	Isolated occurrences in and around urban areas.	Control / Monitor / Education
Ivy ⁵	<i>Hedera helix</i>		e	g	Isolated occurrences in and around urban areas.	Control / Monitor / Education
Japanese honeysuckle ⁵	<i>Lonicera japonica</i>		e	g	Isolated occurrences in and around urban areas.	Control / Monitor / Education
Mirror bush	<i>Coprosma repens</i>		e	g	Bicheno - Widespread infestations. Elsewhere - Localised infestations in and around urban areas.	Control / Monitor / Education
Montbretia ⁵	<i>Crocsmia x crocosmiiflora</i>		e	g	Isolated occurrences in and around urban areas.	Control / Monitor / Education

Common name ¹	Scientific name ²	Weed type ⁶			Distribution ⁷	Management Aim
Myrtleleaf milkwort ⁵	<i>Polygala myrtifolia</i>		e	g	Bicheno - Localised infestations. Elsewhere - Isolated occurrences in and around urban areas.	Control / Monitor / Education
Nasturtium ⁵	<i>Tropaeolum majus</i>		e	g	Bicheno - Localised infestations. Elsewhere - Isolated occurrences in and around urban areas.	Control / Monitor / Education
New Zealand flax ⁵	<i>Phorium tenax</i>		e	g	Isolated occurrences across the Municipality.	Eradicate / Monitor / Education
Oxeye daisy ⁵	<i>Leucanthemum vulgare</i>	a	e	g	Localised infestations on roadsides.	Control / Monitor / Education
Prickly pear ⁵	<i>Opuntia</i> sp.		e		Isolated occurrences in and around urban areas.	Control / Monitor / Education
Pride of Madeira	<i>Echium candicans</i>		e	g	Swansea - Localised infestations. Elsewhere - Isolated occurrences in and around urban areas.	Control / Monitor / Education
Purple groundsel ⁵	<i>Senecio elegans</i>		e		Bicheno – Localised infestations.	Control / Monitor / Education
Radiata pine	<i>Pinus radiata</i>		e		Isolated occurrences in urban areas, rural areas and roadsides.	Control / Monitor / Education
Red valerian ⁵	<i>Centranthus ruber</i>		e	g	Isolated occurrences in urban areas and on roadsides.	Control / Monitor / Education
Scrambling groundsel ⁵	<i>Senecio angulatus</i>		e	g	Isolated occurrences in urban areas and on roadsides.	Control / Monitor / Education
Sea spurge	<i>Euphorbia paralias</i>		e		Isolated occurrences on beaches.	Eradicate / Monitor / Education
Shade crassula ⁵	<i>Crassula multicava</i>		e	g	Isolated occurrences in and around urban areas.	Control / Monitor / Education

Common name ¹	Scientific name ²	Weed type ⁶			Distribution ⁷	Management Aim
Skunkweed ⁵	<i>Navarretia squarrosa</i>		e		Localised infestations on Long Marsh Road	Eradicate / Monitor / Education
Sweet briar (Briar rose)	<i>Rosa rubiginosa</i>	a	e		Localised infestations in across the Municipality.	Control / Monitor / Education
Sweet pittosporum	<i>Pittosporum undulatum</i>		e	g	Localised infestations in and around urban areas.	Control / Monitor / Education
Trailing daisy	<i>Dimorphotheca fruticosa</i>		e	g	Localised infestations in and around urban areas.	Control / Monitor / Education
Tree lucerne	<i>Chamaecytisus palmensis</i>		e	g	Isolated occurrences in and around urban areas.	Control / Monitor / Education
Tree mallow ⁵	<i>Malva arborea</i>		e	g	Isolated occurrences in and around urban areas.	Control / Monitor / Education
Wandering creeper ⁵	<i>Tradescantia fluminensis</i>		e	g	Isolated occurrences – recorded in Bicheno only.	Control / Monitor / Education
Watsonia ⁵	<i>Watsonia</i> spp.		e	g	Isolated occurrences in and around urban areas.	Control / Monitor / Education
Weld (mignonette) ⁵	<i>Reseda luteola</i>	a	e		Localised infestations on particularly on roadsides.	Control / Monitor
Winter euryops	<i>Euryops abrotanifolius</i>		e	g	Bicheno – Localised infestations. Orford – Isolated occurrences.	Eradication / Monitor
Yellow pigface ⁵	<i>Carpobrotus edulis</i>		e	g	Isolated occurrences in and around urban areas.	Control / Monitor / Education
Yellow poppy ⁵	<i>Glaucium flavum</i>		e		Isolated occurrence – south of River and Rocks campground on Moulting Lagoon foreshore	Eradication / Monitor

Table 4: Potential Problem Weeds

The weeds listed in Table 4 are not currently known to occur in the GSB Municipality but are present in Tasmania and have a reasonable potential to spread to the Municipality and become problem weeds. They include both Zone A Declared Weeds under the Tasmanian *Weed Management Act 1999* and agricultural/environmental weeds.

This list is not necessarily comprehensive and new potential problem weeds may be added in the future as new information becomes available.

Common name ¹	Scientific name ²	Zone A Declared Weed	Agricultural / Environmental Weed	Management Aim
Asparagus fern	<i>Asparagus scandens</i>	+		Prevention and early detection
Bristly oxtongue	<i>Helminthotheca echioides</i>		+	
Burgan	<i>Kunzea ericoides</i>		+	
Chilean needlegrass	<i>Nassella neesiana</i>	+		
Foxglove	<i>Digitalis purpurea</i>		+	
Hawkweed	<i>Pilosella</i> spp.	+		
Texas needlegrass	<i>Nassella leucotricha</i>	+		

Section Two

STRATEGIC ACTIONS and OUTCOMES

Component 1 - RESOURCES

Desired Outcome: *Government, community and industry resource identified, shared, managed and used efficiently throughout the region.*

RESOURCES - Support Network

No	Action	Priority	Who	When	Links to STWS Strategic Action	Progress
1.1	Establish and maintain a Weed sub-committee of the GSBNRM to undertake and publish a 5 yearly review of this Plan and an annual internal review.	H	GSBNRM	Annual review		2010 – Sub -committee established and meeting regularly. 2014 – Sub-committee met to review this current Plan.
1.2	Encourage all key land management agencies in GSBC (including GSBC, PWS, FT, DSG, TasNet, TasWat) to recognize their weed management responsibilities and provide appropriate resources to achieve this, including appointing and supporting officers with dedicated weed management responsibilities.	M	GSBNRM / GSBC	Ongoing		2010 - GSBC NRM Manager has dedicated weed management responsibilities. 2014 - GSBC has dedicated on ground weed management staff and three Declared Officers under the <i>Weed Management Act 1999</i> . DSG has dedicated environmental staff that also deals with weed issues. GSBNRM provides a regular forum for discussion and information exchange between individuals and organisations involved in weed management across land tenure throughout the municipality.

RESOURCES - Promote and support benefits of participation

No	Action	Priority	Who	When	Links to STWS Strategic Action	Progress
1.3	Continue to maintain contact with and provide support to community groups.	H	GSBC / PWS	Ongoing	2.7, 4.11	<p>2010 - Conservation Volunteers Australia have worked on various weed control activities in GSBC.</p> <p>Equipment top ups of community trailers which are available for all community groups.</p> <p>GSBC and PWS staff working in partnership with community groups on weed management initiatives.</p> <p>2014 – Contact ongoing with various community groups and individuals and support provided including equipment, safety gear, personnel etc. Ongoing support provided to e.g. Friends of Rocky Hills, EON Bicheno, Orford Community Group.</p>
1.4	Continue to ensure the community groups undertake WH&S procedures and promote a WH&S insurance process for community groups to enable increased involvement.	H	GSBC / PWS / Tasmanian Landcare Association	Achieved / review annually		<p>2010 - GSBC and PWS encourage community groups to become members of the Tasmanian Landcare Association and apply for funding to get landcare insurance. GSBC and PWS work with community groups in ensuring WH&S / Risk Management procedures are followed during community events.</p> <p>2014 – JSA procedure now in place for all GSBC volunteer activities. GSBC continue to encourage and support WH&S procedures by community groups.</p> <p>PWS have clear WH&S requirements for volunteers working on PWS managed land.</p>
1.5	Promotion of funding bodies and sponsors through the display of logos /names at relevant events, demonstration sites and on any relevant published material.	L	NRMDpt / GSBNRMC	Ongoing		<p>2010 - Limited sponsorship obtained to date.</p> <p>2014 – Funding bodies and sponsors acknowledged at all events and on-ground work sites where visible to the public when applicable.</p>

RESOURCES - Weed management information

No	Action	Priority	Who	When	Links to STWS Strategic Action	Progress
1.6	Facilitate a program for ongoing weed-mapping and data sharing within the Municipality. Ensure a consistent approach.	H	NRMDpt/ GSBC / GSBNRMC / PWS / FT / DSG / TasNet / TasWat / community	Ongoing	5-10, 6-1, 6-2, 6-5	2010 - Extensive weed mapping undertaken to date and recently most existing data has been digitized onto GSBCs Geographic Information System. Data still needs to be shared with other potential users. Opportunities for mapping continue. 2014 – Data is being collected in the format required for DPIPWE's Natural Values Atlas (NVA) and sent to the NVA on a regular basis (see also 3.5 for more details).
1.7	Encourage groups, schools, individual landholders and regional collectives within the Municipality to participate in on-going weed data collection and exchange.	M	NRMDpt/ GSBC / community groups/ private landholders	Underway and ongoing as opportunities arise	5-10, 6-1, 6-2, 6-6, 6-7, 6-8	2010 - Mapping has been undertaken by the Orford Community Group and the Coles Bay Weed Club. Weed identification and information days have been held with the Orford Community Group, Swansea Tidy Towns and the Friends of Rocky Hills. 2014 – Reports of weeds are regularly received by GSBC from community members.

RESOURCES - Identification of resources

No	Action	Priority	Who	When	Links to STWS Strategic Action	Progress
1.8	Promote funding and incentives for best practice voluntary / pro-active involvement in the GSB WMP.	H	NRMDpt/ GSBNRMC / GSBC	Ongoing	4-7, 4-8	2010 - Not yet undertaken. 2014 – Ongoing – e.g. Assisting EON and OCG with Landcare funding applications.
1.9	Seek funding / resources on an ongoing basis to implement Actions in the GSB WMP.	H	NRMDpt/ GSBNRMC / GSBC	Ongoing	4-2, 4-7, 4-8	2010 - Funding of \$45,000 has been received to implement the GSB WMP for roadside and strategic control of Spanish Heath. This includes detailed roadside mapping, digitizing existing mapping and training works crew for strategic management of roadside vegetation. 2014 – Significant funding and resources has been received from various sources since 2010. Continually seeking funding and resources as opportunities arise.

RESOURCES - Sharing resources

No	Action	Priority	Who	When	Links to STWS Strategic Action	Progress
1.10	Promote resources available for sharing amongst weed managers and community.	M	NRMDpt / GSBNRMC	Ongoing		2010 - Other than hand held equipment available in the community trailers this has not yet happened in a coordinated manner. 2014 – A Spray Unit and a Washdown Unit are available for use by weed managers/other trained individuals. Promotion of resources is currently on an ad hoc basis.
1.11	Shares resources and information with adjoining Municipalities (i.e. Sorell, Southern Midlands, Northern Midlands, Break O'Day)	M	NRMDpt / GSBNRMC / other Councils	Ongoing		2014 – Ad hoc communication and information sharing with other Councils as required.

RESOURCES - Land manager resourcing of and investment in weed management

No	Action	Priority	Who	When	Links to STWS Strategic Action	Progress
1.12	GSBC develop an annual Weed Works Program for Council land that details on-ground works in line with priorities determined using the GSBC weed database.	H	GSBC	March Annually		2010 - This is currently being developed for the 08/09 financial year. 2014 - This now occurs on an annual basis.

Component 2 - BIOSECURITY

Desired Outcome: *No new weeds established and the spread of current and sleeper weeds prevented.*

BIOSECURITY - Weed Risk Assessment

No	Action	Priority	Who	When	Links to STWS Strategic Action	Progress
2.1	Respond to DPIPWE's Weed Risk Assessment (WRA) as required.	H	GSBNRMC / GSBC	Ongoing		2010 - DPIPWE informs member groups such as GSBC about potential future weeds based on WRA activities. 2014 - DPIPWE liaises with GSBC as necessary.
2.2	Communicate the outcomes of WRA processes to relevant property owners in GSBC.	H	GSBNRMC / GSBC	Ongoing		2010 - Has been undertaken on a case by case basis. 2014 – Ongoing.

BIOSECURITY - Regional Weed Alert Network

No	Action	Priority	Who	When	Links to STWS Strategic Action	Progress
2.3	Continue to be active in State Weed Alert Network activities and encourage community members to become involved.	H	GSBNRMC / GSBC / DPIPWE	Ongoing	3-3, 3-4	2010 - GSBC is currently a member. 2014 – Ongoing.
2.4	Provide regular feedback to the wider community about emerging weed threats.	H	GSBNRMC / GSBC / DPIPWE	Ongoing	3-4	2010 - As opportunities arise especially through the GSBC newsletter. 2014 – As opportunities arise such as through the GSBC newsletter and other local newsletters as well as through existing community networks.

BIOSECURITY – Early Detection and Rapid Response

No	Action	Priority	Who	When	Links to STWS Strategic Action	Progress
2.5	Encourage and support the community to record and report observations of unusual plants.	M	GSBNRMC / GSBC / DPIPWE	Ongoing		2010 - This has occurred on occasion. 2014 – Ongoing community awareness.
2.6	Encourage and support the community to record and report well known existing weeds in new locations.	H	GSBNRMC / GSBC / DPIPWE	Ongoing		2014 – Ongoing.
2.7	Develop and promote a process for assessing and dealing with reports of unusual plant occurrences.	H	GSBNRMC / GSBC / DPIPWE	Ongoing		2010 - No formal process has been developed although the first point of call is to collect a sample of the plant and send it to the Weed Botanist at the Tasmanian Herbarium. 2014 - As for 2010 (above). Potentially problem plants are controlled in a timely manner.

THE AMSINCKIA STORY

In June 2014 GSBC carried out road and street scape works on Gore Street, Orford. On completion of works top soil was purchased for back filling the nature strip in which clean certified grass seed was planted. Late winter rain resulted in good grass growth but also an abundant growth of flat weeds which eventually choked out the grass. Consequently, in early August, an NRM Department On-Ground Works Officer was tasked with applying a selective herbicide to the flat weeds.

By the end of August it was evident that there was one particular plant that had not responded to the treatment and was starting to flower. The plant could not be identified and so photos were sent to the Tasmanian Herbarium and to a Weed Officer at DPIPWE. The response from both was fast - could it be Amsinckia? The following day the NRM On-Ground Works Office dropped off a specimen of the plant to the Herbarium (on her day off) and it was confirmed to be Amsinckia.

As this 'Zone A declared weed' was currently flowering quick action was needed to prevent it setting seed and spreading. So it was all hands on deck - the GSBC Works Staff assisted the NRM On-Ground Works Officers hand pulling all the plants at Gore Street. This collaborative approach meant that all staff were able to 'get their eye in' and recognise Amsinckia so that any future sightings could be dealt with immediately.

There had only been one previous sighting of Amsinckia in the Municipality several years earlier in Bicheno. So the question now was - where did it come from? Did it come in the grass seed? There was a small amount of left over seed but on visual inspection there was no sign of any foreign seeds.

So was it in the soil? It looked probable - some Amsinckia plants were subsequently found in the area where the soil had been temporarily stored. The NRM Department contacted DPIPWE with this information. Following an inspection of the soil supplier by DPIPWE the suspicious soil was confirmed as the source.

So the moral of the tale is: when purchasing soil, sand, seed, fodder etc. ensure that it is guaranteed to be weed-free!

BIOSECURITY - Biosecurity support

No	Action	Priority	Who	When	Links to STWS Strategic Action	Progress
2.8	Develop and implement Standard Operating Procedures for hygiene protocols to ensure that GSBC works crews minimise the risk of weed spread into new areas during maintenance activities.	H	GSBNRMC / GSBC / DPIPWE	Ongoing	3-6	<p>2010 - GSBC is currently participating in a project funded through NRM South to develop hygiene protocols for works operations. Funding has been sought to purchase a mobile washdown unit to enable these protocols to undertaken in the future.</p> <p>2014 – Washdown units have been purchased. Hygiene protocols have been implemented by the NRMDpt team.</p> <p>Training has been provided to GSBC Works Department staff. However, no protocol is yet in place.</p>
2.9	Monitor active quarries to ensure that effective weed hygiene and weed management procedures are carried out.	H	GSBNRMC / GSBC	Ongoing	3-11	<p>2010 - Not yet undertaken.</p> <p>2014 – Site visits to quarries have been undertaken in collaboration with MRT.</p>
2.10	Monitor landscape supplies to ensure that effective weed hygiene and weed management procedures are carried out.	H	GSBNRMC / GSBC	Ongoing		<p>2010 - Not yet undertaken.</p> <p>2014 – Informal site visits have been undertaken.</p>
2.11	Implement, promote and encourage the use of the <i>Tasmanian Washdown Guidelines for Weed and Disease control</i> for landholders, contractors, industry and community organisations.	H	GSBNRMC / GSBC / FT / DSG / TasNet / TasWat	Ongoing	3-8, 3-10	<p>2010 - Not yet undertaken.</p> <p>2014 – Ongoing.</p> <p>Included in planning conditions when appropriate.</p> <p>Hygiene training days have been undertaken for GSBC staff, contractors and community members e.g. at Invasive Species Day community event in Bicheno.</p>

BIOSECURITY - Conservation areas

No	Action	Priority	Who	When	Links to STWS Strategic Action	Progress
2.12	Identify and prioritise areas at risk from weeds and/or diseases. Formulate plans to protect those areas. E.g. <i>Community Foreshore Action Plans</i>	H	GSBC / PWS/ DPIPWE / FT	Ongoing		<p>2010 - Not yet undertaken.</p> <p>2014 – NRMDpt has developed Native Flora & Fauna Management Plans for coastal area reserves for Bicheno, Coles Bay, Swanwick, Swansea, Triabunna and Orford/Spring Bay.</p> <p>PWS has Management Plans in place for some of their reserves.</p> <p>NRMDpt is working with CLS in prioritizing weed control actions required on Crown Land.</p>

BIOSECURITY - Waste disposal

No	Action	Priority	Who	When	Links to STWS Strategic Action	Progress
2.13	Investigate opportunities for appropriate weed disposal.	H	NRMDpt / GSBNRMC / GSBC	Ongoing	3-13	<p>2010 - Not yet undertaken.</p> <p>2014 – Deep waste burial undertaken for small amounts of Declared weeds. Further opportunities need be investigated.</p>
2.14	Undertake a weed survey of all tip sites and vacant land managed by GSBC twice a year to identify, prioritise and control significant weed infestations.	H	NRMDpt / GSBC	Biannual / Ongoing		<p>2010 - Not yet undertaken.</p> <p>2014 – Started and ongoing.</p>

Component 3 - PRIORITISATION AND INTEGRATION

Desired Outcome: *Regional weed management priorities are defined and addressed in an integrated manner.*

PRIORITISATION AND INTEGRATION - Prioritisation and integration

No	Action	Priority	Who	When	Links to STWS Strategic Action	Progress
3.1	Periodically review the status of weeds listed in Tables 1, 2 and 3.	H	NRMDpt / GSBNRMC/ DPIPWE	Annually		2010 – Ragwort was changed from a Zone B to a Zone A declared weed in GSBC. 2014 – Reviewed informally as a part of this review.
3.2	Continue to review the priority of on-ground actions in light of evolving prioritization processes.	M	NRMDpt / GSBNRMC/ GSBC / DPIPWE	Ongoing		2010 - This has been the case with regard to more recent infestations of serrated tussock and also with the inclusion of environmental and agricultural weeds into the weed plan. 2014 - Weed priorities have been determined in Native Flora & Fauna Management Plans for GSBC managed coastal reserves. Often occurs opportunistically depending on funding opportunities e.g. Biodiversity Fund grants.
3.3	Integrate weed management into other strategies and plans at a variety of scales. E.g. catchment management plans, foreshore management plans, property management plans including weed action plans.	H	NRMDpt / GSBNRMC/ GSBC / DPIPWE / community	Ongoing		2010 - Weed management is included in the revision of the Little Swanport Catchment Management Plan as well as other developing plans. 2014 - Weed management is incorporated in Native Flora & Fauna Management Plans for GSBC managed coastal reserves, Levy Street in Bicheno and the Swan-Apsley Catchment Plan. Weed Action Plans are in place for approximately 50 properties.
3.4	Identify and monitor projects and works programs being undertaken within the Municipality to ensure weed management and hygiene issues are considered.	H/M	NRMDpt / GSBNRMC / GSBC / WorkDpt	Ongoing	4-1, 4-14	2010 - Has occurred such as the in the landscaping of Jubilee Beach in Swansea where the removal of weed species was followed by revegetation with appropriate native species. 2014 – Ongoing, for example regular liaison between NRMDpt and GSBC Works Department of work programs on a case by case basis.

PRIORITISATION AND INTEGRATION - Current weed management priorities

No	Action	Priority	Who	When	Links to STWS Strategic Action	Progress
3.5	Continue to inform key public land managers (PWS, DSG, CLS, TasNet, TasWat) of weed priorities in GSBC and encourage a strategic long-term approach to weed management.	M	NRMDpt	Ongoing		2014 – Ongoing (e.g. Moulting Lagoon gorse mapping; Levy Street, Bicheno boneseed mapping). NRMDpt is working closely with CLS on weed management on Crown Land throughout the municipality. Ongoing liaison with TasWat regularly on weed issues as they often get us to do control work for them. Also working with Stornaway on state road weeds on behalf of DSG.
3.6	Maintain current weed recording and mapping.	L	GSBC / DPIPWE	Ongoing		2010 - GSBC roadside mapped data and other community / GSBC collected mapping has been digitised however weeds on private property that have been mapped have not been digitised. 2014 – NRMDpt is recording the location of newly recorded weeds and all weed control treatments on GSBC's 'weed treatment & chemical diary sheets'. The data is sent to NVA and these will form the basis of an in-house GSBC weed database currently under development. Mapping of this data is conducted as required.
3.7	Return digitised GIS maps to landholders for verification and updating as opportunities arise.	L	GSBC / DPIPWE	Ongoing		2010 - See above. 2014 – Ongoing (e.g. Apslawm gorse mapping).

WEEDS ON UNMADE ROAD RESERVES

In the small towns on Tasmania's east coast there are many road reserves that were included in the early original plans for the townships. Roads have not been built on all of these reserves as they are not yet warranted with the current levels of development. As such many of these unmade road reserves remain 'no man's land' and over the years some have become infested with weeds. In the Swansea township the Council has been undertaking weed control over many years on all the verges of the made road reserves with an initial focus on Declared Weeds, in particular gorse. The unmade road reserves were increasingly becoming an obvious next focus for weed control. Discussions commenced with Crown Land Services who have, in a staged process, provided the financial resources to Council's On-Ground Weeds Officers to undertake this work. Since controlling the weeds on the unmade road reserves, the adjoining owners now have incentive to undertake weed control on their side of the fence. Council has also issued weed notifications to all landholders adjoining Council roads and Crown Land unmade road reserves where control of gorse has occurred informing them of their obligations under the Tasmanian Weed Management Act 1999 to undertake boundary protection to prevent any gorse on their property from reinfesting these now 'clean' reserves. Slowly but surely more and more people are getting on board and doing their bit.

Component 4 - COORDINATION AND COOPERATION

Desired Outcome: *All weed management conducted in the region is coordinated and cooperative.*

COORDINATION AND COOPERATION

No	Action	Priority	Who	When	Links to STWS Strategic Action	Progress
4.1	Establish a representative body to facilitate and oversee the implementation of the GSB WMP.	L	NRMDpt / GSBNRMC	Ongoing		<p>2010 - The already established Weed Management Plan sub-committee of the GSBNRMC would be the most suited to facilitate and oversee the implementation of the WMP. However other stakeholders could be invited to participate.</p> <p>2014 – NRMDpt and GSBNRMC oversees implementation of the Plan in cooperation with DPIPWE and other stakeholders as required.</p>
4.2	Support new and existing groups and other stakeholder to develop and implement weed action plans.	H	NRMDpt / GSBNRMC	Ongoing	2-6, 4-11	<p>2010 - The establishment of the Coles Bay Weed Club has been an example of this as has the ongoing support of the Orford Community Group which continues to undertake priority weed activities in the Orford area.</p> <p>2014 – Weed Action Plans are in place for approximately private 50 properties.</p> <p>Native Flora & Fauna Management Plans are the guiding documents for on-ground work on GSBC managed coastal reserves.</p> <p>NRMDpt has worked with other agencies in creating a Weed Action Plans for other public land (e.g. Bicheno Crown Land Reserve).</p>
4.3	Develop and implement a communications plan for the community concerning weeds and the actions and revision of the GSB WMP.	H	NRMDpt	Ongoing	7-1	<p>2010 - Already occurs via the GSBC newsletter however a strategic communication plan needs to be developed.</p> <p>2014 – Included in overall GSB NRM communications plan but not a specific weed plan.</p>
4.4	Continue to work with GSBC's Development and Planning section to ensure weed management issues are dealt with in planning processes.	H	NRMDpt / GSBC	Ongoing	3-7, 3-9	<p>2010 - The NRM Manager attends development and planning meetings to enable weed management issues to be addressed in the planning process.</p> <p>2014 – Relevant 'conditions' with regard to weeds are included in Development Applications where appropriate.</p>

COORDINATION AND COOPERATION (continued)

No	Action	Priority	Who	When	Links to STWS Strategic Action	Progress
4.5	Liaise with other land managers in the Municipality in order to coordinate the implementation of on-ground works.	H	NRMDpt / GSBNRM	Ongoing		2010 - This has happened with GSBC, DSG and PWS working together to coordinate roadside spraying of Spanish heath. 2014 – Ongoing. Since November 2014 GSBC is contracted to control weeds on State roadsides. GSBC NRMDpt collaborates with other agencies and land managers on a regular basis.
4.6	Continue to develop and participate in projects where weed management is a significant component.	H	NRMDpt / GSBNRM	Ongoing	2-9	2010 - Many examples such as the implementation of the Southern Coastal Strategy which has involved weed control in coastal foreshore areas across the Municipality. Further examples include support for NRM Incentives projects involved strategic weed control on private property. 2014 – For recent examples include involvement in NRM South project such as the <i>Eucalyptus ovata-Callitris oblonga</i> forest mapping & weed control, Moulting Lagoon gorse mapping & control, Apsley Marshes gorse & willow mapping & control, and the Landcare Tasmania Inc. funded Dolphin Sands Fire & Weed and Covenant Projects.

ROADSIDE WEEDS IN GSBC

For a number of years the GSB NRM Committee has been in discussion with the Department of State Growth (formerly DIER) about weed control issues along highways within the Glamorgan Spring Bay Municipality. The Committee have strongly argued that weed control is most effective when undertaken at a local level because local people have the ability to respond to new infestations quickly, thus preventing weeds spreading to clean areas.

In the past, GSBC has been responsible for weed control on Council roadsides only. However, in 2014 the GSB NRM Department team was finally successful in securing the contract to control declared and environmental weeds along the highways within the Municipality that are managed by the Department of State Growth. This positive development will ensure that roadside weed infestations, on all roadsides within the Municipality, are dealt with efficiently and effectively. It will also ensure that treated sites are monitored and that follow-up control is carried out in a timely manner.

Therefore, if members of the public are concerned about specific weeds on highways or Council roadsides they can contact the GSBC NRM Department team so that it can be assessed and included in our works program.

Component 5 – EDUCATION, TRAINING AND AWARENESS

Desired Outcome: *A well-informed and active network of people incorporating effective weed management into all land and water management activities in the region.*

EDUCATION, TRAINING AND AWARENESS - Education and awareness - GSBC Council

No	Action	Priority	Who	When	Links to STWS Strategic Action	Progress
5.1	Continue to develop and deliver awareness material for GSBC Councillors, Managers and Staff about our responsibilities under the <i>Weed Management Act 1999</i> .	H	NRMDpt / GSBNRM / DPIPWE	Ongoing	5-2	2010 - Presentations have been undertaken to Council as well as information formally and informally presented to Councilors, Managers and Staff about weed management. 2014 – Ongoing as opportunities allow.

EDUCATION, TRAINING AND AWARENESS - Education and awareness - Broader Community

No	Action	Priority	Who	When	Links to STWS Strategic Action	Progress
5.2	Identify relevant educational institutions and notify them about the GSBC WMP and opportunities for project involvement.	L	NRMDpt / GSBNRM / DPIPWE	Ongoing		2010 - Not yet undertaken in any strategic manner although students from the University of Tasmania have developed a strategic vegetation management plan incorporating weed management for the Barton Avenue foreshore. It is hope to build on this relationship into the future. 2014 – No further action undertaken.
5.3	Work with local schools incorporating weed education into the curriculum. Emphasis to be placed on involving the schools in community action.	M	NRMDpt / GSBNRM / DPIPWE / schools	Ongoing		2010 - All the schools within the Municipality have been involved in weed management activities initiated through the GSB WMP over many years however this has been on an ad hoc rather than a strategic manner. 2014 – As above.

EDUCATION, TRAINING AND AWARENESS - Education and awareness - Broader Community (continued)

No	Action	Priority	Who	When	Links to STWS Strategic Action	Progress
5.4	Organize presentations at appropriate forums for explaining landholder responsibilities under the <i>Weed Management Act 1999</i> and the GSBC WMP.	M	NRMDpt / GSBNRMC / DPIPWE	Ongoing	5-9	2010 - Not yet undertaken. 2014 - Information presented at the Invasive Species Day forum in Bicheno in early 2014. Presentation done during a workshop held as part of the Swan-Apsley Catchment review.
5.5	Provide and promote a local point of contact for weed management information in GSBC, e.g. NRMDpt library.	H	NRMDpt / GSBC / GSBNRMC	Ongoing		2010 - The GSBC NRMDpt office is increasingly being known as a local point of contact for weed management information as is the PWS office at Freycinet. 2014 - Ongoing personal contact with stakeholders by GSBC NRMDpt staff including the co funded Catchments To Coast Coordinator. Library established at new GSBC office in Triabunna.
5.6	Work with experts and community leaders in developing weed education programs relevant to the requirements of the Municipality.	M	NRMDpt / GSBC / GSBNRMC	Ongoing	5-2	2010 - Not yet undertaken. 2014 - NRMDpt works with DPIPWE and other Councils in this regard.
5.7	Distribution of brochures on weed identification and weed control methods to the community.	H	NRMDpt / GSBNRMC	Ongoing	5-2	2010 - Happens on a regular basis/needs basis. A GSBC specific weed 'bookmark' was developed and sent to all ratepayers highlighting the top four priority weeds. 2014 — Brochures provided via NRMDpt stall at various community events. Availability of brochures publicised via local newsletters.
5.8	Support National and State actions focusing on educating and supporting the nursery trade in minimising the distribution and spread of potential weeds.	L	GSBNRMC / GSBC / DPIPWE	Ongoing		2010 - Not yet undertaken. 2014 – Not yet undertaken.

EDUCATION, TRAINING AND AWARENESS - Education and awareness - Broader Community (continued)

No	Action	Priority	Who	When	Links to STWS Strategic Action	Progress
5.9	Approach businesses and individuals in GSBC trading in plants to ensure they are aware of the GSB WMP and inappropriate weeds for distribution.	H	GSBNRMC / GSBC / DPIPWE	Ongoing		2010 - Has been undertaken but on an opportunistic as opposed to strategic basis. 2014 – As above.

EDUCATION, TRAINING AND AWARENESS - Training requirements - GSB Council

No	Action	Priority	Who	When	Links to STWS Strategic Action	Progress
5.10	Ensure that Authorised Weed Officers undergo regular refresher training.	H	NRMDpt	Ongoing		2014 – Not yet undertaken for all currently Authorised Weed Officers.
5.11	Promote training of GSBC works staff in relevant biosecurity Risk Assessment procedures.	H	WorksDpt / NRMDpt			2010 - Policies and procedures are being developed by GSBC based on those used by the PWS. 2014 – This issue is covered in the Certificate IV course in Horticulture in which four NRMDpt staff members are currently enrolled.
5.12	Continue to incorporate weed management into GSBC staff training program, including during induction of new staff.	H	NRMDpt / GSBNRMC / DPIPWE / WorksDpt	Ongoing	3-15, 5-9	2010 - Has already commenced with most GSBC outside crew having undertaken training in weed identification, control and training in chemical use and handling. 2014 – Currently occurs on an informal basis for WorksDpt staff. Roll out of the Flora and Fauna Plans will formalise this. This issue is also covered in the Certificate IV course in Horticulture in which four NRMDpt staff members are currently enrolled.

EDUCATION, TRAINING AND AWARENESS - Training requirements - Broader Community

No	Action	Priority	Who	When	Links to STWS Strategic Action	Progress
5.13	Facilitate workshops for target groups within the Municipality as opportunities arise: e.g. <ul style="list-style-type: none"> • Weed Identification • Weed mapping • Integrated Weed Management • Chemical handling 	M	NRMDpt / GSBC / GSBNRM / DPIPWE	Ongoing	3-15, 5-8, 5-9	<p>2010 - Already has occurred with some community joining GSBC staff in training opportunities.</p> <p>Workshops and field days have been organized for the Orford Community Group, Coles Bay Weed Club and the Friends of Rocky Hills.</p> <p>2014 – Two chemical handling training courses have run over the past three years.</p> <p>Weed identification is integrated into other activities e.g. wildflower walk & talk's hosted by NRMDpt at Triabunna and Coles Bay; working bees.</p>
5.14	Work with appropriate individuals and organisations to ensure training workshops are <u>Accredited</u> by appropriate institutions where applicable.	M	NRMDpt / GSBC / DPIPWE / TAFE	Ongoing		<p>2010 - GSBC staff have undertaken accredited training in Chemical Use and Handling, Weed Identification and Management and use of Chainsaws. This training can be used as Units towards Certificates on Horticulture and Conservation and Land Management at TAFE.</p> <p>2014 – Four NRMDpt staff are currently enrolled in a Certificate IV in Horticulture.</p>

EDUCATION, TRAINING AND AWARENESS - Public awareness opportunities

No	Action	Priority	Who	When	Links to STWS Strategic Action	Progress
5.15	Organise displays and promotion at local events.	H	NRMDpt / GSBC / GSBNRM	Ongoing	5-2, 5-6	<p>2010 - The GSBNRM has had one display at the Cranbrook Craft Fair and plans to be involved again this year.</p> <p>A number of activities have been held during Weed Buster Week over the last few years in each town. An example is the 'Front Yard Blitz' in Coles Bay, which transformed a weed infested front garden to one planted with native plants. It was attended by many locals, the Minister and media. It was the official launch of the Coles Bay Weed Action Plan.</p> <p>2014 - NRMDpt continue to have a stall at various community events, e.g. Swansea and Orford Australia Day events, Seafest, Swansea Country Fair.</p>

EDUCATION, TRAINING AND AWARENESS - Support best practice weed management

No	Action	Priority	Who	When	Links to STWS Strategic Action	Progress
5.16	Organize field days on Integrated Weed Management. Location of field days needs to vary depending upon the priority weeds and target groups.	M	NRMDpt / GSBNRMC / GSBC / DPIPWE	Ongoing	5-9	2010 – Not yet undertaken. 2014 – Serrated tussock field day.
5.17	Inform the community of alternative methods of non-chemical weed control.	M	NRMDpt / GSBNRMC / GSBC / DPIPWE	Ongoing	5-2	2010 – Not yet undertaken. 2014 – Occurs only on an ad hoc basis e.g. working bees when hand pulling is the most appropriate method. Council has just purchased a steam spray unit and once this becomes regularly used it will be promoted as alternative method of weed control to chemicals.
5.18	Identify and promote demonstration sites of Integrated Weed Management in highly visible locations within the Municipality.	M	NRMDpt / GSBNRMC / GSBC / DPIPWE / NRMSouth			2010 - Not yet undertaken. 2014 – Not yet undertaken.

Component 6 – POLICY, SUPPORT AND REGULATION

Desired Outcome: *Compliance with the Weed Management Act 1999 and all government, community and industry bodies supporting the Act with adequate weed management procedures and actions.*

POLICY, SUPPORT AND REGULATION - Policy support and regulations - GSB Council

No	Action	Priority	Who	When	Links to STWS Strategic Action	Progress
6.1	Adopt Risk Assessment procedures, for all weed management activities, to address: <ul style="list-style-type: none"> • WH&S • Public liability • Environmental risks • Social risks. 	H	NRMDpt / GSBC	Ongoing		2010 - This is an ongoing process for GSBC involving all Council staff and Managers. The NRM Manager works regularly with PWS to improve risk management procedures for community events. 2014 – Achieved through adoption of JSAs and weed & chemical recording sheets. However, review of these is ongoing.
6.2	Ensure the GSBC WMP and other relevant documents are consistent with National and State Weed Legislation and Policy.	M	NRMDpt / GSBNRM / GSBC / DPIPWE	Ongoing	1-7	2010 - State Government Regional Weed Management Officers have been involved in the development of the GSB WMP. State Government WMOs are also involved in the revision of other plans such as catchment management plans as appropriate. 2014 – Achieved through this Plan review.

POLICY, SUPPORT AND REGULATION - Guidelines and codes of practice

No	Action	Priority	Who	When	Links to STWS Strategic Action	Progress
6.3	Encourage and support organizations with weed management responsibilities to comply with all applicable codes of practice and guidelines such as the <i>Tasmanian Washdown Guidelines for Weed and Disease Control</i> .	H	GSBNRM / GSBC / FT / DSG / TasNet / TasWat	Ongoing	1-12	2010 - GSBC is about to commence working on developing procedures in line the <i>Tasmanian Washdown Guidelines for Weed and Disease Control</i> . 2014 – DSG are considering hygiene sites. TFS is including hygiene in mitigation plans.

POLICY, SUPPORT AND REGULATION - Enforcement

No	Action	Priority	Who	When	Links to STWS Strategic Action	Progress
6.4	Maintain Authorised Weed Officers within the GSB Municipality to enforce the <i>Weed Management Act 1999</i> . Promote the role within the community.	H	NRMDpt / GSBC / DPIPWE	Ongoing	1-2, 1-3, 1-4	<p>2010 - The NRM Manager is a Authorised Weed Officer. Further training for other GSBC and PWS staff will be undertaken in late 2008.</p> <p>2014 – GSBC has appointed three Authorised Weed Officers. As a first step in enforcement, 151 Weed Notifications have been sent out regarding Zone A weeds (Spanish heath, boneseed, bridal creeper, brooms and pampas grass) and one Zone B weed (gorse boundary protection in Swansea). Requirement notices will be sent out in 2015.</p>

Component 7 – RESEARCH AND DEVELOPMENT

Desired Outcome: *A region involved in and encouraging excellence in weed management knowledge, technology, skills, capacity and ability.*

RESEARCH AND DEVELOPMENT - Research support and promotion

No	Action	Priority	Who	When	Links to STWS Strategic Action	Progress
7.1	Identify and notify relevant educational institutions about the GSB WMP and research opportunities.	M	NRMDpt / GSBNRMC / DPIPWE	Ongoing		2010 - Not yet undertaken. 2014 – Not yet undertaken.
7.2	Support and promote relevant research on weed management in GSB Municipality.	M	NRMDpt / GSBNRMC / DPIPWE	Ongoing		2010 - Support has been given for research being undertaken on biological control on a number of occasions over many years. 2014 – Support has been provided to a proposed business venture to use gorse as a fuel source. Support for boneseed research in Bicheno.

RESEARCH AND DEVELOPMENT - Cost and benefit analysis

No	Action	Priority	Who	When	Links to STWS Strategic Action	Progress
7.3	Continue to research and review weed control methods undertaken by GSBC.	H	GSBC	Ongoing		2010 - Not yet undertaken. 2014 – Following discussions with other Councils, GSBC is soon to purchase a steam unit as an alternative to chemical treatment of weeds.

Component 8 – MONITORING AND EVALUATION

Desired Outcome: *A region that monitors and fully understands the extent and scope of its weed problem and has a Strategy that is regularly reviewed, and therefore relevant and achievable.*

MONITORING AND EVALUATION - On-ground monitoring

No	Action	Priority	Who	When	Links to STWS Strategic Action	Progress
8.1	Review the on-ground priorities.	M	NRMDpt / GSBNRMC / DPIPWE	Annually		2010 - Complete. 2014 – Ongoing.
8.2	Review the annual implementation costs of the GSB WMP for the GSBC.	H	NRMDpt / GSBC	Annually		2010 - Not yet undertaken. 2014 – Not yet undertaken.

MONITORING AND EVALUATION - Strategy review

No	Action	Priority	Who	When	Links to STWS Strategic Action	Progress
8.3	Undertake a review of the objectives and overall structure of the GSB WMP including the weed on-ground priorities.	M	NRMDpt / GSBNRMC / DPIPWE	Internally: Annually Public document: Five yearly	4-3	2010 - Complete. 2014 – Ongoing.
8.4	Review the GSB WMP to ensure that it remains consistent with any new/revised policy and legislation.	M	NRMDpt / GSBNRMC / DPIPWE	Annually		2010 - Complete. 2014 - Complete

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Appendix

WEED PHOTOS

DECLARED WEEDS – Zone A



African lovegrass *Eragrostis curvula*



Amsinckia *Amsinckia* spp.



Boneseed *Chrysanthemoides monilifera* subsp. *monilifera*



Bridal creeper *Asparagus asparagoides*



Montpellier broom *Genista monspessulana*



English broom *Cytisus scoparius*

DECLARED WEEDS – Zone A (continued)



Himalayan honeysuckle *Leycesteria formosa*



Feathertop *Cenchrus longisetus*



Fennel *Foeniculum vulgare*



Hoary cress *Lepidium draba*



Pampas grass *Cortaderia* spp.

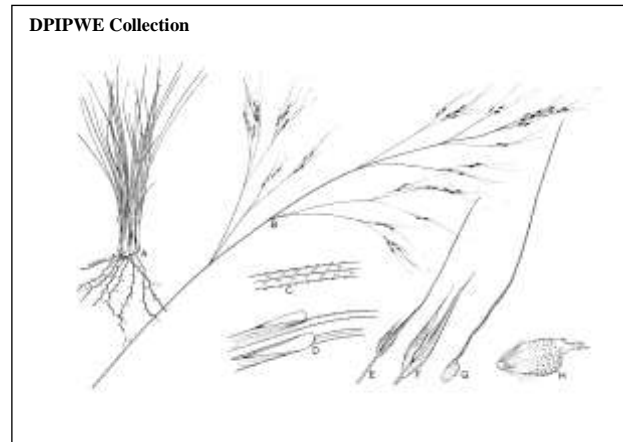


Paterson's curse *Echium plantagineum*

DECLARED WEEDS – Zone A (continued)



Ragwort *Senecio jacobaea*



Serrated tussock *Nassella trichotoma*



Spanish heath *Erica lusitanica*



Thistle - creeping thistle *Cirsium arvense*



Thistle - nodding thistle *Carduus nutans*



Thistle - saffron thistle *Carthamus lanatus*

DECLARED WEEDS – Zone A (continued)



Thistle - scotch thistle *Onopordum acanthium*



White-edged nightshade *Solanum marginatum*



Willows - *Salix* sp.

DECLARED WEEDS – Zone B



African boxthorn *Lycium ferocissimum*



Blackberries *Rubus fruticosus* aggregate



Gorse *Ulex europaeus*



Thistle – slender thistle *Carduus pycnocephalus*



Thistle – winged thistle *Carduus tenuiflorus*



White horehound *Marrubium vulgare*

ENVIRONMENTAL AND AGRICULTURAL WEEDS



Agapanthus *Agapanthus praecox*



Arum lily *Zantedeschia aethiopica*



Banana passion fruit *Passiflora tarminiana*



Blackberry nightshade *Solanum nigrum*



Bluebell creeper *Billardiera heterophylla*



Blue butterflybush *Psoralea pinnata*

ENVIRONMENTAL AND AGRICULTURAL WEEDS (continued)



Blue periwinkle *Vinca major*



Cape ivy *Delairea odorata*



Cape wattle *Paraserianthes lophantha*



Capeweed *Arctotheca calendula*



Cootamundra wattle *Acacia baileyana*



Cotoneaster *Cotoneaster* spp.

ENVIRONMENTAL AND AGRICULTURAL WEEDS (continued)



Dolichos pea *Dipogon lignosus*



Drain flatsedge *Cyperus eragrostis*



Evening primrose *Oenothera stricta*



Firethorn *Pyracantha* spp.



Flaxleaf fleabane *Conyza bonariensis*



Gazania *Gazania* spp.

ENVIRONMENTAL AND AGRICULTURAL WEEDS (continued)



Great mullein *Verbascum thapsus*



Great reedmace *Typha latifolia*



Hawthorn *Crataegus monogyna*



Howitt's wattle *Acacia howittii*



Ivy *Hedera helix*



Japanese honeysuckle *Lonicera japonica*

ENVIRONMENTAL AND AGRICULTURAL WEEDS (continued)



Mirrorbush *Coprosma repens*



Montbretia *Crocosmia x crocosmiiflora*



Myrtleleaf milkwort *Polygala myrtifolia*



Nasturtium *Tropaeolum majus*



New zealand flax *Phormium tenax*



Oxeye daisy *Leucanthemum vulgare*

Greg Jordan

ENVIRONMENTAL AND AGRICULTURAL WEEDS (continued)



Prickly pear *Opuntia* spp.



Pride-of-madeira *Echium candicans*



Purple groundsel *Senecio elegans*



Radiata pine *Pinus radiata*



Red valerian *Centranthus ruber*



Scrambling groundsel *Senecio angulatus*

ENVIRONMENTAL AND AGRICULTURAL WEEDS (continued)



Sea spurge *Euphorbia paralias*



Shade crassula *Crassula multicava*



Skunkweed *Navarretia squarrosa*



Sweet briar *Rosa rubiginosa*



Sweet pittosporum *Pittosporum undulatum*



Trailing daisy *Dimorphotheca fruticosa*

ENVIRONMENTAL AND AGRICULTURAL WEEDS (continued)



Tree lucerne *Chamaecytisus palmensis*



Tree mallow *Malva arborea*



Wandering creeper *Tradescantia fluminensis*



Watsonia *Watsonia* sp.



Weld *Reseda luteola*



Winter euryops *Euryops abrotanifolius*

ENVIRONMENTAL AND AGRICULTURAL WEEDS (continued)



Yellow pigface *Carpobrotus edulis*



Yellow poppy *Glaucium flavum*

POTENTIAL PROBLEM WEEDS



Asparagus fern *Asparagus scandens*



Bristly oxtongue *Helminthotheca echioides*



Burgan *Kunzea ericoides*



Chilean needlegrass *Nassella neesiana*



Foxglove *Digitalis purpurea*



Hawkweed *Pilosella* spp.

POTENTIAL PROBLEM WEEDS (continued)



Rob & Fiona Richardson

Texas needlegrass *Nassella leucotricha*