



GEORGE TOWN COASTAL MANAGEMENT PLAN

OCTOBER 2005

Prepared by SFM Environmental Solutions Pty Ltd

For the Tamar Region Natural Resource Management
Strategy Reference Group Inc. (Tamar NRM)



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FINAL COPY

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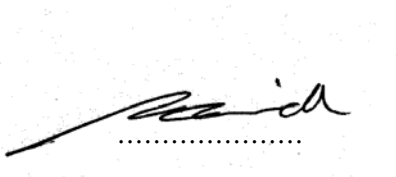
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Statement of Endorsement

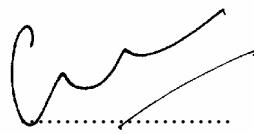
The George Town Coastal Management Plan has been prepared by SFM Environmental Solutions under the guidance of a steering committee specially selected for this project. The George Town Coastal Steering Committee represents land managers, local and state government agencies, Tamar NRM and community groups.

The George Town Council, Tamar NRM and the Parks and Wildlife Service Tasmania have endorsed the plan as a future blueprint for the management of the George Town Coastal area and are committed to the full implementation of this plan, in conjunction with the community.

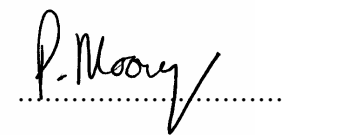
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Summary

The George Town Coastal Management Plan (GTCMP) is a non-statutory document that aims to preserve the natural values of the George Town coastal region by addressing management issues in a coordinated and systematic manner. This Plan covers the Coastal Reserves, Recreation Reserves and some areas of unallocated Crown lands that extend from the western boundary of East Beach to the west bank of Little Pipers River. Coastal townships within this Coastal Management Area (CMA) include: Bellbuoy Beach, Beechford, Lulworth, Tam O'Shanter, Weymouth and Bellingham.

The dominant coastal scrub and heathland vegetation communities within the GTCMP area are generally in moderate condition. However, some sections of native vegetation and coastal landforms are becoming increasingly degraded through human impact which in turn may negatively affect native fauna populations. Some vegetation communities found within the GTCMP provide important habitat for threatened species and the preservation of these areas is considered a high priority by local, state and national management authorities. Many local residents treasure both the natural values of their region and the recreational opportunities these values provide.

Local communities within the GTCMP area have previously been involved with a variety of on-ground activities, including revegetation projects, weed removal and track maintenance. Building strong working relationships and networks between these local community groups and the management authorities involved is essential to the success of the Management Plan. Community consultation has been of utmost importance during the formulation of this document, as the Management Plan's implementation schedule will largely be "driven" by local residents. Tamar NRM will establish a George Town Coastal Working Group to oversee the progress of on-ground works. This Working Group will consist of representatives from various community groups, Tamar NRM, the Tasmanian Parks and Wildlife Service (PWS) and the George Town Council.

The GTCMP is divided into four parts. Part A places the Management Plan in context, stating the scope and aims of the document. This section outlines the region's flora, fauna, geomorphology and possible threats, clearly defining the area contained within the Management Plan using the aid of maps. Part B states the

Management Plan's vision and defines the document's broad and specific objectives. Part C is an implementation schedule specific to each community that has been drafted in consultation with the local residents, the George Town Council, PWS, Coastcare and the Aboriginal Heritage Unit. This section describes tasks to be undertaken, responsibilities of those involved with the implementation and a broad timeline for the schedule to be completed. Part D provides general guidelines that address specific management issues. These guidelines deliver underlying principles for preserving GTCMP areas both now and in the future.

Acknowledgements

This Management Plan was developed in direct consultation with the communities of Bellbuoy Beach, Beechford, Lulworth, Tam O'Shanter, Weymouth and Bellingham. This Plan would not have been possible without the input from these local residents who provided their own personal time, enthusiasm, experiences and local landcare expertise. The authors would especially like to thank the participants of the four community forums and the people who prepared written submissions. We also wish to extend our gratitude to members of local management authorities George Town Council, PWS, Coastcare, the Aboriginal Heritage Unit and Tamar NRM for their cooperation in providing information and assistance .

The project was made possible through the Tamar Region Natural Resource Management Strategy Reference Group Inc. (Tamar NRM) and was funded by the George Town Council and by the Commonwealth Government through Envirofund (a program of the Natural Heritage Trust). The authors would like to thank all members of the Steering Committee who guided this project:

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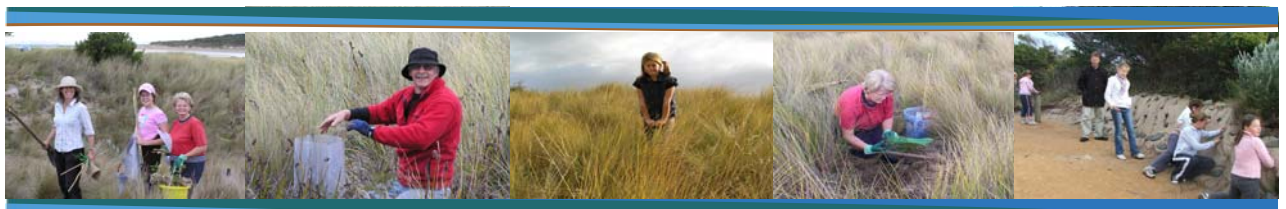
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Disclaimer

The views expressed within this document are solely those of the authors and stake holders and do not necessarily represent the opinions, policies and strategies of the Tamar Region Natural Resource Management Strategy Reference Group Inc. (Tamar NRM), PWS or the George Town Council.

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The information contained within this report is constrained by the amount of time and resources available for research. Those who use this information do so at their own risk and it is recommended that users conduct their own enquiries and seek their own professional advice before relying on this report.



Acronyms

4WD	Four Wheel Drive vehicles
DPIWE	Department Primary Industry Water and the Environment
DTPHA	Department of Tourism, Parks, Heritage and the Arts
EPBC	Environmental Protection and Biodiversity Conservation Act 1999
CMA	For convenience, the areas of Coastal Reserve, Recreational Reserve and unallocated Crown land covered in this Plan are referred to collectively as the Coastal Management Area (CMA)
GTCMP	George Town Coastal Management Plan
GT Council	George Town Council
GTCWG	George Town Coastal Working Group
GTSpot	Geo temporal Species Point Observations Tasmania
MAST	Marine and Safety Tasmania
NRM	Natural Resource Management
PC	<i>Phytophthora Cinnamomi</i> (Root rot fungus)
PWC	Personal watercraft including the brand Jetski
PWS	Parks and Wildlife Service Tasmania
TALSC	Tasmanian Aboriginal Land and Sea Council
Tamar NRM	Tamar Region Natural Resource Management Strategy Reference Group Inc.
TASI	Tasmanian Aboriginal Site Index
TFS	Tasmanian Fire Service

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1. Fauna Species recorded within the CMA
2. Written submissions from Local Residents
3. Letter sent by SFM Environmental solutions to the mailing addresses of local residents
4. Minutes from the Community Forums held Saturday 2 July 2005
5. Stakeholder Contact List
6. Statutory Management Objectives
7. PWS Community Partnership Agreement Template

PART A : MANAGEMENT PLAN CONTEXT

1 INTRODUCTION

The Coastal Management Area (CMA) covered in the George Town Coastal Management Plan (GTCMP) is of great natural value to permanent residents, semi permanent shack owners, Tasmanian and interstate holiday makers and international tourists. Residents and holiday makers enjoy a large number of recreational opportunities provided by the safe, clean beaches and natural environment.

The coastal areas have a temperate maritime climate where the mean annual rainfall is 677.2mm. Coastal heathland is the dominant vegetation community type, and while most of the vegetation within the reserve is in 'moderate' condition, there are also areas of high conservation value. The beaches provide an important breeding area for resident shore birds species such as the Hooded Plover and Pied Oystercatcher. The dune vegetation and open heathland forest support a number of native fauna species including some of conservation concern. The CMA also contains many important sites of Aboriginal cultural heritage as well as unique coastal landforms of geomorphological significance such as laterally graded beaches, turbidite outcrops (belonging to the Mathinna Group) and examples of the Pleistocene desert dune complex.

The CMA (extending between East Beach and Little Pipers River) has been subjected to increasing levels of human impact over the last century. Mounting pressure on the local environment from an increasing population combined with a shift from holiday homes to more permanent residential property have contributed to numerous management issues in the CMA. Such issues include weed infestation, dune erosion and loss of native vegetation. Before this Plan, no coordinated approach to the management of this coastal area existed between different authorities and the local community.

There are many benefits of addressing environmental impacts in their infancy. A coordinated plan is needed to address current management issues of the CMA in a strategic and efficient manner, preserving the natural and cultural values of the area

into the future. This is a non-statutory plan and while it does not have the force of law, it should be adhered to as it has been prepared and agreed to by all relevant parties including land managers and the community. The Plan has been founded on input from all stakeholders including the local community, the George Town Council, the Tamar Region Natural Resource Management Strategy Reference Group Inc. (Tamar NRM), the Aboriginal Heritage Unit, Coastcare and the Tasmanian Parks and Wildlife Service (PWS).

2 LOCATION AND PLANNING AREA

This Management Plan covers Coastal Reserves, Recreation Reserves and some areas unallocated Crown land between East Beach and Little Pipers River on the northern coast of Tasmania (Map 1). Together, these areas are referred to as the Coastal Management Area (CMA). In general, the areas included in the CMA are narrow strips of land extending only 50-100m inland from the low tide mark. However, a small number of these areas extend up to 5km inland.

A change in the nomenclature of reserve titles means that Coastal Reserves and Recreation Reserves (as shown on the Tasmap 1:25,000 series) are now formally called 'Public Reserves'. This is a collective term used for a wide range of reserve areas under the *Crown Land Act 1976*. Further, the state-wide Crown Land Assessment and Classification (CLAC) Project currently being undertaken is generally recommending that Public Reserves along the coast become Conservation Areas (this is discussed in more detail in section 5). The term 'Coastal Reserve' will be retained in this Plan, both because of these current and imminent changes in classification and the widespread generic usage of the term throughout the community.

The coastal strips of unallocated Crown land areas within the region have also been included in the Management Plan CMA as it is likely that many of the strips will become Conservation Areas after the completion of the CLAC project. Including these areas in this Plan will avoid the need to write an additional management plan for them in the future. Where blocks of unallocated Crown land extend a long way inland, a hypothetical reserve boundary line (perpendicular to the coast) has been drawn so that it is continuous with the adjoining Coastal Reserve areas.

Two large areas of unallocated Crown land (at Five Mile Bluff and East of Bellingham) have been included in the Plan's CMA in their entirety because they contain tracts of native vegetation in excellent condition and are of high conservation value. This Plan recommends that the area at Bellingham become a "Conservation Area" while Five Mile Bluff should become a "Nature Reserve" (as recommended in the *Conservation of Tasmanian Plant Species and Communities Threatened by Phytophthora cinnamomi – Strategic Regional Plan for Tasmania*¹).

The Plan's CMA has been divided as follows into five community-based sections for ease of strategy formulation:

- Bellbuoy Beach,
- Beechford,
- Lulworth/Tam O'Shanter,
- Weymouth and
- Bellingham.

These sections have been further defined in section 9.

3 AIMS

The aim of this Plan is to identify the natural and cultural values as well as environmental management issues within the area under study (the George Town Coastal Management Area, CMA). The Plan then endeavours to create a systematic, coordinated approach to ensure the maintenance of these values and the elimination or mitigation of management issues. This Plan aims to become a blueprint for the future management of these coastal areas. The specific aims of the GTCMP are to:

- Identify and manage environmental issues within the CMA;
- Protect and restore habitat of threatened species and ecological communities;

¹ Schahinger, R. Rudman, T. Wardlaw, T. 2003 *Conservation of Tasmanian Plant Species & Communities Threatened by Phytophthora cinnamomi - Strategic Regional Plan for Tasmania*. Technical Report 03/03. Nature Conservation Branch, Department of Primary Industries, Water and the Environment, Hobart.

- Reverse the decline in the extent and quality of native vegetation;
- Prevent and control the introduction and spread of weeds;
- Provide landholders, community groups and other natural resource managers with understanding and skills to contribute to biodiversity conservation and sustainable NRM;
- Build organisational frameworks to promote conservation and ecologically sustainable use and management of natural resources;
- Mitigate off-reserve threats to the natural values of the reserve areas; and
- Protect Aboriginal cultural sites within the reserve areas from degradation and unnecessary disturbance during nature conservation and restoration works.

The Plan will become an important resource to guide future community action and assist government and local planning authorities in the ongoing management of the CMA.

4 COMMUNITY AND STAKEHOLDER CONSULTATION

Community consultation and participation is crucial to the success of this Management Plan. The implementation schedule will be largely driven by the community and the success of the on-ground works program depends on the support of local residents. It was necessary to understand the local values of the community and become familiar with the separate management issues concerning each section of the CMA. SFM endeavoured to gain an appreciation of each local community group/progress association, including their enthusiasm and capacity to undertake on-ground works.

To achieve the high level of community interaction required, two letters were sent to the mailing address of each local resident advertising the plan, requesting their

presence at two separate community forums and calling for individual written submissions. Written submissions from local residents have been included in Appendix 2 and the letters sent from SFM to local residents are found in Appendix 3.

The first community forums were held on Saturday 2 July 2005 at Tam O'Shanter Golf Club and Weymouth Community Hall and were attended by approximately 70 members of the local community. The minutes from these forums have been included in Appendix 4. These forums introduced the plan to the local residents and identified and prioritised local community values. Local area management issues were identified and discussed and individuals were encouraged to make written submissions. A list of contacts for community groups and members specifically relevant to this Plan has been included in Appendix 5.

The second round of community forums were held on Saturday 13 August 2005 at the Weymouth Community Hall and on Sunday 14 August 2005 at the Tam O'Shanter Golf Club; approximately 45 local community members attended. The aim was to confirm the priority of local management issues and coordinate an implementation schedule specific to each community with the aid of management authorities, specifically the George Town Council and PWS.

5 LAND TENURE, LEGISLATION, POLICY AND PLANNING

One of the underlying reasons for initiating this Management Plan was to reduce the confusion over land tenure and the responsibilities of the various management authorities. Community consultation revealed that a number of management issues (e.g. firewood collection) are exacerbated because many members of the public are uncertain or unaware of the activities that are permitted on reserved and unallocated Crown land.

This section identifies the status of lands within the CMA and lists the agencies responsible for their management. The relevant legislation, policy and planning documents that guide management are also listed. The classification of many areas of Crown land within the CMA may change in the near future and revisions of some policy and planning documents are currently in progress. Where possible the likely implications of such changes for this Plan have been outlined.

5.1 Land Tenure

Currently, the land within the CMA is either classified as unallocated Crown land or “Public Reserve” (this term includes areas previously called Coastal and Recreation Reserves). These areas are all owned by the Crown under the *Crown Lands Act 1975* and the lead agency responsible for their management is Crown Land Services of DPIWE. This agency performs the majority of administrative duties (e.g. assessment of development proposals). However, the PWS of DTPHA undertakes most on-ground management and PWS rangers are responsible for enforcing the many of the provisions of *Crown Lands Act 1975*.

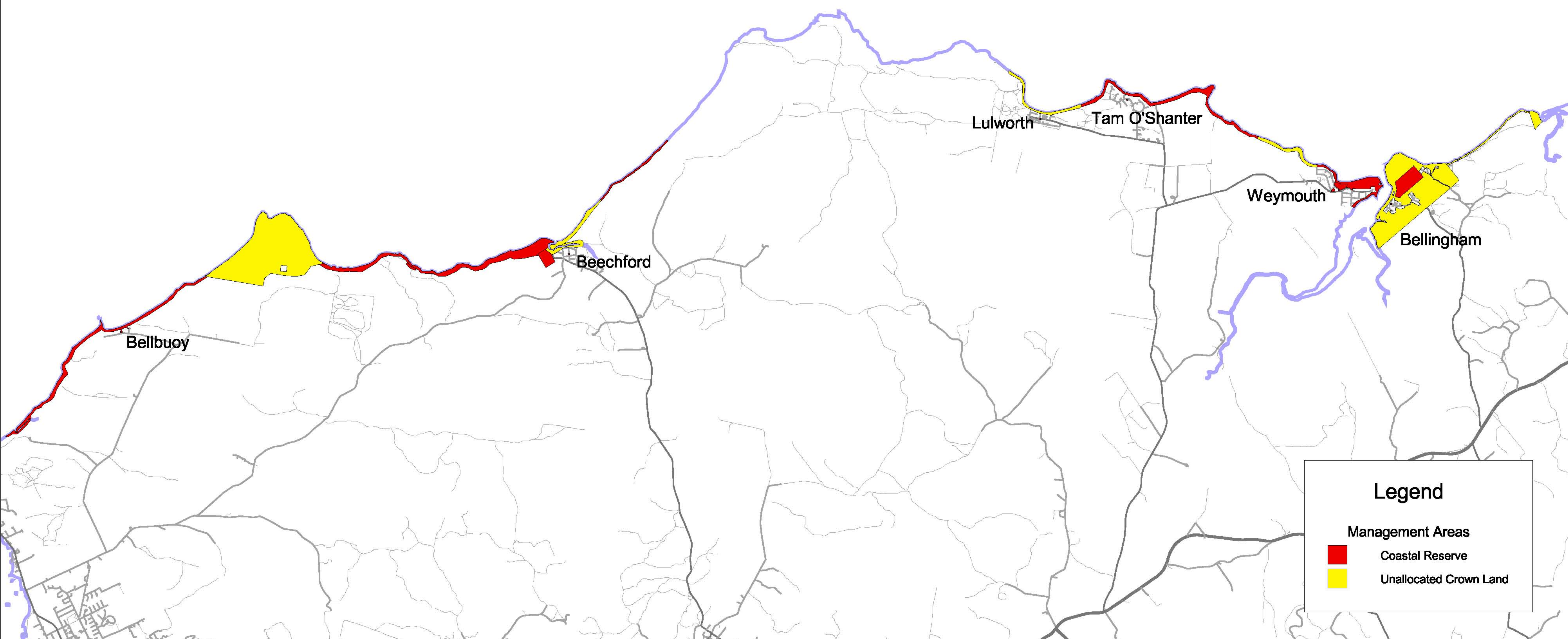
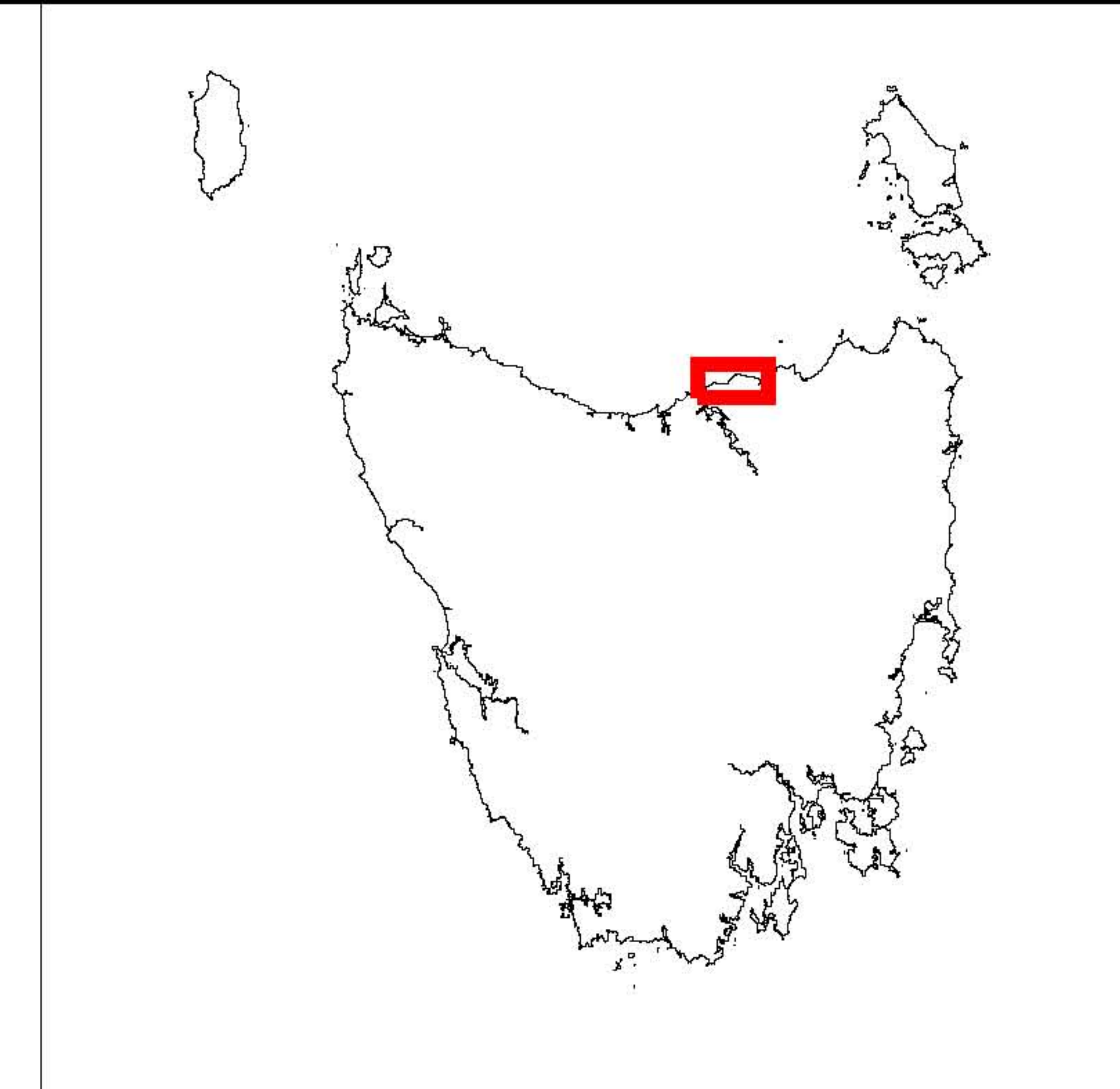
Map 2 shows land tenure in the George Town coastal region including Crown land managed by PWS (both reserves and unallocated land), land owned by the Commonwealth Government (Stony Head Artillery Range), Council owned land, Crown land leased to Council and freehold title. Map 2 does not make a distinction between unallocated Crown land and Public Reserves because PWS provides on ground management for both. Map 1 shows reserve areas and unallocated Crown land covered by this Plan.

The classification of Crown land in Tasmania is currently being reviewed as part of the Crown Land Assessment and Classification (CLAC) project. This process is likely to result in some important changes to the classification of land within the CMA. The CLAC project is generally recommending that “Public Reserve” (including both Coastal and Recreation Reserves) and many areas of unallocated Crown land along the coast be proclaimed as “Conservation Area” (a type of reserve) under the *Nature Conservation Act 2002*.

“Conservation Area” is usually managed by PWS under the *National Parks and Reserves Management Act 2002* and the *National Parks and Reserved Lands Regulations 1999*. However, land that is no longer in a predominantly natural state, is closely associated with urban areas or is leased to councils or other authorities is more likely to remain or become “Public Reserve” under the *Crown Lands Act 1975*.

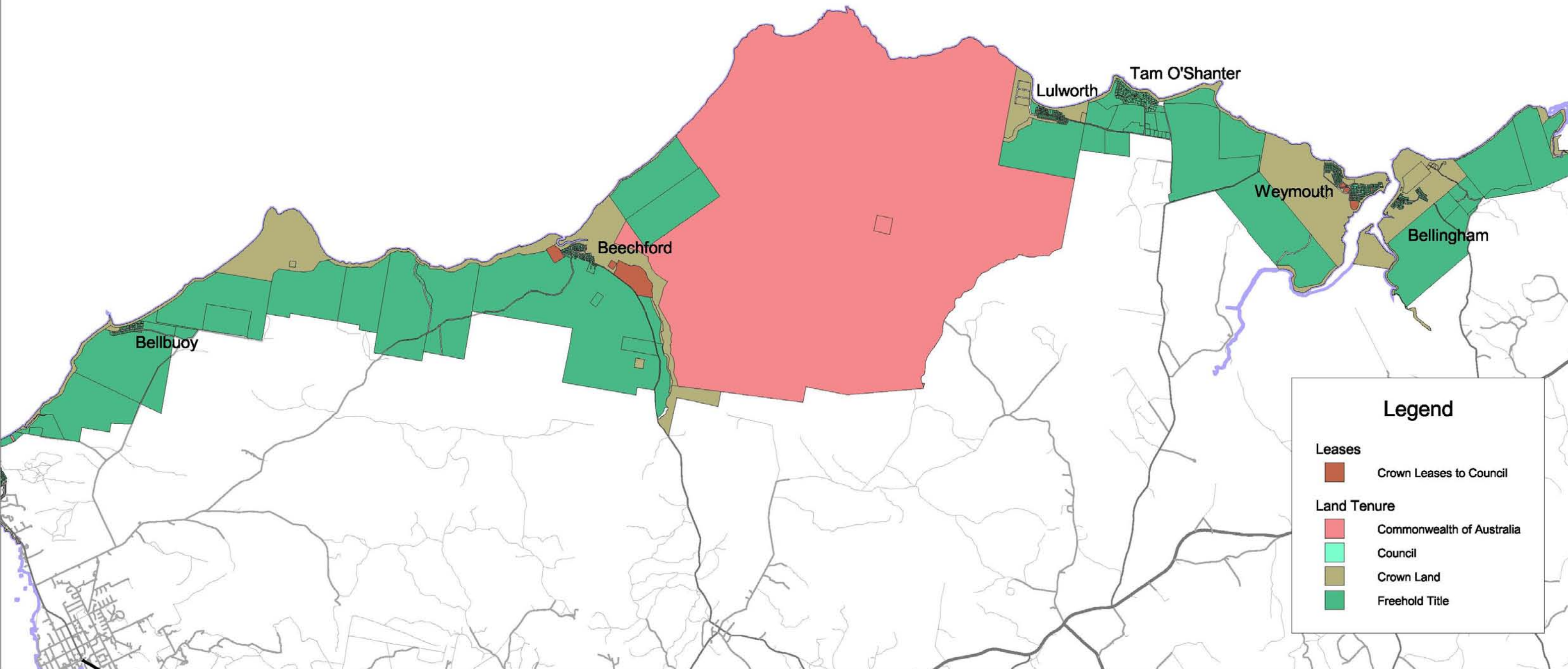
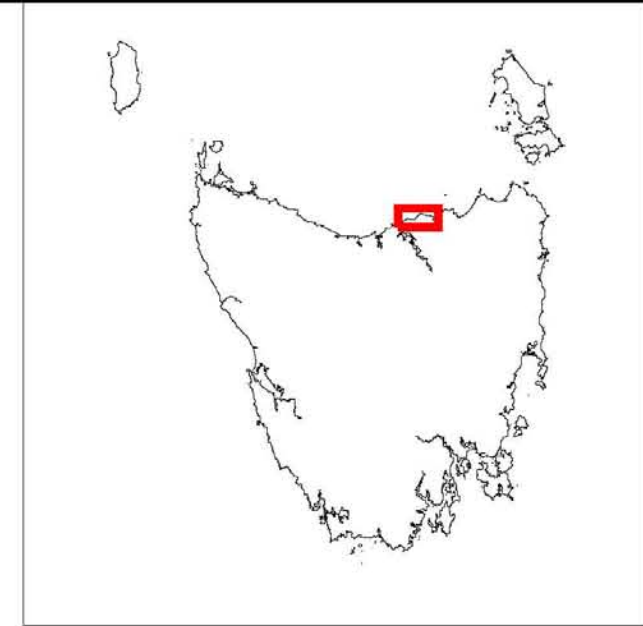
Although the management objectives for Conservation Area and Public Reserve are similar, Conservation Area affords higher protection status than Public Reserve. Management under the different Acts will also have some implications for how lands are managed in the future particularly in regard to enforcement, authorisation of activities, assessment of developments and lease and licence agreements.

Bass Strait



Map 1. Outline of Management Area

Bass Strait



Legend

Leases

- Crown Leases to Council

Land Tenure

- Commonwealth of Australia
- Council
- Crown Land
- Freehold Title

Map 2. Land Tenure and Leases

Appendix 6 lists the management objectives for the different classes of reserved land in Tasmania. These objectives determine the types of activity that can be considered and authorised.

At this stage it is not possible to confirm the changes that will occur under the CLAC project but it is likely that many areas of land within the CMA will become Conservation Area while a smaller number may remain or become Public Reserve. In addition, it is possible that the area of unallocated land at Five Mile Bluff may become a “Nature Reserve” (higher status than Conservation Area) as was recommended in the *Conservation of Tasmanian Plant Species and Communities Threatened by Phytophthora cinnamomi – Strategic Regional Plan for Tasmania*².

The CLAC process aims to improve the management of Crown land and will help to clarify the responsibilities of PWS, George Town Council and Crown Land Services Tasmania. Furthermore, the proposed “Planning Directive” under *Land Use Planning and Approvals Act 1993* will mean that some activities undertaken on land managed by PWS will need to be approved by Councils under their planning schemes. These changes are intended to improve communication between PWS and Councils and will result in a more integrated assessment and approvals process.

5.2 Legislation

The PWS is required to manage the lands within the CMA under the following Acts and Regulations:

- *Crown Lands Act 1976:*
For unallocated Crown land and Public Reserve
- *National Parks and Reserves Management Act 2002 and the National Parks and Reserved Lands Regulations 1999:*
For areas proclaimed as Conservation Area and Nature Reserve under the *Nature Conservation Act 2002*)
- *Land Use Planning and Approvals Act 1993*
- *Aboriginal Relics Act 1975 and the Aboriginal Relics Regulations 1978*

² Schahinger, R. Rudman, T. Wardlaw, T. 2003 *Conservation of Tasmanian Plant Species & Communities Threatened by Phytophthora cinnamomi - Strategic Regional Plan for Tasmania*. Technical Report 03/03. Nature Conservation Branch, Department of Primary Industries, Water and the Environment, Hobart.

Specific legislation for particular activities (vehicle usage) and management issues (e.g. weed control) also apply and are listed under the relevant headings in the Part D (Management Guidelines) and in the Key Sources section.

5.3 Policy and Planning

The management objectives and guidelines contained in the George Town Coastal Management Plan have been developed in accordance with a number of state, region and local environmental management strategies and planning documents. Due to their detailed nature, this section only provides a very brief overview of the relevant documents and how they influence the management of the CMA. The Key Sources section contains full references and information on how to find these documents.

The Tasmanian Reserve Management Code of Practice 2003

The land within the CMA by Parks and Wildlife is managed in accordance with the Tasmanian Reserve Management Code of Practice 2003. The Code specifies appropriate standards and practices for activities on reserved and unallocated Crown land. The management principles and approaches it provides form the basis of the management guidelines in Part D of this Management Plan. In addition, the Code outlines the approval processes for proposed activities on Crown Land and the exercise of statutory powers.

The State Coastal Policy 2005 (recently released and replaces the 1996 version)

This is the major policy covering the management of Tasmania's Coastline. The State Coastal Policy 1996 was recently reviewed and is now available. The Policy covers all coastal and marine activities and lists sustainable development objectives, three major management principles and associated policy outcomes. These outcomes aim to provide direction for dealing with specific coastal issues.

The Principles are:

- Natural and cultural values of the coast shall be protected; with provisions addressing the protection of:
 - Natural resources and ecosystems
 - Cultural and historic resources
 - Cultural heritage
 - Coastal hazards

- The coast shall be used and developed in a sustainable manner, with provisions addressing:
 - Coastal uses and Development
 - Marine Farming
 - Tourism
 - Urban and Residential Development
 - Transport
 - Public Access and Safety
 - Public Land
 - Recreation
- Integrated management and protection of the coastal zone is a shared responsibility

Because the State Coastal Policy relies heavily on the strength of Council planning scheme provisions, this Management Plan recommends that the George Town Municipality Planning Scheme (currently under review) include mechanisms that ensure that the objectives of the Coastal Policy are met.

Tamar Estuary and Foreshore Management Plan 2000

The Tamar Estuary and Foreshore Management Plan (TEFMP) is an important guiding document for agencies involved with the management of the CMA. The TEFMP provides a policy framework for coordinating planning and complex jurisdictional issues along the Tamar Estuary Foreshore and the adjoining northern coastline. The planning guidelines listed in the TEFMP address a range of planning and management issues in order to ensure the protection of reserve values.

The TEFMP also highlights the importance of council planning schemes as tools for implementing the policy and strategic directions.

The Tamar Region Natural Resource Strategy 1999 and the Tamar Region Natural Resource Strategy 2nd Edition, 2001.

These Strategies were developed under the Tasmania Natural Resource Management Framework. The first document deals largely with the identification of environmental management issues in the Tamar region and makes recommendations for actions to address them. The second document focuses on the implementation of the actions and details the responsibilities, timeframes and

performance indicators. There are a number of actions that relate to the CMA including weed management, cat control and vegetation conservation.

The George Town Municipality Planning Scheme 1991 and the George Town Development Strategy 2001

The George Town Municipality Planning Scheme is currently being reviewed and should take into account the new coastal policy and the recommended additions put forward by this Management Plan to improve the protection of the natural values of the CMA. The Planning Scheme will be the primary tool for ensuring sustainable development along the coast by implementing the objectives of the State Coastal Policy 2005, The Tamar Estuary and Foreshore Management Plan 2000 and the George Town Coastal Management Plan.

The George Town Development strategy reviews the municipality and has formed the basis of the revision of the George Town Planning Scheme 1991 that is currently being undertaken. The strategy identifies the needs of the municipality, the likely changes in land use and policy in the next 20 years and major land use issues. It contains a development framework that provides a set of objectives and actions for the management of land use in the area.

Land Management Zoning System (PWS)

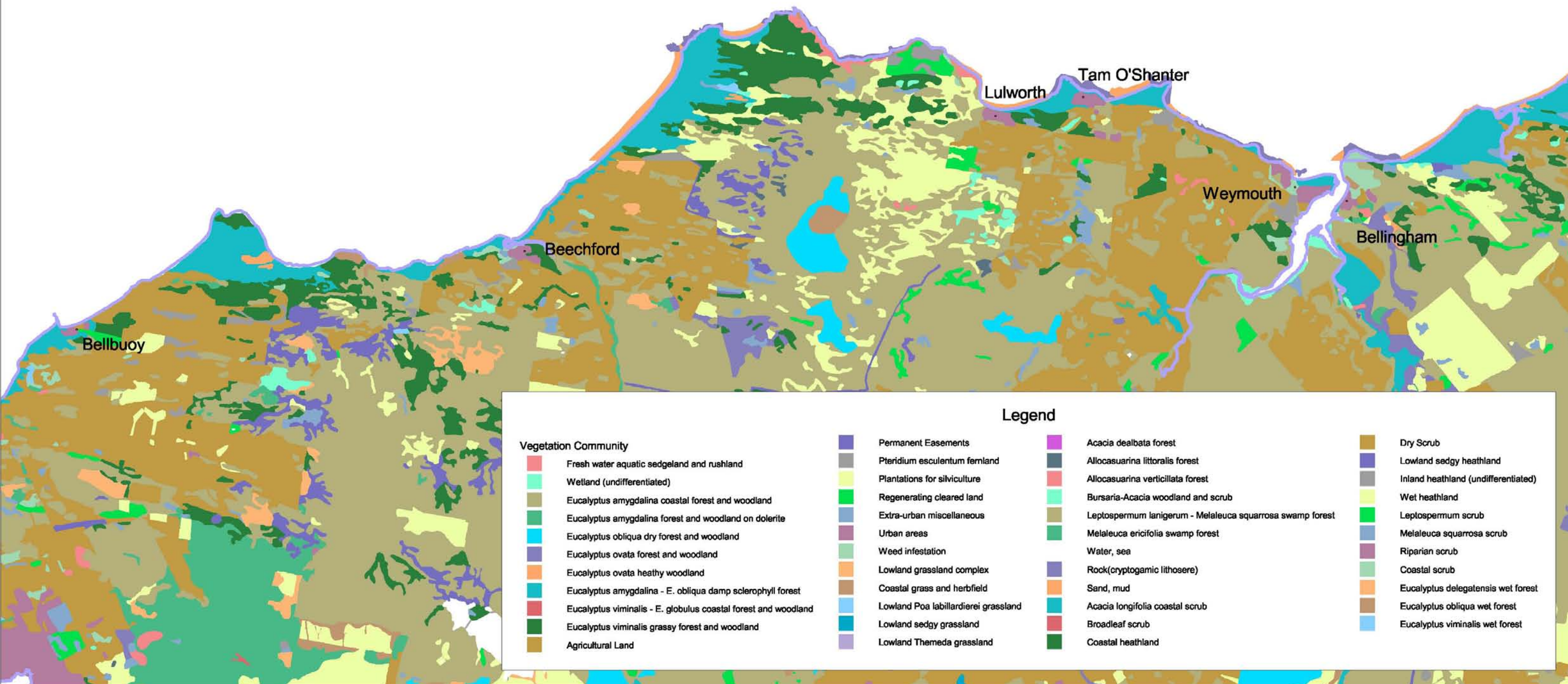
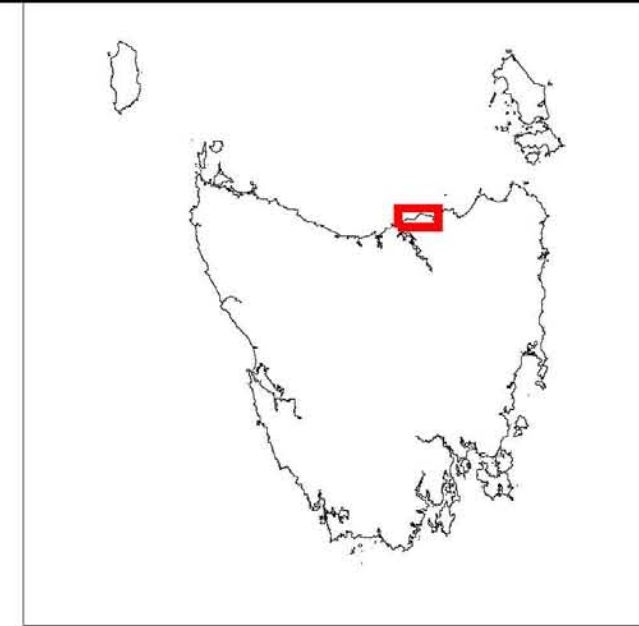
The Parks and Wildlife Service has developed a land management zoning system for Crown land reserved under the *Nature Conservation Act 2002*. This system should be applied to the reserves in the CMA after the completion of the CLAC project reclassifications. The zoning scheme will help to identify the management requirements for the land within the CMA.

6 VEGETATION ASSESSMENT

The vegetation within the coastal lands covered by this Management Plan (the CMA) is predominantly coastal scrub and coastal heathland with isolated pockets of woodland. Map 3 depicts the different vegetation community types found within the CMA based on the TASVEG 2000 mapping system. Blake and Cannell (2000)³ and

³ Blake, G. & Cannell, R. 2000, 'The Tamar Estuary 2020 Strategy Foreshore Vegetation Management and Analysis' in Watchorn, L. 2000, *Tamar Estuary and Foreshore Development Plan*, Tamar Estuary 2020 Steering Committee, Launceston.

BASS STRAIT



Map 3. Vegetation Communities based on TASVEG

Blake et al (2003)⁴ have extensively assessed the condition of the vegetation throughout the Tamar region. Utilising a categorical system (Table 1) they describe the coastal vegetation as ranging from predominantly untouched native vegetation to highly modified communities with few remnant native species. Near the townships, vegetation is generally more degraded due to greater human impact. Activities that cause degradation include: dumping of green waste, illegal clearing vegetation by adjacent landowners, illegal stock grazing and formation of unplanned pedestrian and vehicular tracks.

Table 1. Vegetation Condition Categories as described by Blake & Connell (2000)

Category	Description	Examples
Category 1	Mostly or wholly undisturbed native vegetation, usually large contiguous areas. Few or no exotics. Requires protection from future potential agents of disturbance such as clearing, grazing, nutrient enrichment, dumping of garden waste, inappropriate fire regimes or potential environmental weeds. Requires limited level of intervention. This is the category of highest priority for management to maintain it's values and current condition.	Five Mile Bluff Stony Head Military Area Unallocated Crown land surrounding the Bellingham Recreational Reserve
Category 2	Remnant native vegetation with significant habitat value or making a significant contribution to local biodiversity, however, with indications of disturbance including a significant proportion of exotic plants. Would require a more active level of intervention.	Areas of coastline between Five Mile Bluff and Beechford Some areas found within the Stony Head Military Area
Category 3	Some native species, but extensively modified with little value for nature conservation unless the land has strategic value. Intervention would require a significant expenditure of resources. However, importance of the existing vegetation for the community should be considered before allowing further clearing or disturbance. This applies especially to prominent, large individual eucalyptus trees. Introduced Rice Grass, have been mapped in this category because of its apparent habitat value.	Coastline between Tam O'Shanter and Weymouth Bellbuoy Beach west of Five Mile Bluff
Category 4	Few natives and no value for nature conservation unless the land has extreme strategic value and unless significant specially targeted funds or resources are available.	Small areas where agricultural clearing borders the foreshore.

⁴ Blake, G., Bell, P. and Ziegler, D. 2003. Tamar Region Vegetation Mapping and Analysis. Tamar Region Natural Resource Management Reference Group Inc. Launceston.

6.1 Method

An analysis of the vegetation communities and threatened species was undertaken. This involved:

- a site visit to observe vegetation present;
- obtaining the records of threatened flora species from Tasmanian Parks and Wildlife Service Natural Values Report (GTSpot);
- obtaining mapped vegetation communities based on TASVEG 1.0;
- reviewing relevant flora and fauna reports previously conducted in the area; and
- inspecting topographic maps of the CMA and the surrounding area.

6.2 Vegetation Communities

Plant communities are assemblages of various plant species found growing together in different areas with similar site characteristics. Specific plant communities can also be associated with unique groups of animal species forming part or the entire animal/s critical habitat. Several native plant communities have been noted within the CMA.

***Acacia longifolia* coastal scrub** is one of the dominant remnant vegetation communities found in the CMA. An excellent example of this community type can be observed on the Crown land adjacent to Five Mile Bluff. This vegetation type occurs along the coastal sand dune strip and consists of dense scrub dominated by shrubs or small trees and typically begins just above the high water mark inland. The dominant species tends to be *Acacia longifolia* subsp. *sophorae* (false boobyalla) but dominance can be shared with *Leucopogon parviflorus* (coastal beard-heath), *Myoporum insulare* (boobyalla) and stunted *Banksia marginata*. Other species found in this community include *Correa alba* (white correa), *Lepidosperma concavum* (sword sedge), *Wahlenbergia* spp. (blue bell) and *Tetragonia implexicoma* (ice-plant).

Coastal heathland forms a mosaic with coastal scrub communities and forest types like *Eucalyptus amygdalina* coastal woodland or *Allocasuarina verticillata* forest tending to occur behind the dune vegetation. The northern tip of Five Mile Bluff exhibits an excellent remnant patch of this vegetation. This community is highly diverse with dominance varying with subtle changes in geology, slope and drainage. Dominant species tend to be uniform in height (less than 1m) and include epacrids, daisies, pea flowers, *Pilothea* spp. (wax flowers), *Leptospermum* spp. (tea-tree) and

Tetratheca spp. Emergents such as *Banksia marginata*, *Allocasuarina verticillata* and *Leucopogon parviflorus* growing to 2-3m are also present on more sheltered aspects.

Coastal grasslands are found on some frontal dunes and sandy shores occupying a narrow band of vegetation between the coastal heath, scrub and woodland communities and the high water mark or rocky shore. The grassland is dominated by *Spinifex sericeus* (spinifex), *Austrofestuca littoralis*, *Austrostipa stipoides* (coastal spear-grass) and *Poa poiformis*.

***Allocasuarina verticillata* forest** is found on dry rocky dolerite slopes along the coast and is particularly evident around Stony Head, north west of Lulworth. This vegetation type varies from an almost closed forest with only needles as groundcover with no understorey to a woodland with common understorey shrubs including *Acacia longifolia* subsp. *sophorae* (false boobyalla), *Myoporum insulare* (boobyalla) and *Leucopogon parviflorus* (coastal beard-heath).

***Eucalyptus amygdalina* coastal forest and woodland** extends throughout the region where land clearing and disturbance has been minimised. In these areas, this community can dominate to the inside edge of coastal heaths or scrub occurring only a few hundred meters from the high water mark. This community is dominated by *Eucalyptus amygdalina* (black peppermint) as an open forest with 25-30m individuals in more sheltered area or as a low woodland in exposed drier areas. Tall shrub understorey species include *Banksia marginata* (banksia), *Bursaria spinosa* (prickly box), *Exocarpos cupressiformis* (native cherry) and *Allocasuarina littoralis* (black she-oak). Common smaller shrubs and groundcover include *Bossiaea cinerea* (showy Bossiaea), *Lomandra longifolia* (sagg), *Pultenaea daphnoides* (native daphne), *Pimelea humilis* (dwarf riceflower) and *Xanthorrhoea australis* (Austral grass-tree).

Wet heath occurs in association with the dry heath in low lying areas adjacent to drainage lines. The wet heath has no *Xanthorrhoea* spp, (grass-tree) and is dominated by *Melaleuca* spp., *Hakea teretifolia*, *Bauera rubioides* and graminoids including *Xyris* spp. and *Leptocarpus* spp. Button grass (*Gymnoschoenus sphaerocephalus*) is sometimes common in small patches. This community is highly variable, well reserved and a low conservation priority.

Coastal scrub grades into coastal heathland or gradually increases in height with distance from the coast, forming a woodland community. Remnant patches of this

community are found around the townships of Beechford, Bellingham and Weymouth. The vegetation tends to be wind pruned generally between 2-8m tall and dense with a closed canopy. Small emergent *E. amygdalina* specimens can also be noted. Typical species include *Banksia marginata*, *Leucopogon parviflorus*, *L. australis* and *Acacia verticillata*.

***Pteridium esculteum* (bracken fern)** occurs in some well drained slopes adjacent to remnant native vegetation around Weymouth. This community develops as a response to the removal of the native community and failed pasture establishment. It is not significant for conservation.

6.3 Flora of Conservation Significance

A search of the various Tasmanian Parks and Wildlife Service databases (natural values report) revealed vegetation types or forest communities described by Kirkpatrick *et al.* (1995) or Tasmania Regional Forest Agreement (1997) present throughout the CMA. Similarly there are a number of recorded flora species or stands of native vegetation listed as “*threatened*” pursuant to the Tasmanian *Threatened Species Protection Act* 1995 (TSP Act) or the *Commonwealth Environmental Protection & Biodiversity Conservation Act* 1999 (EPBC Act) present near or adjacent to the CMA

A search of the Tasmanian Parks and Wildlife service natural values report revealed 29 “*threatened species*” listed under the TSP Act and EPBC Act that have been previously recorded within the CMA (Table 2).

Table 2. Threatened Species previously recorded within 5km of the CMA

Common name	Scientific name	TSP	EPBC	Habitat requirements
Juniper wattle	<i>Acacia ulicifolia</i>	Rare	N/A	<ul style="list-style-type: none"> Restricted to dry open sclerophyll forests on sandy soils, inhabits moist well draining locations, regeneration through seed bank after fire
Jointed twig rush	<i>Baumea articulata</i>	Vulnerable	N/A	<ul style="list-style-type: none"> Wetlands, swamps and sedge communities (Curtis and Morris 1994).
Daddy long-legs	<i>Calonemorchis filamentosa</i>	Rare	N/A	<ul style="list-style-type: none"> Uncommon and very localised in lowland areas of the Eastern part of the state. Occurs in heathy & sedgy open Eucalypt woodland on sandy soil.
Tailed spider orchid	<i>Arachnorchis caudata</i>	Rare	Vulnerable	<ul style="list-style-type: none"> Heathy and grassy open Eucalypt forest and woodland, often with she-oaks, and in heathland on sandy and loamy soils. The species is most often found on sunny north-facing sites.
Paterson's	<i>Arachnorchis</i>	Rare	N/A	<ul style="list-style-type: none"> Low shrubby and sedgy heathlands in near coastal areas in the north between Stanley and Lulworth.

spider orchid	<i>patersonii</i>			Flowering between September and November.
Milky beauty head	<i>Calocephalus lacteus</i>	Rare	N/A	<ul style="list-style-type: none"> Grassy margins of open dry sclerophyll and <i>Allocasuarina</i> forests.
Australian Centaury	<i>Centaurium spicatum</i>	Rare	N/A	<ul style="list-style-type: none"> Found throughout Australia and in New Caledonia. In Tasmania, <i>Centaurium spicatum</i> has been recorded from cleared forest pasture, rainforest/wet sclerophyll forest and heathland in the east and north of the State. This species may have been introduced to Tasmania.
Scarce Centrolepis	<i>Centrolepis strigose</i> spp. <i>pulvinata</i>	Rare	N/A	<ul style="list-style-type: none"> Damp places in the north-east (Curtis and Morris 1994)
Black bristle-rush	<i>Chorizandra enodis</i>	Vulnerable		<ul style="list-style-type: none"> Damp, sandy heaths around the Low Head region.
Australian hound's tongue	<i>Cynoglossum australe</i>	Rare	N/A	<ul style="list-style-type: none"> Grasslands and open forests through south-east Australia and is widespread and frequent on the landward margins of coastal sand dunes and in dry places (Clarke and Carolin 1991, Curtis 1981).
Large Gnat Orchid	<i>Cyrtostylis robusta</i>	Rare	N/A	<ul style="list-style-type: none"> Coastal or near coastal sites less than 5 km from the sea and with an altitude 100m or less. Restricted to <i>Allocasuarina verticillata</i> dry sclerophyll forest on coastal hills and bluffs with light to moderate coastal exposure.
Swamp Diuris	<i>Diuris palustris</i>	Endangered	N/A	<ul style="list-style-type: none"> Wetter heathlands and margins of <i>Melaleuca</i> forests
Common hemp bush	<i>Gynatrix pulchella</i>	Rare	N/A	<ul style="list-style-type: none"> Riparian shrub found along rivers and drainage channel predominantly in the north of the State.
Twiggy guinea flower	<i>Hibbertia virgata</i>	Rare		<ul style="list-style-type: none"> Sandy heaths and open woodlands around the north-east of Tasmania (Curtis and Morris 1975).
Swamp onion orchid	<i>Hydrorchis orbicularis</i>	Rare	N/A	<ul style="list-style-type: none"> Herbfield, sedgeland, grassland and heathland on peats and sandy loams in sites subject to periodic inundation such as swamps and depressions (Jones et al 1999).
Harsh ground fern	<i>Hypolepis muelleri</i>	Rare	N/A	<ul style="list-style-type: none"> Watercourses or deep rich alluvial soils below 120m altitude. Also found below open woodland of <i>Acacia melanoxylon</i> or <i>Eucalyptus</i> species (Garrett 1996).
Yellow onion orchid	<i>Microtidium atratum</i>	Rare	N/A	<ul style="list-style-type: none"> Herbfield, sedgeland, grassland and heathland on peats and sandy loams in sites subject to periodic inundation, such as swamps, depressions and soaks (Jones et al 1999).
Pygmy clubmoss	<i>Phylloglossum drummondii</i>	Rare	N/A	<ul style="list-style-type: none"> Wet, peaty soils with little competition from other plants, only found along the northern coastline of the State, extending up into King and Flinders Islands (Garrett 1996).
Island purple grass	<i>Poa poiformis ramifer</i>	Rare	N/A	<ul style="list-style-type: none"> Shores and offshore islands around the coast on sand dunes and in rocky habitats (Curtis and Morris 1994).
Northern leek orchid	<i>Prasophyllum secutum</i>	Vulnerable	Endangered	<ul style="list-style-type: none"> Localised along the north coast of the state, on the West Coast and Flinders Island. Found in dense coastal scrub in the swales of stabilised sand dunes on white to grey sands and sandy loam. Largest known population adjacent to the tip at Lulworth.
Guinea flower bush pea	<i>Pultenaea mollis</i>	Vulnerable	N/A	<ul style="list-style-type: none"> Locally common in the north-east of the State in heath woodland. Known records around Weymouth.
Mud dock	<i>Rumex bidens</i>	Rare	N/A	<ul style="list-style-type: none"> Marshes and drainage channels particularly in the north of the State (Curtis 1967).
Salt couch	<i>Sporobolus virginicus</i>	Rare	N/A	<ul style="list-style-type: none"> Coastal sand hills and salt marshes near the North-east Coast and through the Furneaux Islands.
Australian dusty miller	<i>Spyridium parvifolium</i> var. <i>parvifolium</i>	Rare	N/A	<ul style="list-style-type: none"> Low, open woodland, shrubbery and heath. Restricted to the north of the State and the Bass Strait Islands.
Pink bells	<i>Tetradlea ciliata</i>	Rare	N/A	<ul style="list-style-type: none"> Restricted to coastal heaths and heathy woodlands in the north of the State (Curtis and Morris, 1975).

Rabbit Ears	<i>Thelymitra antennifera</i>	Endangered	N/A	<ul style="list-style-type: none"> Coastal heathland on poorly to moderately drained peaty and sandy soils, sometimes in mossy skeletal soils on granite bedrock (Jones et al 1999)
Plum Orchid	<i>Thelymitra mucida</i>	Rare	N/A	<ul style="list-style-type: none"> Heathland and eucalypt woodland on poorly drained to wet sandy or peaty loams, especially around margins of swamps (Jones et al 1999). Known around Low Head region.
Shiny Grass Tree	<i>Xanthorrhoea bracteata</i>	Vulnerable	Endangered	<ul style="list-style-type: none"> Endemic to Tasmania and occurs in sandy soils, often acidic and waterlogged, in coastal heathlands between the Asbestos Range and Waterhouse Point in the north-east (Curtis and Morris 1994).

7 FAUNA ASSESSMENT

A preliminary site inspection was undertaken of the area covered by the plan (CMA). The purpose of the inspection was to provide an indication of the terrestrial vertebrate fauna species present or likely to be present in the CMA. The field investigations did not include specific surveys of vertebrate species.

Fauna investigations were conducted in all accessible habitats within the CMA, but were concentrated in areas of the CMA considered to be of most relevance for native terrestrial fauna species including in stands of coastal dune vegetation, along creek lines and rocky and sandy foreshore areas. However, given the dynamic nature of coastal and foreshore landscapes, certain habitat types may occur on an ephemeral or seasonal basis, therefore some habitats that may occur in the CMA may not be assessed in this report. Appendix 1 is a list of native fauna species recorded within the CMA.

7.1 Fauna Habitats & Habitat Linkages

The existing landscape of the coastal area and adjoining lands is a mosaic of urban, agricultural lands and native vegetation (at various degrees of disturbance). The large area of cleared agricultural land adjacent to the littoral zone is of limited value for native fauna, many of which require large contiguous tracts of native vegetation and a high level of structural and floristic diversity to meet their habitat requirements. However, the coastal zone provides a largely intact strip of sandy/rocky foreshore and littoral vegetation that is likely to be used by a relatively diverse range of fauna species, including woodland, wetland and shorebird avifauna species, microchiropteran bats, terrestrial mammals, reptiles and amphibians.

The coastal zone and adjacent land provides known habitat for five threatened fauna species as well as potential habitat for a range of other threatened fauna species not previously recorded in the locality.

Links or corridors of littoral vegetation and coastal foreshore may facilitate the movement of biota and the transfer of genetic material through the coastal area and adjoining lands, and are likely to provide habitat for a variety of coastal-specialist species. The maintenance of connectivity along the coastal zone and between fragments of vegetation in adjacent lands may help to increase the chances of survival of fauna and flora populations in the CMA, and may therefore contribute to the sustainability of habitat and ecological processes and values. However, the maintenance and re-establishment of vegetated corridors in the coastal area and adjoining lands will require careful planning and long-term maintenance to ensure viability, and will involve a balance between conservation objectives and future development goals.

7.2 Fauna Habitats

7.2.1 *Littoral Scrubland*

Littoral scrubland communities form a largely intact strip of vegetation throughout the coastal reserve areas. The floral and structural diversity of this community provides valuable refuge and foraging habitats for a variety of species, including mammals, ground dwelling reptiles and avifauna species.

The seasonal flowering of scrubland species and associated abundance of insect fauna provides suitable foraging resources for a variety of small insectivorous (eg. Grey Fantail) and nectivorous (eg Eastern Spinebill) avifauna, while the complex structure and dense growth of the scrubland supports suitable nesting and roosting habitats for and a variety of small avifauna species including the Crescent Honeyeater, New Holland Honeyeater and Yellow-rumped Thornbill.

An abundance of insect fauna and complex litter layer throughout the scrubland community provides suitable foraging and refuge resources for ground dwelling reptiles (eg. Metallic and White's Skink) and mammals (eg. Echidna, Eastern Quoll and Eastern Barred Bandicoot).

Dense foliage of scrubland, ground cover and grassy vegetation provides suitable grazing and browsing resources for larger marsupials including Tasmanian

Pademelon, Bennetts Wallaby, Brush-tail Possum, Common Wombat and Ring-tailed Possum. An abundance of these species throughout the community provides prey for carnivorous mammals including the Tasmanian Devil and Spotted-tailed Quoll.

The dense and complex growth form and associated cover of the littoral scrubland community and the fringing rocky and sandy foreshore areas provide suitable nesting habitat for the Little Penguin. Furthermore, given the extent of the littoral landscape throughout the CMA it is likely significant colonies of the species reside in the area.

7.2.2 Coastal Foreshore

Sandy and rocky foreshore areas provide a continuous and valuable refuge and foraging resource for a variety of marine fauna and avifauna species throughout the CMA.

A diversity of foreshore and intertidal habitats, such as those dominating the coastal reserves, support a range of marine invertebrate species. These species provide the basis of a seasonal foraging resource for a variety of migratory (*eg.* Red-necked Stint, Bar-tailed Godwit and Eastern Curlew) and residential (*eg.* Pied Oystercatcher and Hooded Plover) shorebird and wader species. Similarly, structural features of the foreshore zone including sand splits and rocky platforms provide suitable high tide roost sites for both visiting and resident shorebird species. Given the provision of both foraging and roosting resources it is likely that the coastal reserves support significant populations of resident shorebirds throughout the year and migratory species on seasonal basis during the southern hemisphere summer foraging period. Furthermore the coastal reserves support a variety of nesting (*eg.* strandline deposits and exposed sand splits) resources suitable for residential shorebird species and it is likely that a number of species including the Pied Oystercatcher and Hooded Plover nest in the area.

Many of the migratory shorebird species that are likely to use the foreshore areas on a seasonal basis are listed under the “*migratory species*” provisions of the *Commonwealth Environmental Protection and Biodiversity Conservation Act* and are protected by International Agreements between Australia and China (CAMBA) and Australia and Japan (JAMBA).

Rocky and sandy foreshore areas provides suitable nesting habitat for the Little Penguin and it is likely that significant colonies of the species nest throughout the CMA. Specifically, the foreshore zone provides a “*runway*” by which Little Penguins access the ocean for foraging and nest sites in the littoral zone.

The foreshore zone also provides foraging habitat for variety of predatory species in the area including the White-bellied Sea Eagle and the Tasmanian Devil which may forage and scavenge through the intertidal zone.

7.2.3 Ephemeral Wetlands and Creek lines

Whilst no wetlands, soaks or flowing creek lines were assessed during site visits there is a variety of ephemeral wetlands systems and creek lines present in the CMA. Ephemeral wetlands are highly productive aquatic systems and provide a variety of both foraging and refuge habitats for a range of aquatic and water dependent species. Standing water and the associated abundance of insect life provides suitable habitat for a variety of amphibian species (eg. Common Froglet and the Brown Tree Frog). The seasonal wetlands within the CMA would also provide essential water resources for resident and transitory species.

7.3 Threatened Fauna Species

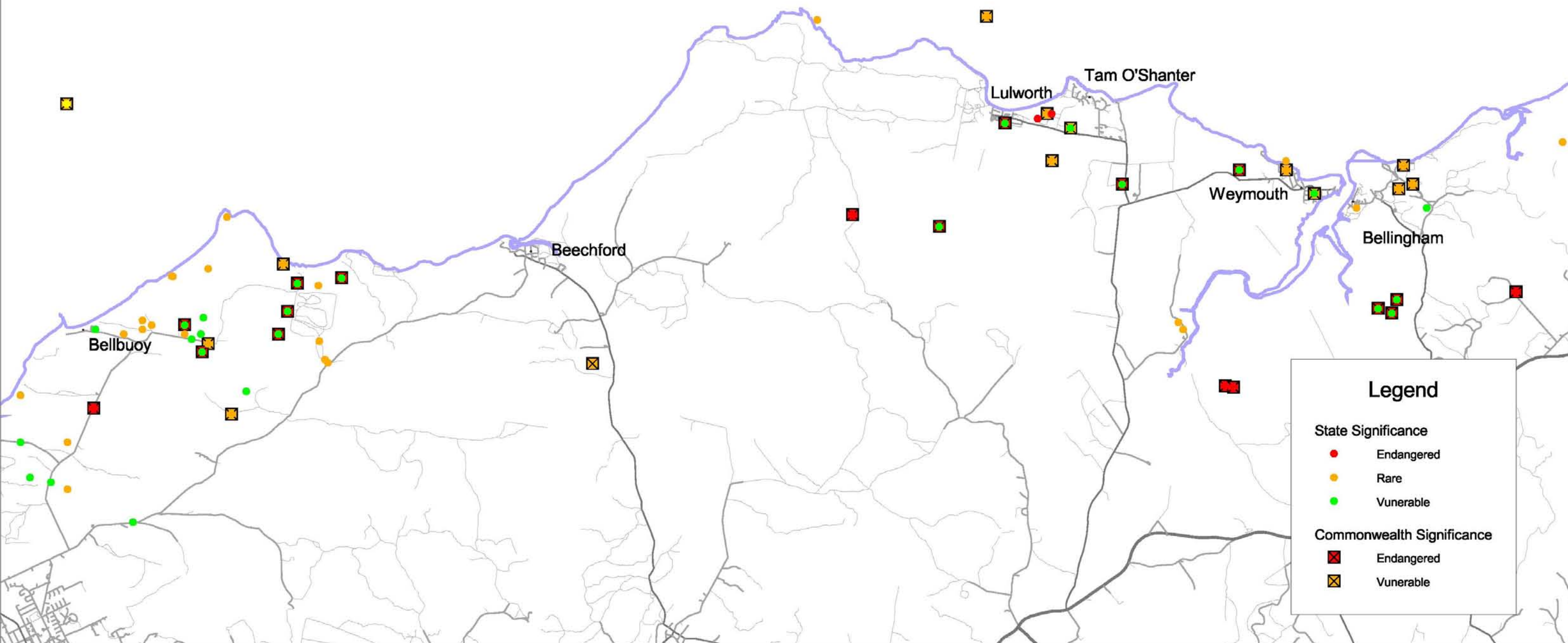
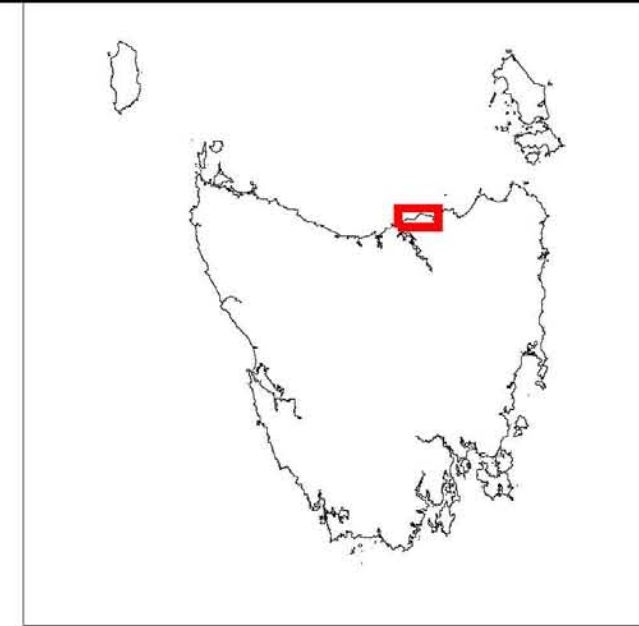
Five threatened fauna species have been recorded in or in close proximity to the CMA and are listed in Table 3. Four of these species are listed as threatened species in Tasmania pursuant to the TSP Act. The Eastern Barred Bandicoot is considered only of national conservation significance being listed as a vulnerable species pursuant to the Commonwealth EPBC Act. Map 4 displays threatened fauna sightings based on the GT Spot database.

Table 3. Threatened fauna species recorded with the CMA

Common Name	Scientific Name	TSP Act Status	EPBC Act Status
Green and Golden Frog	<i>Litoria raniformis</i>	Vulnerable	Vulnerable
Eastern Barred Bandicoot	<i>Perameles gunnii</i>	-	Vulnerable
Eastern Curlew	<i>Numenius madagascariensis</i>	Endangered	-
Wedge-tailed Eagle	<i>Aquila audax fleayi</i>	Endangered	Endangered
Spotted-tailed Quoll	<i>Dasyurus maculatus maculatus</i>	Rare	Vulnerable

It is likely that some of the more mobile and wide-ranging threatened species not previously recorded from the locality (such as birds) utilise the habitats in the CMA.

BASS STRAIT



Map 4. Threatend Flora and Fauna species based on GTSPOT.

Whilst many of these species are likely to be resident in the more extensive tracts of vegetation on the foothills and the escarpment, some could also potentially be resident in or adjacent to the CMA (*eg* tree-hollow dependent fauna).

Wide ranging bird species (*eg* the Swift Parrot) are likely to be only irregular visitors to the CMA dependent on seasonal movements and food availability in the locality. However, resident small mammal species (*eg* the New Holland Mouse) are likely to be present throughout the coastal vegetation communities.

Systematic surveys of the coastal reserve area are required if a more detailed assessment of threatened fauna and their habitats can be made. The specific habitat requirements of those threatened fauna species previously recorded and likely to occur in the locality and an assessment of the likelihood of their occurrence in the study area is provided in Table 4.

Table 4. Threatened Species recorded within the vicinity of the CMA

Species Name	Scientific Name	Habitat and likelihood of presence
Green and Golden Frog	<i>Litoria raniformis</i>	Permanent and ephemeral wetlands; likely to occur in ephemeral wetland and drainages throughout the CMA
Eastern Barred Bandicoot	<i>Perameles gunnii</i>	Found throughout drier lightly wooded landscapes with a mosaic of open grassland and dense understorey; likely to be present throughout the denser coastal vegetation communities
Eastern Curlew	<i>Numenius madagascariensis</i>	Intertidal mud and sand flats where it forages during the summer months; likely to be present along the foreshore habitats on a seasonal basis throughout the CMA
Wedge-tailed Eagle	<i>Aquila audax fleayi</i>	Wide ranging forest dependent species that forages across a wide variety of open or lightly wooded habitats; likely to occur across CMA on a transitory basis
Spotted-tailed Quoll	<i>Dasyurus maculatus maculatus</i>	Found in a diverse range of habitats favouring fertile landscapes with complex structural diversity and abundant prey species; likely to be present across the CMA in low to moderate population densities.

8 GEODIVERSITY

The coastal landscapes within the CMA demonstrate a range of geomorphological features including weathered basalt outcrops, sea caves, cliffs, headlands and beaches with parabolic dunes. The coastline has a number of major beaches each at least one kilometre long and many smaller beaches with shingle and pebble between basalt headlands. The dominating feature of the landscape is the Mathinna Group fold beds which outcrop on the shore platform in the eastern side of Stony Head. These are made up of sandstones, greywackes, and fine-grained marine sediments, some of which have undergone low grade metamorphism to form shales and slates.

The Mathinna Group is the oldest rock type in north-east Tasmania, being of Ordovician and Devonian origin.

The Tasmanian Geoconservation Database (Dixon and Duhig 2000) lists Tasmanian features and systems that have been identified to date as having geoconservation significance. Six recognised features have been identified and are described in the Table 5 and are shown on Map 5.

Table 5. Recognised features of geomorphological significance within the CMA

ID	Name	Description
PIP10	North East Tasmania Pleistocene Aeolian System	Part of a Pleistocene desert dune complex which formerly covered much of Bass Strait. Aeolian sand sheets and longitudinal dunes of last glacial age which constitute the largest desert dune complex in Tasmania. Landforms in marginal areas are likely to include important evidence of interfingering relationships with other landform process systems (eg, fluvial, periglacial). The current (1996) status of knowledge of the feature is inadequate for the identification of significant sites and features within the overall complex.
PIP14	Bellingham Formation Type Locality	"Typical outcrops" (the nearest to a type locality which has been described) of the Bellingham Formation, a classical turbidite unit forming part of the regionally important Mathinna Group.
PIP15	Tam O'Shanter Bay – Laterally Graded Beach	Good example of pronounced grading of beach sediment (cobble - pebble -sand) away from cobble supply on western headland (basalt). Maintenance and upgrading of boat ramp could potentially interfere with lateral grading (groyne effect).
PIP21	Stony Head Bay Folds	Well exposed folds in Mathinna Group metasediments "useful for teaching" structural geology (and field techniques usually only applicable in war zones) – "watch for unexploded ammunition" (ibid).
PIP24	Weymouth Shore Platform	Shore platform on an entire valley filling flow of columnar jointed basalt bounded by Mathinna Group metasediments. Horizontal platform shows a remarkable duality of levels with the centres of columns approx. 90cm above msl and the edges approx. 40cm above msl. Developed by joint controlled weathering to saturation base level.
NIN02	Granite Point Contact Features	Devonian granodiorite intrusive into Mathinna Group metasediments, low pressure assimilatory migmatization (unusual in such a high-level intrusion), abundant xenoliths and mafic schlieren. Teaching site. The feature is sensitive to degradation by shoreline developments.

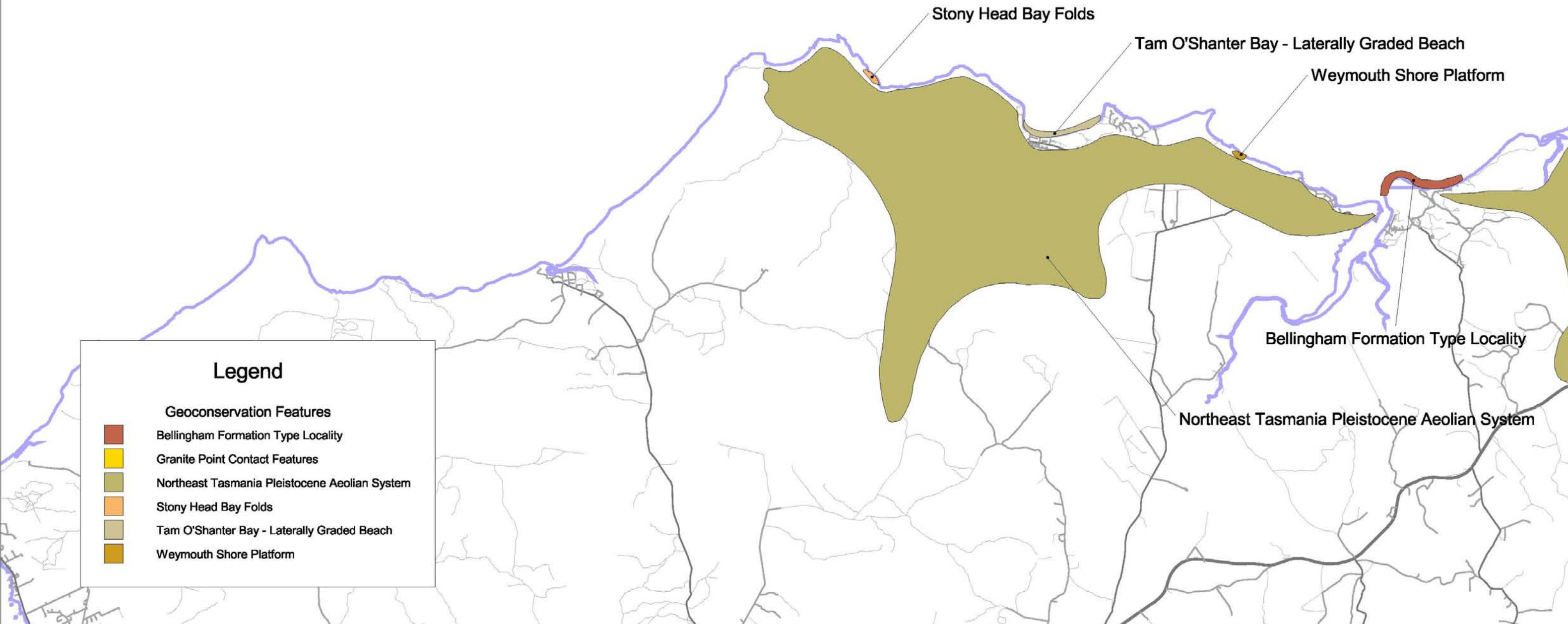
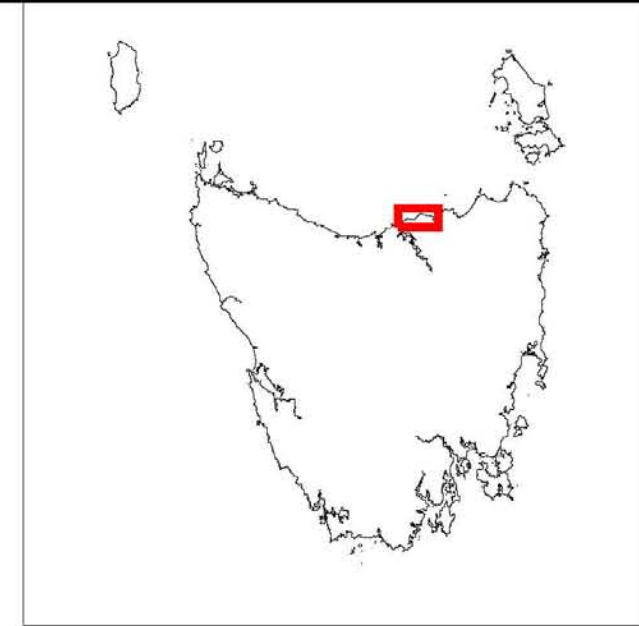
9 REGIONAL DESCRIPTION

9.1 Bellbuoy – East Beach

The section of the CMA under the "Bellbuoy Beach" grouping extends from the eastern boundary of East Beach, to the western boundary of the unallocated Crown land situated at Five Mile Bluff. Map 6 is an aerial photograph of the Bellbuoy Beach settlement and surrounding area with Map 6a depicting land tenure.

The Bellbuoy community consists of 21 houses/shacks and is located on the private land areas directly behind the Three Mile Bluff Coastal Reserve. In recent times the

Bass Strait



Map 5. Geomorphological Features



Map 6. Orthoimage of Bellbuoy

Map data provided by DPIWE, George Town Council and Tamar NRM
Prepared by: Andrew Morgan, SFM Environmental Solutions

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Map printed 25/8/2005





Map 6a. Land Tenure of Bellbuoy

area has undergone residential development and a subdivision has been approved adjacent to reserve areas. Bellbuoy Beach is an observation site for coastal shore birds of conservation concern, such as the Hooded Plover and Pied Oystercatcher, and penguins have been observed from East Beach to Five Mile Bluff. The natural vegetation behind the areas of beach and dune is in reasonable condition due to fewer access tracks through blocks of native vegetation compared with the other reserve areas of similar type. The heavy coastal scrub vegetation behind the rocky foreshore between Bellbuoy Beach and Five Mile Bluff is in excellent condition. It is recommended that the unallocated Crown land at Five Mile Bluff become Nature Reserve due to the excellent condition of native vegetation which provides an important level of ecosystem connectivity for the coastal reserve network.

Some of the threats to the Bellbuoy area include: grazing of stock on CMA land, illegal recreational driving along above the high tide mark on beach areas, weed infestation (sea spurge on the dune area and other species surrounding the community area), dogs at large within the CMA, creation of unplanned tracks within the CMA, the dumping of green waste and insufficient rubbish collection within the CMA. During the consultation process, Bellbuoy residents indicated that natural and recreational values such were of high importance to the community.

The local community have recently formed a “Friends of Bellbuoy” group and have entered into a bilateral agreement with the PWS on action items such as improving track access from the local picnic area to the beach. A template for this agreement has been included in Appendix 7. There is a high level of enthusiasm towards conducting on-ground works by the members of the “Friends of Bellbuoy” community group. However, training, equipment and external coordination is necessary to ensure the success of any works programs undertaken locally.

9.2 Beechford

The “Beechford” section of the CMA extends from the eastern boundary of Five Mile Bluff to the western boundary of the Stony Head Artillery Range. The area consists of Coastal Reserve west of the Curries River mouth, unallocated Crown land on the eastern side of the Curries River mouth extending approximately 1.5km, and then Coastal Reserve from the western edge of unallocated Crown land to the eastern boundary of the Stony Head Artillery Range. Map 7 is an aerial photograph of the area surrounding the township of Beechford and Map 7a displays the land tenure of this region.



Map 7. Orthoimage of Beechford

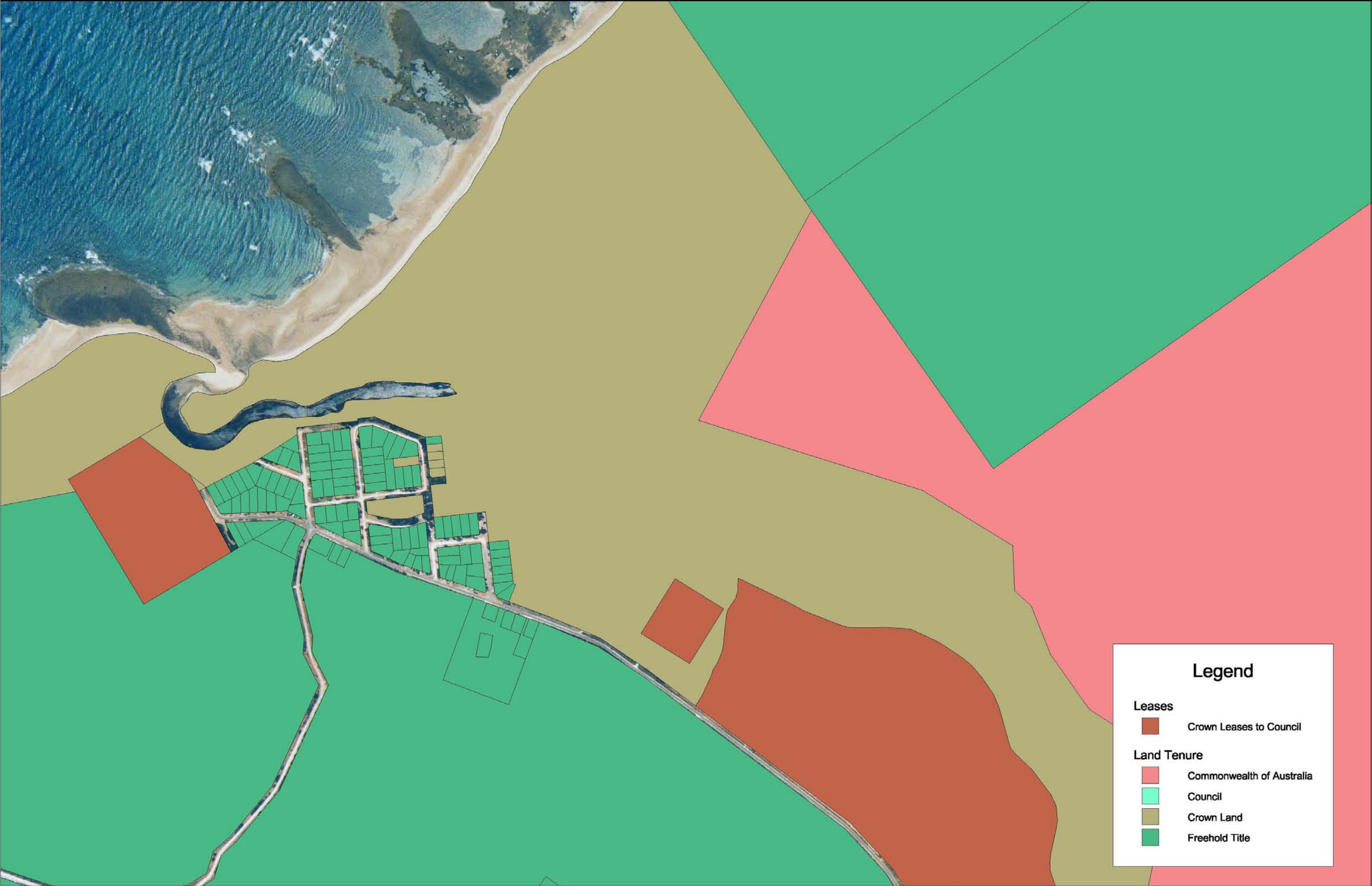
Map data provided by DPIWE, George Town Council and Tamar NRM
Prepared by: Andrew Morgan, SFM Environmental Solutions

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Map printed 25/8/2005





Map 7a. Land Tenure of Beechford

The local township of Beechford is located on the east bank of Curries River, behind the unallocated Crown land area and has 94 houses/shack dwellings. There is limited access to the CMA contained within the broad “Beechford” region and this has contributed to the general ‘good’ condition of both dunal vegetation and heavy coastal scrub. The only exception to this lies around the township of Beechford where informal vehicle and pedestrian tracks have cut into the local vegetation and weeds such as seaspurge and blackberries have impacted on the local area. It is likely that shorebirds of conservation significance use the shore area for either seasonal roosting or nesting and other protected species, such as the Spotted Quoll, use the natural vegetation as a habitat on a transitional basis.

Threats to the Beechford region include local weed infestations, dune erosion in the immediate area surrounding the township, green waste dumping in the CMA, dumping of large waste items in the CMA (such as ovens) and increases in exotic animal populations.

The local community listed recreational values as high priorities in the areas and were keen to see the native coastal vegetation cleared of weeds. Beechford has a local Progress Association which provides a broad range of services and community coordination to the area. However there are some members of the community not affiliated with this group. It is recommended that residents of Beechford form a “Friends of Beechford” Coastcare group to focus specifically on the issues contained within this Management Plan. Beechford residents indicated during the community consultation process that, while they have experience in event coordination, many are physically unable to undertake on-ground works programs. This community needs a small degree of external coordination, equipment and assistance from local ‘work for the dole’ schemes and government agencies.

9.3 Lulworth/Tam O’Shanter

The Lulworth/Tam O’Shanter section of the CMA stretches from the eastern boundary of the Stony Head Artillery Range to the eastern end of the Coastal Reserve area that exists to the east of the Tam O’Shanter township. Map 8 is an aerial photo of the Lulworth/Tam O’ Shanter townships and immediately adjacent areas while Map 8a depicts land tenure. The town of Lulworth contains 97 houses/shacks and Tam O’Shanter has 40. The number of residences in Tam O’ Shanter is set to increase with a local development underway in the area.



Map 8. Orthoimage of Lulworth & Tam O'Shanter



Map 8a. Land Tenure of Lulworth & Tam O'Shanter

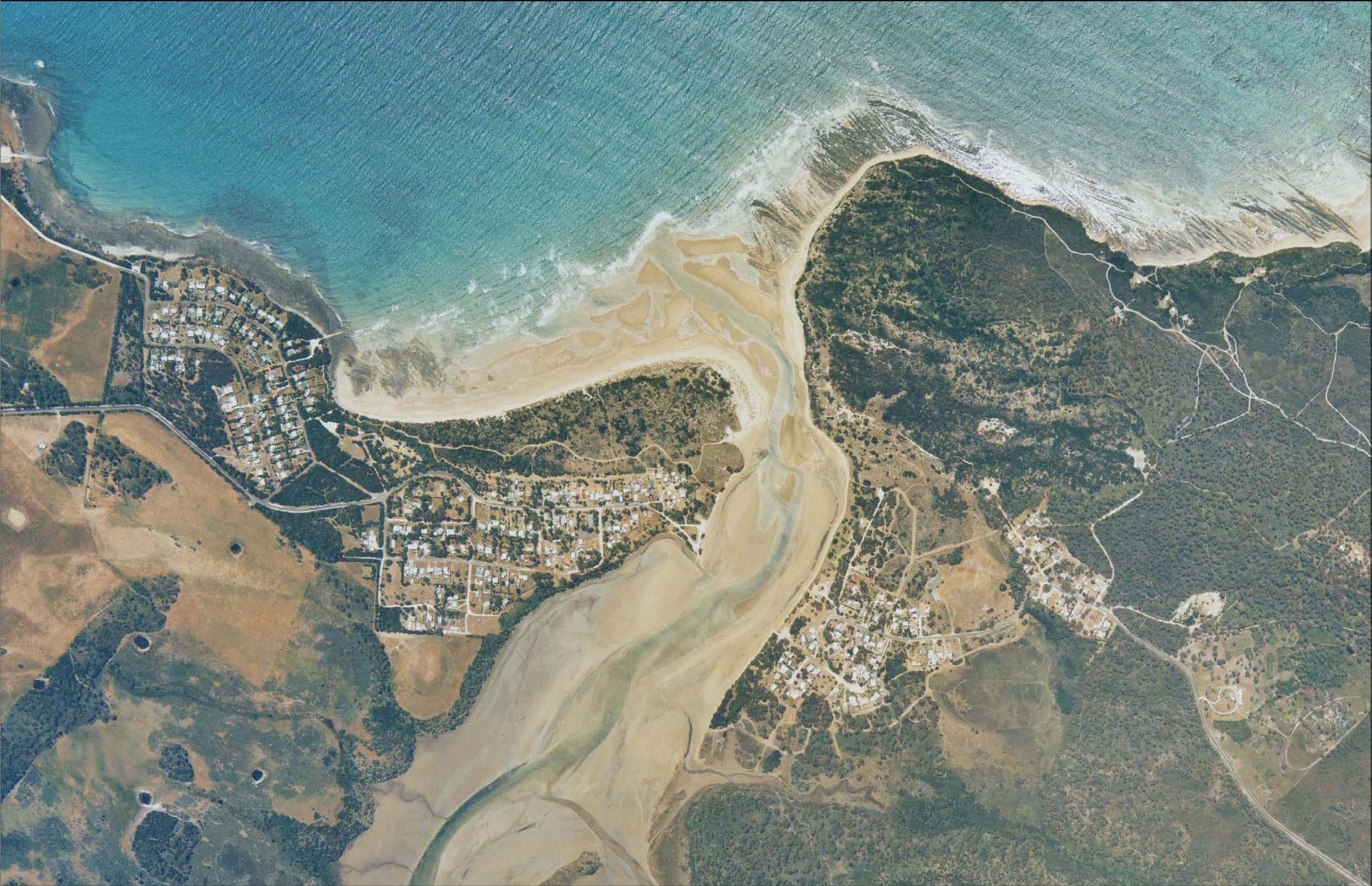
The natural vegetation has been impacted close to the township areas, mainly through access tracks to the beach disturbing native flora and introduced weeds. There is a large area of Coastal Reserve west of Tam O'Shanter where the rocky nature of the coastline, combined with limited area access, has allowed the native coastal heath to remain in excellent condition. Residents expressed the need to maintain the natural values of the area, but not at the expense of recreational activity. Major threats to the Lulworth/Tam O'Shanter region include: weed infestations around the local population areas, dumping of green waste in the CMA, residents removing native CMA vegetation to improve views, the degradation of natural vegetation through human impact and a lack of coordinated fire management.

The Lulworth Progress Association is one of the oldest in the George Town region and has expressed enthusiasm for coordinating on-ground works associated with this Management Plan. The Lulworth Progress Association currently holds monthly working bees to remove rubbish around the township and members have previously constructed a beach access track in the local area. Residents of Lulworth have also undertaken numerous revegetation works and weed removal working bees. Although this community has previous experience in coordinating on-ground works, refresher training days and works support from George Town Council and PWS are important for the success of the Management Plan within this section of the CMA.

9.4 Weymouth

The "Weymouth" section of the CMA extends from the western boundary of the unallocated Crown land (west of the Weymouth township) to Pipers River. Map 9 is an aerial photograph of the Weymouth Township while Map 9a depicts land tenure. The town of Weymouth consists of 180 houses/shacks and is located directly to the west of the Pipers River mouth. There is a large area of Coastal Reserve situated to the north east of the Weymouth township which is predominantly coastal scrub in 'moderate/degraded' condition due to human impact such as unplanned path access.

The Weymouth residents have raised fire as a concern for this area, asking for action to be taken. Other threats to the Weymouth CMA include weed infestations around the local township and the dumping of green waste in the Coastal Reserve. There is an area located on the western side of the entrance to Pipers River where groynes.



Map 9. Orthoimage of Weymouth & Bellingham

Map data provided by DPIWE, George Town Council and Tamar NRM
Prepared by: Andrew Morgan, SFM Environmental Solutions

0 100 200 300 400 Meters

1:7500
Map printed 25/8/2005





Legend

Leases

■ Crown Leases to Council

Land Tenure

■ Commonwealth of Australia
■ Council
■ Crown Land
■ Freehold Title

Map 9a. Land Tenure of Weymouth & Bellingham

0 100 200 300 400 Meters

Map data provided by DPIWE, George Town Council and Tamar NRM
Prepared by: Andrew Morgan, SFM Environmental Solutions

1:7500
Map printed 25/8/2005



have been placed to maintain the shape of the river mouth. Over time, these have become degraded and there are now numbers of jagged posts protruding from the sand at a local swimming beach. Residents are concerned about the impacts these will have on the recreational users of the beach.

The local community are particularly well organised and of all the local George Town communities the Weymouth Progress Association has the most experience in coordinating on-ground works. Previous examples of on-ground works include seed collection, weed working bees, planting activities, waste management and track maintenance. The Weymouth Progress Association and community members participated in an event to celebrate World Environment Day on 5 June 2005, where over 40 volunteers planted native species on the sand dunes of Weymouth estuary foreshore.

The Weymouth community members have a high level of relevant training and knowledge and expressed their desire to work alongside management authorities to achieve practical environmental outcomes. They need some further equipment, ongoing funding and cooperation from PWS and George Town Council to fulfil the requirements of the implementation schedule in this Plan.

9.5 Bellingham

The “Bellingham” section of the CMA extends from the unallocated Crown land surrounding the Bellingham township adjacent to Pipers River, along the coast to the western bank of the entrance to Little Pipers River. Map 9 displays an aerial photograph of the Bellingham township which contains 85 houses/shack dwellings. Map 9a depicts the land tenure of the area surrounding the town of Bellingham.

The area of unallocated Crown land surrounding the Bellingham Recreation Reserve contains heavy coastal scrub with pockets of woodland. This comparatively large area of native flora provides important habitat and coastal connectivity for many species of native fauna (including endangered species such as the Spotted Quoll). It is in ‘moderate’ condition due to human impacts such as unplanned pathways cutting into the native vegetation facilitating the egress of weeds and erosion. It is recommended that this area be made a Conservation Area.

Bellingham Beach is one of the few beaches allowing the use of recreational vehicles below the high tide mark. There is a significant threat to the area from irresponsible

vehicle users accessing the delicate hind dunes, destroying native vegetation, increasing dune erosion and stressing local wildlife (such as migratory shore bird species). There have also been incidences of vehicle users clearing their own tracks through coastal unallocated Crown land to provide greater beach access. Residents have also expressed concern regarding the pressures placed on the local campground, especially the amount of dumped waste in the area and the state of the vegetation. They have also expressed concern at the failure of Personal Water Craft (PWC) owners to comply with the Pipers River water usage patterns produced by Marine and Safety Tasmania (MAST).

The Bellingham community has a strong interest in conserving the natural values of the area, while maintaining traditional recreational activities, such as horseriding and recreational driving along the beach. The Bellingham Progress Association has expressed enthusiasm and a desire to drive the implementation schedule produced in this Plan. While members have experience in the coordination of on-ground works, they require training, funding, equipment and assistance from PWS.

PART B : MANAGEMENT DIRECTIONS

1 VISION

The George Town Coastal Steering Committee generated the following vision statement for the George Town Coastal Management Plan (GTCMP):

Communities and management authorities working together to protect, enhance and sustainably manage the natural values of our coastal area for recreation and conservation into the future

From this vision statement and following community consultation, broad and specific objectives were formulated for the land covered in this Plan (the Coastal Management Area, CMA).

2 BROAD OBJECTIVES

The GTCMP recognises that:

- The populations in the vicinity of the CMA have expanded markedly over recent years and are placing increased pressure on the natural values of the area.
- The CMA supports vegetation communities that are predominately native and worthy of conservation at local, regional and state levels. These communities will only remain protected in the future through carefully formulated management strategies and ongoing assessment.
- The CMA contains many sites of significant Aboriginal heritage and correspondingly this Plan must be sensitive to Aboriginal heritage values.
- The CMA lands form an important recreational area for both members of the local communities and holiday makers from elsewhere in Tasmania/interstate. The major attraction is the natural values of the area.

- There has previously been a lack of coordination between management authorities such as the George Town Council and the Tasmanian Parks and Wildlife Service (PWS).

The broad objectives of the GTCMP are to:

- Conserve and restore the natural values of the CMA, ensuring they are maintained for future generations.
- Encourage a coordinated approach between management authorities and the local community to the conservation and restoration of natural and cultural values of the CMA.
- Clearly define management responsibilities within the CMA.
- Ensure sites of Aboriginal significance are protected.
- Develop an implementation schedule that is easy to implement within the given timeframe and has the support of both the local community and local management authorities.

3 SPECIFIC OBJECTIVES

The GTCMP aims to achieve the broad objectives by:

- Controlling and eradicating weeds within the CMA.
- Managing and maintaining track access within the CMA.
- Ensuring sustainable use of the CMA for recreational purposes such as dog walking, vehicle access and horse riding.
- Establishing fire management prescriptions for the CMA.
- Minimising the private clearance of CMA land for viewsapes and fire breaks.

- Halting the practice of grazing on CMA land.
- Establishing relationships and networks between local management authorities, local community and adjacent land owners.
- Restoring natural vegetation that has become damaged or degraded.
- Informing local community of the need to maintain natural values and provide ongoing avenues for education on specific topics such as weed identification and removal or birds on beaches.
- Providing ongoing coordination and monitoring of the implementation schedule by establishing the George Town Coastal Working Group.

PART C IMPLEMENTATION SCHEDULE

1.1 Ensuring Successful Implementation of the Management Plan

The success of this Management Plan (GTCMP) centres on the delivery of the on-ground actions and programs described in this section. The management authorities involved have broad responsibilities over a number of areas. The community can help these management authorities fulfil their commitments to specific areas by working closely alongside the authorities and coordinating local on-ground works. Effective implementation of these strategies will also require:

- Sustaining the momentum and activity of all levels involved with the Plan (Tamar NRM, the proposed George Town Coastal Working Group, PWS, George Town Council and community groups). This is especially vital in the early stages.
- Continuing a coordinated approach to management issues and on-ground works and maintaining the networks established in this Plan.
- Creating regular avenues to address breakdowns in communication and funding.
- Providing regular feedback to the proposed George Town Coastal Working Group (GTCWG) on items that have been implemented (such as difficulties involved) so the GTCWG can review the Plan regularly.
- Delivering assistance, time, funding and equipment agreed upon in the consultation stages of this Plan.
- Regular review of the plan by the GTCWG

To ensure the above points are achieved, the roles and responsibilities of all organisations involved with the plan are clearly defined below; Figure 1 describes how these groups interrelate. In many cases, local community groups have shown interest and enthusiasm, agreeing to coordinate various on-ground works.

1.2 Organisational Structure and Individual Responsibilities

Community Groups are responsible for:

- “driving” local projects by keeping track of implementation schedules and reporting progress and deficiencies to an appropriate GTCWG representative;
- communicating and liaising with management authorities to ensure on-ground actions are initiated and completed on time;
- organising community support for some on-ground works listed in the implementation schedule;
- ensuring a representative from each community is a member of the GTCWG.

Tamar NRM is responsible for:

- ensuring the successful overall implementation of the Management Plan;
- keeping the implementation schedule updated;
- coordinating funding applications for various works ;
- organising regular GTCWG meetings (especially in the early stages of implementation); and
- providing information to community groups (liaising with PWS volunteer coordinator and Coastcare) on the correct process they must follow to implement items on the schedule.

George Town Coastal Working Group (GTCWG) is responsible for:

- overseeing the smooth implementation of the Management Plan under Tamar NRM;
- monitoring the Plan’s progress and reviewing the implementation schedule
- addressing “break downs” in communication and coordination between organisations and community groups;
- finding solutions to implementation issues; and
- ascertaining why deadlines have not been met and providing the driving force to see tasks back on track.

George Town Council is responsible for:

- individual tasks as laid out in the implementation schedule, ranging from minor event coordination to providing works, sourcing funding for certain works, providing advice and equipment;
- coordinating volunteer labour teams involved with on-ground works, such as Project Hahn and 'Work for the Dole'.
- ensuring a Council representative is a member of the GTCWG

Tasmanian Parks and Wildlife Service (PWS) is responsible for:

- individual tasks as laid out in the implementation schedule, ranging from minor event coordination to providing works advice and equipment;
- providing assistance as directed by Tamar NRM, with funding applications and advice to the local community on the process they must follow to achieve tasks on land managed by PWS (PWS Volunteer Coordinator).
- Compliance with relevant Acts and Regulations.
- ensuring a PWS representative is a member of the GTCWG

Coastcare is responsible for:

- coordinating individual tasks as laid out in the implementation schedule, especially training;
- providing advice to community groups on the processes they must follow to achieve tasks as directed by Tamar NRM;
- assisting community with funding applications under Tamar NRM; and
- ensuring a Coastcare representative is a member of the GTCWG.

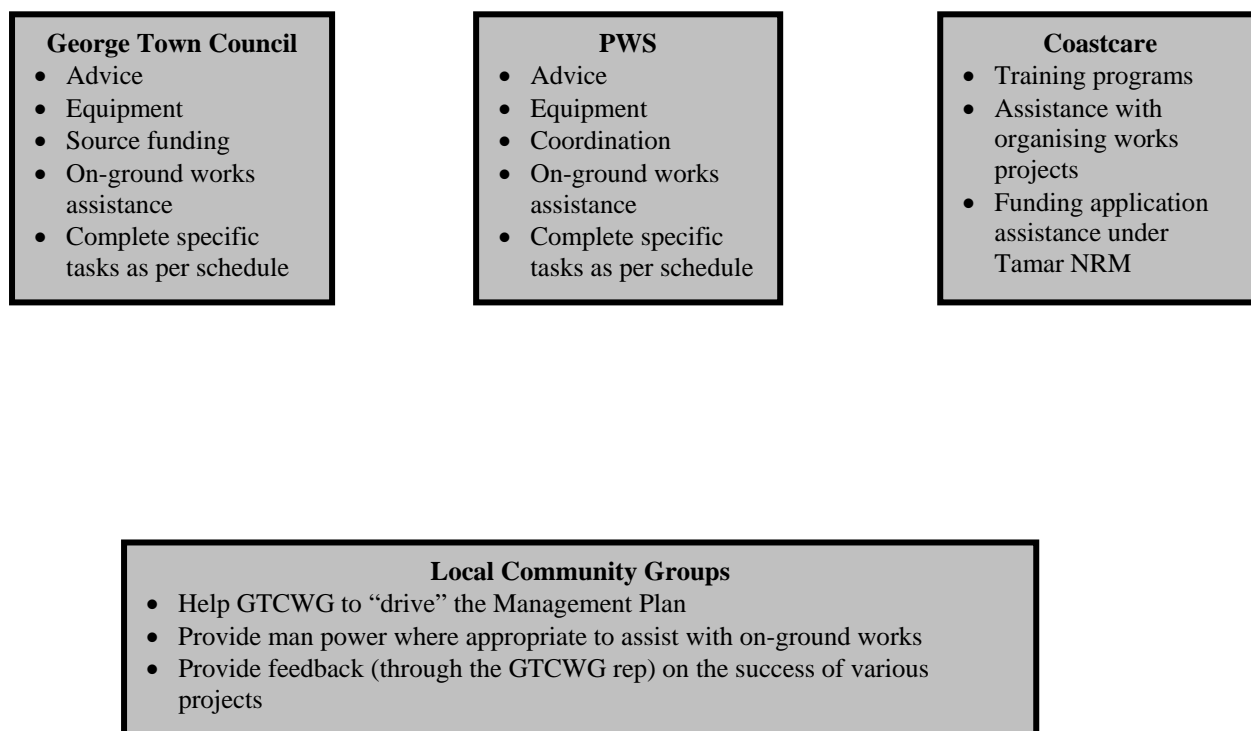
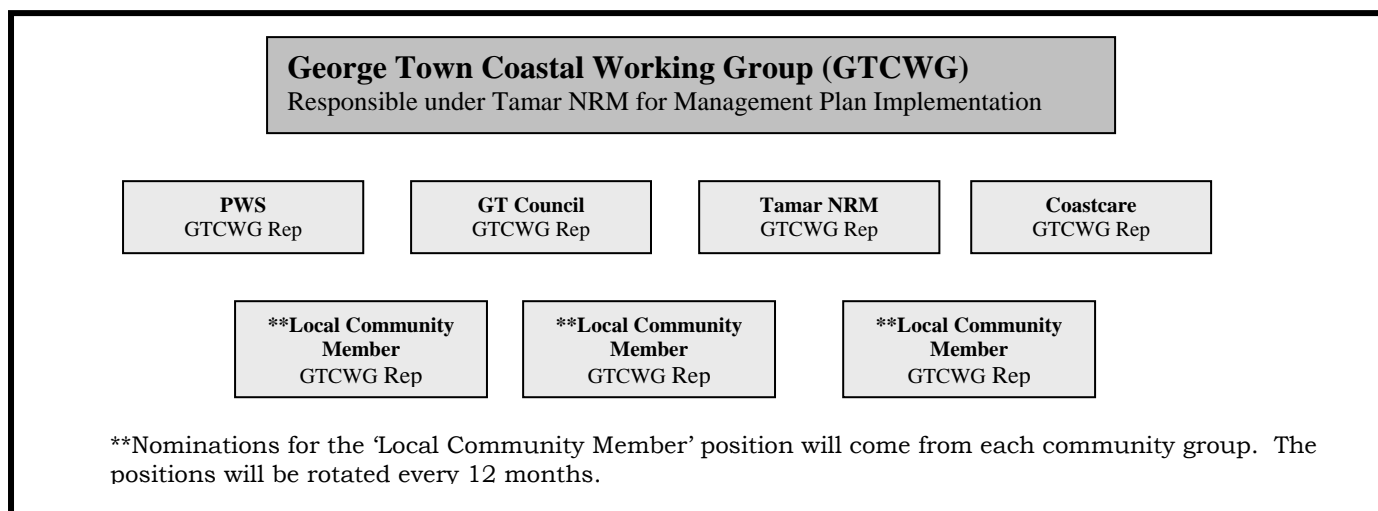


Figure 1: GTCMP Implementation

1.3 Implementation Schedule for Tasks Affecting all CMA Lands

Five major issues identified are common to all lands covered by the Plan (the Coastal Management Area or CMA) and these are:

1. The overall coordination of the Management Plan;
2. Waste disposal within the CMA; and
3. Fire management within the CMA.
4. The encroachment of private yards onto the CMA
5. Control of feral animal populations

Issue	Task Description	Responsibility	Time scale
Overall Management Plan Coordination	Establish a working group from the current George Town Coastal Steering Committee, with members from George Town Council, Tamar NRM, PWS and various progress associations. This working group will oversee the implementation of the Plan, providing external coordination when needed.	Tamar NRM to establish	Established immediately to be on-going
Green waste disposal in the CMA	Council to complete investigations into a mulching service for the coastal reserve areas contained within this Plan. The proposed service would operate twice yearly during major pruning periods. Residents would be advised of mulching dates and encouraged to take green waste to designated pick up points, where it would be processed by the Council.	George Town Council	Review to be completed by December 2006
Green waste disposal in the CMA	Establish mulching service if approved by Council	George Town Council	To be established by December 2007
General waste management within the CMA	George Town Council to monitor and review current waste collection methods. Council to investigate increasing the frequency of waste collection in certain public areas, specifically the Bellingham Campground and the Bellbuoy picnic areas.	George Town Council	Waste collection methods to be reviewed by December 2007. Council to assess increasing frequency of waste collection in public areas, short term – by December 2006
General waste management within the CMA	George Town Council to investigate the possibility of a locked “skip” to be emptied weekly. These skips could be used by local community members holding access keys who use holiday houses over the week end so they do not need to leave bins out during the week.	George Town Council	Review and possible implementation to be completed by December 2007
Encroachment of adjacent land owners onto the CMA	Develop a covering letter for the Creeping Backyard brochure stating clearly what private land owners are, and are not allowed to do regarding clearing areas for viewsapes and fire buffers. Legislation should be explained including the consequences of failure to	George Town Council in conjunction with PWS	To be distributed to residents by December 2007. This process should be repeated every 5 years.

	comply.		
Fire management	Northern Fire Management Officer to conduct risk assessment of the CMA, (especially the Weymouth section of the CMA) and produce management prescriptions for each specific reserve area	PWS	To be completed by December 2006
Fire management	Fire trails and breaks, specifically in Weymouth, Bellingham and Beechford CMA sections are to be assessed and cleared if necessary by PWS before the summer fire season. This is a "one off" action as the future management of firebreaks and trails will be contained within the fire management prescriptions.	PWS to coordinate and give permission to local fire authorities to conduct clearance.	To be completed before the summer season 2005/2006
Feral Animals	Populations of feral cats and rabbits are increasing in the CMA. PWS to monitor populations and their impacts, and to work in conjunction with George Town Council if required.	PWS, George Town Council	Ongoing

1.4 Implementation Schedule for Bellbuoy Beach

Management priorities for Bellbuoy Beach are:

1. Improve quality and maintenance of tracks and local picnic area
2. Weed control
3. Pruning and revegetation programs
4. Interpretation signage
5. Stock in the CMA
6. Dogs 'at large' roaming the CMA uncontrolled
7. Green waste dumping in the CMA (See Part C section 1.1)

Issue	Task Description	Responsibility	Time scale
Improve the quality of local tracks and picnic area	<p>a) PWS to assist Friends of Bellbuoy Beach to improve local tracks and picnic area as per the Partnership Agreement between PWS and Friends of Bellbuoy. This includes:</p> <ul style="list-style-type: none"> • Replacing the chain access gate with a boom gate • Upgrading tracks • Researching the possibility of installing gas BBQs 	<p>a) PWS to provide guidance, coordination when asked and practical assistance</p> <p>PWS, Tamar NRM and CoastCce to organise</p> <p>Friends of Bellbuoy to provide man power.</p> <p>George Town Council to organise volunteer labour such as project HAHN and Work for the Dole.</p>	By 2008

		CoastCare to provide support	
Weed management	a) Hold a weed eradication day in the Bellbuoy area. This will be coordinated through Tamar NRM and enlist the assistance of a weed expert. Council to provide weed/green waste removal vehicles	Tamar NRM to assist with coordination (e.g. engaging a weed expert). Friends of Bellbuoy to liaise with George Town Council	By October 2006.
	b) Friends of Bellbuoy to coordinate on-going weed removal days and to coordinate with Tamar NRM if further training is needed	Friends of Bellbuoy Tamar NRM	One weed removal day approximately every six months (as appropriate)
	c) Weed management plan to be reviewed in five years.	GTCWG	By December 2010
Weed management	Distribute brochures on weed identification and management to the local community	Tamar NRM to provide brochures – George Town Council to distribute	By December 2006
Interpretive signs at the picnic ground	Develop interpretation signs for the picnic area within the CMA that may provide information on: <ul style="list-style-type: none"> • Birds on beaches • Penguins • Importance of dog control and for native fauna • Aboriginal heritage 	PWS Interpretation and Education section to provide advice on content and recommend appropriate consultant Coastcare and Tamar NRM to assist Friends of Bellbuoy with coordination (e.g. sourcing a contractor) Friends of Bellbuoy to aid with sign design George Town Council to source funding	By August 2010
Revegetation program	Develop a community revegetation program consisting of: Training local community members to undertake local provenance seed collection and growing for plantings One day per year organised by the Friends of Bellbuoy association, attended by PWS when planting takes place. Ongoing care and watering of juvenile plants by Friends of Bellbuoy progress association	Tamar NRM/ Coastcare to assist with coordination Friends of Bellbuoy to organise working bee PWS to oversee and assist with on-ground works and provide basic equipment	By October 2008 and then ongoing
Dogs at large in the community	Community to be sent information stating: <ul style="list-style-type: none"> • the location of dog exercise areas • The regulations pertaining to ownership of “uncontrolled dogs” 	George Town Council to organise, PWS to provide information on impacts of dogs on the	By December 2007

	(fines etc)	environment.
	<ul style="list-style-type: none"> The impacts of dogs at large on native birds and other fauna. 	
Dogs at large in the local community	Friends of Bellbuoy to liaise with council as to the numbers of 'dogs at large' within the community and request the presence of a dog catcher if necessary.	Friends of Bellbuoy and George Town Council
		Ongoing
Halting grazing on CMA	a) Tamar NRM to source potential funding for a fencing program	a) Tamar NRM
	b) GT Council and PWS to contact land owners in question and discuss situation	b) PWS and George Town Council
	c) Fencing undertaken by landholders	c) Landholders and community
		By October 2007
		By December 2007
		By December 2008
Recreational vehicles on dunes	Maintain current PWS enforcement operations, on suitable days such as public holidays. PWS to monitor the beach for part of the day, issue handing fines as appropriate to perpetrators.	PWS and police
		By April 2006 Ongoing – 2 ½ days per year.

1.5 Implementation Schedule for Beechford

Management priorities for Beechford are:

1. Waste management
2. Weed management
3. Fire management
4. Foreshore access
5. Beechford campground area

Issue	Task Description	Responsibility	Time scale
Community Organisation	Tamar NRM, Coastcare, PWS Volunteer Coordinator and Beechford community to discuss the possibility of forming a Coastcare or Friends of Beechford group to focus on maintaining the Beechford section of the CMA.	Tamar NRM to coordinate meeting in conjunction with Beechford community	By April 2006
Waste and weed management	a) Develop Waste and Weed Management Action Plan for removal of waste and weeds from areas of land covered in the Plan managed by PWS and GT council (including unallocated Crown land) in Beechford	Beechford community, George Town Council, PWS and Tamar NRM	By December 2006
	Organise a planning workshop in Beechford with PWS, George Town Council, Beechford community and a weed expert) to develop Weed and Waste Management Action Plan. The workshop will prioritise actions, set out schedule for clean-up days, removal works,	Tamar NRM or Coastcare to coordinate	By Oct 2006

	<p>revegetation and training days. Will also define responsibilities of community and management authorities.</p> <p>Tamar NRM/ Coastcare to write up the Action Plan in cooperation with Beechford community.</p> <p>b) Implementing of the Action Plan:</p> <p>Beechford to monitor and report on implementation of the Waste and Weed Agreement to GTCWG.</p> <p>Tamar NRM and George Town Council to provide advice and assistance to seek funding and labour to implement the Action Plan (e.g. assistance with funding applications and organising work teams).</p> <p>George Town Council and PWS to provide expert advice, equipment, machinery and technical support and labour as determined in Action Plan.</p> <p>Action Plan to include two clean up days within the first year. First day to be held in conjunction with Clean up Australia Day in March 2007.</p> <p>c) Waste and Weed Action Plan to be reviewed and renewed by GTCWG in five years.</p>	<p>Tamar NRM/ Coastcare and Beechford community</p> <p>Beechford community</p> <p>Tamar NRM and George Town Council</p> <p>George Town Council and PWS</p> <p>Tamar NRM/ Coastcare and Beechford Community, George Town Council and PWS</p> <p>c) GTCWG</p>	<p>By December 2006</p> <p>December 2006 -ongoing</p> <p>March 2007- ongoing six monthly as required</p> <p>By 2010</p>
Weed management	<p>Distribute brochures on weed identification, control and responsible planting on private land to residents and shack owners.</p> <p>Develop and distribute 'Weed of the Month' information sheet to raise awareness of important weed species on the northern coast.</p>	<p>Tamar NRM and PWS to provide brochures – George Town Council to distribute to residents and shackowners</p> <p>Coastcare to develop - Council to distribute</p>	<p>By December 2006</p> <p>By June 2006 - redistribute every 5 years</p>
Stagnant water at the mouth of the Curries River	<p>If water quality declines such that it becomes a health hazard, seek expert advice from PWS/DPIWE.</p>	<p>Beechford community to report incident and PWS to provide contact information.</p>	<p>As required</p>
Pedestrian and vehicle access to foreshore	<p>Investigate the possibility of undertaking an assessment of access points for pedestrians and vehicles (for boat launching) to foreshore and of boat launching infrastructure.</p> <p>If required, develop a works program for access points</p>	<p>Beechford community and PWS to liaise MAST</p> <p>Beechford community, PWS, George Town Council, Tamar NRM</p>	<p>By June 2007</p> <p>Initiate by 2009</p>

Beechford Campground	a) GT Council to state intentions for the future development and use of the campground area.	a) GT Council to liaise with Beechford.	By Nov 2007
	b) Investigate upgrading facilities including the possibility of installing hybrid system toilets. Liaise closely with Beechford Progress Association and community.	b) GT Council with Beechford Progress Association to investigate upgrading campground facilities.	Complete investigation by 2009

1.6 Implementation schedule for Lulworth/Tam O'Shanter

Management priorities for Bellingham are:

1. Weed management
2. Waste management (refer to Part C section 1.1)
3. Revegetation
4. Track maintenance

Issue	Task Description	Responsibility	Time scale
Weed management	Hold a weed eradication day in the Lulworth/Tam O'Shanter area. This will be coordinated through Tamar NRM and enlist the assistance of a weed expert. Council to provide weed/green waste removal vehicles	Tamar NRM to assist with coordination (e.g. engaging weed expert) George Town Council and liaise with the Lulworth Progress Association. George Town Council to provide basic equipment and weed removal vehicles.	By January 2007.
	Lulworth Progress Association to coordinate on-going weed removal days and to coordinate with Tamar NRM if further training is needed.	Lulworth Progress Association/Tamar NRM	One weed removal and green waste collection day approximately every six months (as appropriate)
	Weed management plan to be reviewed in 5 years by the GTCWG.	GTCWG	2010
Weed management	Distribute brochures on weed identification and management to the local community.	Tamar NRM to provide brochures – George Town Council to distribute	By December 2006
Weed management	Tamar NRM to coordinate funding applications to assist the community to eradicate high priority weed species (sea spurge and blackberries).	Tamar NRM or Coastcare to provide assistance to the community	By September 2007
Specific track maintenance	There is one informal access track in the area that the community wishes to maintain. A meeting is required between the Lulworth Progress Association and PWS to develop an agreement for ongoing maintenance,	Tamar NRM to arrange meeting with Lulworth Progress Association and PWS	By December 2005

Revegetation program	<p>a) Tamar NRM in conjunction with the local community to undertake a planting program within the local community. It is anticipated this will consist of:</p> <p>Training local community members to undertake local provenance seed collection and growing for plantings.</p> <p>One day per year organised by the Lulworth Progress Association when planting takes place. Ongoing care and watering of juvenile plants by the Lulworth Progress Association.</p>	<p>a) Tamar NRM/ Coastcare to assist coordinating program with community</p> <p>Tamar NRM/ Coastcare to assist organising training</p> <p>Lulworth Progress Association to organise a working bee with assistance from PWS.</p>	By December 2007
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1.7 Implementation Schedule for Weymouth

Management priorities for the Weymouth Community are:

1. Fire management (see Part C Section 1.1)
2. Weed management/revegetation
3. Waste management (see Part C Section 1.1)
4. Encroachment onto CMA land
5. Future management of public camping areas on coast
6. Stabilisation of river mouth and maintenance of groynes

Issue	Task Description	Responsibility	Time scale
Weed management	<p>a) Develop a five year weed action plan for Weymouth:</p> <p>Organise a weed action planning workshop with the Weymouth Progress Association, PWS, George Town Council and a weed expert. The workshop will prioritise actions, set out schedule for removal and revegetation works, determine responsibilities of community and management authorities.</p> <p>Tamar NRM to write up plan in cooperation with Weymouth Progress Association</p> <p>b) Implementing action plan will involve:</p> <p>Weymouth Progress Association to coordinate on-going weed removal and revegetation as per the weed action plan and to liaise with GTCWG for further training, equipment and assistance is required.</p> <p>Tamar NRM to provide advice and assistance to the Weymouth Progress Association on seeking funding and labour to implement the action plan (e.g. assistance with funding</p>	<p>Tamar NRM to assist community to organise workshop</p> <p>Tamar NRM and Weymouth Progress Association</p> <p>Weymouth Progress Association and GTCWG</p> <p>Tamar NRM</p>	<p>By December 2006</p> <p>December 2006 ongoing</p>

	applications).		
	George Town Council and PWS to provide expert advice, equipment, machinery and technical support and labour as determined in action plan.	George Town Council and PWS	
	C) Weed action plan to be reviewed by GTCWG in five years time.	GTCWG	
Weed management	Distribute brochures on weed identification, control and responsible planting on private land to residents and shack owners.	Tamar NRM and PWS to provide brochures – George Town Council to distribute to residents and shackowners	By December 2006
	Develop and distribute 'Weed of the Month' information sheet to raise awareness of important weed species on the North Coast.	Coastcare to develop - Council to distribute	By June 2006, redistribute every five years
Recreational vehicles on dunes and beaches	Distribute 'Cruisen without bruise' pamphlet informing residents and shack owners of responsible recreational vehicle usage near Bellingham	PWS to provide brochure George Town Council to distribute	Short term, within one year
Weymouth campground	George Town council to initiate redevelopment of campground, liaising with Weymouth Progress Association	George Town Council	Medium - within two years
Maintenance of groynes for safety	Investigate means of improving the safety of the groynes at mouth of the Pipers River	Weymouth Progress Association with assistance from PWS and George Town Council	By December 2007
Stabilisation of mouth of Pipers River and long term maintenance of groynes	Seek expert advice from DPIWE and investigate possibility of scheduling a geomorphological assessment or obtaining expert advice from DPIWE or consultant PWS to investigate opportunities for funding and assessment in conjunction	Weymouth community with assistance from PWS (e.g. provision of contact details for experts)	By 2009
Personal Water Craft (PWC)	Refer to implementation schedule for Bellingham		

1.8 Implementation Schedule for Bellingham

Management priorities for Bellingham are:

1. Recreational vehicle dune access and degradation
2. Weed management
3. Waste management (see Part C section1.1)
4. Fire management (see Part C section1.1)
5. Condition of Bellingham camp ground

6. Irresponsible PWC usage of the river-mouth

Issue	Task Description	Responsibility	Time scale
Recreational vehicles on dunes	Conduct assessment of current tracks, decide on main tracks to be used to access beach.	PWS	By April 2006
Recreational vehicles on dunes	Conduct maintenance on main beach access tracks.	PWS to coordinate Bellingham Progress Association to provide man power George Town Council to provide works depot staff and basic equipment	By December 2006
Recreational vehicles on dunes	Make unnecessary tracks inaccessible to recreational vehicles by digging ditches and erecting temporary signage.	PWS to coordinate Bellingham Progress Association to provide manpower George Town Council to provide works depot staff and basic equipment George Town Council to source funding for a back hoe (duration one day)	By December 2006
Recreational vehicles on dunes and beaches	Design, source and erect interpretive signage at appropriate positions along the designated access tracks. The signs will cover the following: Regulations pertaining to vehicles on the beach – where they can go, consequences for reckless driving. An overview of Bellingham beach nesting birds and how recreational vehicle use can affect them Effects of incorrect recreational vehicle use on the environment (eg, dune erosion)	George Town Council to source funding PWS to recommend preferred contractors	By 2008
Recreational Vehicles on dunes and beaches	Maintain current PWS enforcement operations, planned suitable days such as public holidays. PWS to monitor the beach for part of the day, issuing fines as appropriate to perpetrators.	PWS in cooperation with police	By April 2006 Ongoing – 2 ½ days per year.
Weed management	a) Hold a weed eradication day in the Bellingham area. This will be coordinated through Tamar NRM and enlist the assistance of a weed expert. Council to provide weed/green waste removal vehicles	a) Tamar NRM to assist with coordination (e.g. engaging weed expert) George Town Council and Bellingham Progress Association	By October 2006
	Bellingham Progress Association to coordinate on-going weed removal days as per the weed management plan and to coordinate with Tamar NRM if further training is needed.	Bellingham Progress Association/Tamar NRM	Hold one weed removal day approximately six monthly (as appropriate)
	Weed management plan to be reviewed by the GTCWG in five years.	GTCWG	2010
Weed management	Distribute brochures on weed identification and management to the local community.	Tamar NRM to provide brochures – George Town Council to	By December 2006

distribute			
Bellingham Campground	George Town Council to investigate and fund a public toilet for the camp ground (possible hybrid unit). This would not contain showers .	George Town Council	By 2008
Bellingham campground	George Town Council to install better garbage bins and increase waste collection at this site to twice weekly.	George Town Council	By April 2006
PWC	Weymouth water usage guide sign to be orientated correctly.	MAST	December 2006
PWC	MAST to investigate the possibility of placing speed restriction signs in visible locations to transiting water craft, denoting the five knot area.	MAST	By 2008
PWC	MAST to investigate the possibility of marking the channel where fast craft may operate away from swimmers.	MAST	Investigation TBC by December 2007 If deemed appropriate, marking to be laid by 2009

PART D : MANAGEMENT GUIDELINES

1: CONSERVATION OF RESERVE VALUES

1.1 Flora and Fauna Habitat Management

Preserving the natural values of the areas contained within the GTCMP is one of the main priorities of this document. There are sections of native vegetation in excellent condition providing important habitats for a range of fauna species. Relatively few targeted surveys have been completed throughout the management region (CMA). The potential for threatened species to occur is relatively high; of particular note is the presence of a number of rare or threatened orchids. Floral surveys need to be undertaken and measures implemented in the immediate future to protect these areas from impact. Several native flora communities located around local townships have become degraded due to human impact. Strategies need to be developed in conjunction with the local community improve the quality of these natural communities.

Bellbuoy Beach is a confirmed nesting site for the Hooded Plover and the Pied Oystercatcher which are both classified as species of conservation concern and it is likely that nesting sites occur on other beaches within the CMA⁵. Population numbers of these species may be adversely impacted by humans through exercising dogs on the beach (on and off the lead), pedestrians and recreational vehicles above the high tide mark. Weeds such as seaspurge and marram grass can also alter important dune habitat. Hooded Plover breeding occurs in the summer months, from August/early September – March and September – January for the Pied Oystercatcher. Beach usage over these breeding periods will have the most significant impact, especially if the activities occur above the high tide mark.

1.1.1 Guidelines

⁵ Bryant, S. 2002. *Conservation assessment of beach nesting and migratory shorebirds in Tasmania* Nature Conservation Branch, DPIWE. Natural Heritage Trust Project No. NWP 11990

Habitat management

- Undertake comprehensive flora and fauna surveys of the sub-areas contained within the GTCMP, producing a detailed species inventory for each sub-area. Flora surveys are especially important for the large parcels of reserved land and unallocated Crown land, particularly Five Mile Bluff and north of Bellingham (or any other area where there is a coastal shrub interface with woodlands).
- Maintain the integrity and connectivity of large patches of coastal flora communities. Prioritise the protection of high quality areas (for example, Five Mile Bluff) by restricting track access and implementing *Phytophthora* hygiene procedures when entering.
- It is recommended that Five Mile Bluff and the area of unallocated Crown land north of Bellingham become Conservation Areas.
- Improve the condition of native flora communities, especially around local townships through:
 - Weed management programs,
 - Revegetation programs,
 - Minimising the number of tracks dividing sections of native vegetation.
- Reduce threatening processes to native flora communities through:
 - Limiting stock grazing on the CMA,
 - Regulating the number of tracks allowed to divide sections of native vegetation through the CMA,
 - Work towards preventing stock grazing on the CMA,
 - Ensuring council and contractor vehicles accessing the CMA are washed down, reducing spread of disease and weeds.

Avifauna

- Investigate the possibility of restricting beach use during breeding season in nesting areas (dog access and 4WD).

- Erect interpretive signs at Bellbuoy Beach explaining conservation significance of the two beach nesting bird species and how recreational users can minimise their impact.
- Send out “Birds on Beaches” flyer to members of the local community and place articles on bird impact in local newspapers and NRM news letters.

1.2 Conservation of Aboriginal Values

The CMA contains many significant recorded Aboriginal heritage sites. It is also likely that there are a high number of unrecorded Aboriginal heritage sites, given the coastal nature of the CMA and the proximity of parts of the reserves to fresh water. It is important that the Aboriginal community is consulted and informed of all Aboriginal cultural heritage matters covered by the *Aboriginal Relics Act* 1975. This Act is administered by the PWS under the Department of Tourism, Parks, Heritage and the Arts (DTPHA) and it applies across all land tenure.

1.2.1 Guidelines

- Reserve managers should be pro-active in working cooperatively with the Aboriginal community to identify, protect, conserve and present Aboriginal values.
- Consult and involve the Aboriginal community in the development and refinement of existing land management practices for managing Aboriginal values [note that specialist advice should be sought regarding appropriate consultation protocols]
- Seek advice and guidance from the Aboriginal community regarding plans and on-ground works (conservation related or otherwise) that involve ground disturbance. The following procedure is to be followed:
 - Contact the Aboriginal Heritage Office at the DTPHA.
 - Contact the Tasmanian Aboriginal Land and Sea Council (TALSC) for a request form for a Tasmanian Aboriginal Site Index (TASI) search to be undertaken for the area. Tel (03) 6231 0288
 - Send completed form to the Aboriginal Heritage Office Tel (03) 6233 3927

- Once a TASI search has been completed the Aboriginal Heritage Office will either give approval for works to proceed (if there are no known heritage sites recorded or unrecorded sites likely to be present) or recommend an Aboriginal Cultural Heritage Assessment. This assessment will be conducted by an Aboriginal Heritage Officer Consultant (a list of appropriate Consultants can be obtained from TALSC).
 - The Consultant can provide management recommendations regarding the protection and conservation process for dealing with Aboriginal heritage sites. A copy of the report should be lodged with the Aboriginal Heritage Office.
- Subject to funding, employ an Aboriginal Heritage Consultant to conduct a survey of the Coastal Reserve area.

1.3 Conservation of Historic Heritage

Currently, there are no sites within the CMA that are listed as significant on the Tasmanian Historic Places Inventory under the *Historic Cultural Heritage Act 1995*. Despite this there may be sites that the local communities recognise as culturally significant.

1.3.1 Guidelines

- Sites recognised by the community can be surveyed for cultural significance by a specialist. Some sites may qualify for inclusion on the Tasmanian Heritage Register. The Tasmanian Heritage Council has published significance thresholds for criteria for entry onto the Tasmanian Heritage Register. Information about the Tasmanian Heritage Council can be found at www.tasheritage.tas.gov.au
- Management protocols for such sites can be determined from the results of the survey.

2 RESERVE PROTECTION

2.1 Weed Management

The presence of certain weed species in the CMA has become a significant management issue. Sea spurge, black berries, marram grass, bridal creeper, wandering jew and other exotic invasive species are found within the CMA and are increasing in numbers. Weed management should be undertaken in accordance with the *Weed Management Act 1999*, *Weed Management Regulations 2000* and the *Northern Region Weed Action Plan* (soon to be released).

2.1.1 Guidelines

- Conduct mapping of the distribution and density of weed species in the CMA. This will assist with the prioritisation of weed species for eradication and allow a quantitative assessment of the effectiveness of weed management practices in the region⁶. The data gained can be added to the state database.
- Based on weed mapping information, prepare works/action schedules for weeds in each section of the CMA. These documents may be brief but will outline the order in which the weed problems should be tackled based on species, potential impact, feasibility of treatment and availability of resources.
- All ground works within the CMA should be carried out using the same hygiene principles as in section 2.9.
- Activities or developments which can increase nutrient levels should be avoided in locations that are weed free and unlikely to be subject to weed infestation.
- PWS, Tamar NRM and community groups to liaise and cooperate with relevant adjacent landowners to ensure a holistic approach to CMA weed management.

⁶ Trawmana Environmental Consultants, 2004. *Weed Management Strategy – Northern Natural Resource Management Region*.

- Reduce the number of tracks through the CMA, especially in sensitive areas.
- Undertake actions in section 2.3 to reduce the amount of green waste dumped in the CMA.
- Marram grass should only be used as an erosion control measure in accordance with Section 5.6 of the Tasmanian Reserve Code of Practice ⁷ (as a last resort).

2.2 Fire Management

It is important that CMA lands have adequate fire management strategies. Uncontrolled fire within a section of the CMA can pose a safety risk to nearby residents as well as causing erosion, destabilisation of coastal landforms and encourage weed infestation. Fire management aims to:

- Protect human life and property,
- Maintain natural diversity of species and community through maintaining appropriate fire frequencies, and
- Protect conservation values from the adverse impacts of fire.

Fire management within the CMA was considered a high priority by local residents. The following issues were raised at the community forums:

- A perceived lack of fire management and coordination in the area,
- Possible high fire risk of the Weymouth section of the CMA,
- Poorly maintained fire breaks in Weymouth and Bellingham, and
- Confusion over set back allowances for the purpose of fire breaks.

2.2.1 Guidelines

- Fire management within the CMA must be carried out in accordance with current fire management and suppression policies (*Fire Services Act 1979*).

⁷ Department of Tourism, Parks Heritage and the Arts, 2003. *The Tasmanian Reserve Management Code of Practice*. Section 5.6 pp.51.

- Northern Fire Management Officer to advise on fire and vegetation management prescriptions for the CMA. These prescriptions will provide guidelines for the management of fire within individual CMA sections. Management and planned burning operations will be implemented by PWS in conjunction with the Tasmanian Fire Service.
- It is highly desirable that prescriptions are completed by summer 2005/2006. However, if this timeframe proves unattainable, it is recommended that PWS organise in conjunction with the George Town Council and the Tasmanian Fire Service for existing fire access tracks and breaks to be maintained. This is a priority in the Weymouth Coastal Reserve.
- New houses awaiting construction sharing a boundary with the CMA should not be approved for construction by Council unless appropriate vegetation clearance distances are observed between the house and plot boundary. Appropriate vegetation clearance distances (setbacks from CMA boundaries) should be based on the TFS Guidelines for Development in Bushfire Prone Areas of Tasmania (2005).
- Information should be sent to residents informing them of regulations regarding the clearance of CMA material for fire protection and that a 5 metre abatement zone may only be constructed with approval from PWS/Crown Land Services.
- Fire management actions within the CMA should be supported by council planning scheme mechanisms for new developments that ensure setbacks from reserve boundaries are met in order thus reducing the need to clear vegetation within reserves.

2.3 Waste Management

Waste management was considered a significant issue by residents of the GTCMP coastal communities. The major issues raised in the community forums were:

- Dumping of green waste in the CMA.
- Overflowing of bins in the CMA due to a decrease in garbage collection frequency by the local Council. And

- Inappropriateness of bins located along Bellbuoy Beach (specifically not animal proof and not anchored).

The George Town Council is limited to maintaining a fortnightly service due to budget constraints and it is recommended that the collection service be monitored closely and reviewed on a regular basis.

2.3.1 Guidelines

- George Town Council will conduct an assessment of the quality of bins along Bellbuoy Beach and replace if necessary.
- George Town Council to investigate the possibility of locked waste skips for residents to deposit rubbish in the interval between local services.
- George Town Council to investigate the possibility of increasing collection services at public areas where waste dumping is of notable concern.
- George Town Council to assess practicality of a mulching service to reduce the level of green waste dumped in the CMA.
- PWS and local community to monitor the level of waste in the CMA and report problem areas and high levels of dumping to George Town Council.
- George Town Council to monitor and review the success of the current garbage management system.

2.4 Control of Exotic Animals

Feral animals pose a threat to native fauna and flora within the CMA. Dead penguins have been noticed along Bellbuoy Beach, possibly due to feral dogs or cats. This beach is also a nesting ground for two bird species of conservation concern (the Pied Oystercatcher and the Hooded Plover) that are easily impacted by feral species. Feral cats have been observed at Bellbuoy Beach and evidence of their presence noted throughout the CMA. Residents have also reported increasing rabbit populations at Weymouth, Bellingham and Lulworth that can cause erosion, native vegetation loss and weed infestation by grazing on native plants and digging.

2.4.1 Guidelines

- Populations of feral cats, dogs and rabbits in the CMA should be monitored by PWS and if necessary, controlled by PWS in conjunction with the George Town Council.
- Dog owners should receive information on the legal requirement to keep dogs under control (as discussed in section 3.2).

2.5 Management of Grazing

There are occasions where cattle and sheep stray into the CMA to graze, usually near Bellbuoy Beach and Beechford. Impacts include erosion, damage of native vegetation and an increase in weed species throughout the area.

2.5.1 Guidelines

- Build partnerships with local graziers responsible to work towards excluding stock from reserve areas. Environmental ramifications should be explained.
- Seek financial assistance from Envirofund for the construction of reserve boundary fences to keep livestock away from the CMA.

2.6 Beach Access

There are many tracks providing beach access through the CMA. Some have been established by PWS and the George Town Council and others have been created by local residents without permission from the Crown. Excessive tracks through the CMA can divide native plant communities, impact on fauna habitat, increase soil erosion, aid the spread of diseases such as Root Rot Fungus (section 2.9) and encourage weed infestation. Many of the beach access tracks in the CMA are poorly maintained.

2.6.1 Guidelines

- The number of tracks and roads within the CMA should be kept to a minimum.

- Key access tracks should be identified. Where vehicle access is permitted, these should be maintained as class 4 roads⁸ and protected against soil erosion (hardened or stabilised). Non-vehicular tracks should be well maintained and adequately signed to limit unplanned track development and promote minimal impact practices by track users.
- Where appropriate, partnership agreements should be drawn between PWS and local volunteer groups containing a works schedule.
- Community consultation should occur regarding the location of key tracks.
- Articles regarding the negative environmental impacts and legal ramifications of illegal tracks through the CMA should be placed in local newspapers and NRM newsletters.

2.7 Encroachment of Residential Activities on Reserves

Encroachment and unauthorised uses of CMA lands by adjacent land owners is a common problem along the coastline. In particular, the creation of beach-access paths and the clearing of native vegetation to enhance views or for fire protection can cause significant loss of vegetation, promote erosion and spread weeds.

Many members of the public are unsure of the activities that are permitted in the CMA and are uncertain over the authority responsible to manage. Furthermore, they confused or unaware of the correct process for gaining approval to undertake activities. For example, at the community forums it became apparent that many land owners were unsure if they were legally allowed to clear the area in front of their house. In many instances the situation is exacerbated because land tenure boundaries are not clearly defined.

Encroachment is an important issue for PWS as it is the source of ongoing problems and impacts in reserve areas. As on – ground policing is difficult, costly and often has only limited success, it is recommended that the issue is addressed through the planning scheme.

⁸ Department of Tourism, Parks Heritage and the Arts, 2003. *The Tasmanian Reserve Management Code of Practice*. Section 6.3 pp.65.

2.7.1 Guidelines

- George Town Council and PWS to work together to develop planning scheme mechanisms that ensure that appropriate setbacks from CMA are made in order to reduce the need for fuel reduction and vegetation clearing for fire protection within the CMA.
- New houses awaiting construction sharing a boundary with the CMA should not be approved for construction by Council unless appropriate vegetation clearance distances for fire protection are observed between the house and plot boundary.
- Residents should be sent the “Creeping Backyards” pamphlet (currently included in all new resident information packs distributed by Council). This pamphlet explains that residents cannot legally clear the vegetation in reserve areas without PWS approval, and that this approval is only given for safety reasons.
- After completion of the Crown Land Assessment and Classification (CLAC) project Investigate the possibility of producing a map that shows the most up to date information on the boundaries, status and management objectives for CMA land. The map could be made available to the public through the George Town Council website.
- It is recommended the current program of random residential checks be maintained by PWS.
- Where necessary put up fences and signage along CMA boundaries.

2.8 Coastal Development

The relatively intact natural coastal landscapes of the region covered by this Plan (the CMA) are highly valued by residents and visitors alike. In recent years there has been a significant increase in the rate of residential and industrial development along the coastline, partially due to an increase in population in the area. Inappropriate development in areas surrounding the CMA lands can degrade the scenic, aesthetic and natural qualities of the landscape and can reduce the sense of

place among local communities. As landscape values are a major attraction of the area, efforts should be made to protect them.

Coastal development can also negatively impact upon the integrity of reserves in the CMA. For example the Flora and fauna values of reserves can be threatened by the spread of weed species from gardens nearby.

2.8.1 Guidelines

- Planning for developments should be undertaken in accordance with the State Coastal Policy 2005 and the Tamar Foreshore and Estuary Management Plan 2000, the George Town Coastal Planning Scheme 1991 (currently being revised) and the George Town Development Strategy 2002. Local communities should not be expanded beyond the allocated township boundaries currently set by the GT Council.
- Developments on land adjacent to reserves should be planned and implemented in ways that will not detract significantly from landscape values of the reserves.
- Support the coastal development provisions of the State Coastal Policy 2005 by including improved planning scheme mechanisms to ensure best practice. Investigate the possibility of establishing a 'coastal development code' that sets out detailed requirements for sensitive development adjacent to the CMA. The code could address set backs aesthetics, garden planting, storm water management, street layout and access to the CMA.
- The land management zoning system (Natural 1, Natural 2, Recreation, Visitor Services and Special Use) for Crown land reserved under the Nature Conservation Act 2002 should be applied to the CMA. Planning schemes need to incorporate appropriate use and development provisions to ensure that management objectives for the land are recognised up front when considering development applications.

- Planning scheme should set out statutory requirements for planning approval for coastal developments. This information should also be presented in a readily accessible format for public.
- Encourage consultation during the initial planning phase between planning authorities, developers and local communities to reduce visual impact of development.

2.9 Disease Management

Phytophthora cinnamomi (PC) or Root Rot Fungus is a threat to native vegetation within the CMA. It is an introduced fungus that can cause severe disease and plant death in understorey, shrub or ground layer vegetation. It is currently reported as widespread along the Tasmanian coast and is spread from existing infections by root to root contact or by plant contact with microscopic spores. These spores are spread by water movement, animal movement, vehicle movement and transportation on human clothing and footwear. While PC has been recorded at some locations within the CMA, there are still valuable areas of vegetation that remain unaffected. Under the *Conservation of Tasmanian Plant Species and Communities Threatened by Phytophthora cinnamomi – Strategic Regional Plan for Tasmania*⁹ Five Mile Bluff is a recommended PC management area. The Strategic Regional Plan for Tasmania also proposed that Five Mile Bluff be proclaimed a “Nature Reserve” under the Nature Conservation Act 2002. Specific guidelines taken from this report have been included after the general PC management guidelines.

Guidelines

- Any earthworks or track construction within the CMA should take measures to reduce the potential introduction and spread of Root Rot Fungus or other plant diseases.
 - Machinery and equipment should be hosed or cleaned including under the tyres, removing dirt or mud that could spread disease or weeds.

⁹ Schahinger, R. Rudman, T. Wardlaw, T. 2003 *Conservation of Tasmanian Plant Species & Communities Threatened by Phytophthora cinnamomi - Strategic Regional Plan for Tasmania*. Technical Report 03/03. Nature Conservation Branch, Department of Primary Industries, Water and the Environment, Hobart.

- Procedures should follow the Tasmanian Washdown Guidelines for Weed and Disease Control (in press).
 - George Town Council, PWS and community groups to enforce hygiene practices of contractors they employ to undertake works.
 - Source gravel, soil and organic material necessary for works from disease/weed free stocks.
- Limit the number of beach access tracks

In addition the general guidelines, the following specific guidelines are for Five Mile Bluff

- Make the Five Mile Bluff area a nature reserve to better reflect the values present.
- Negotiate with the landowner to the west to address the issue of wandering livestock and consider fencing off the boundary to the coastline.

2.10 Coastal Protection Works and Reclamation

Although coastal protection works such as straightening river mouths may have numerous economic and social benefits, activities such as beach reshaping, river mouth cutting can significantly alter natural erosion and deposition patterns along a coastline. Such changes can have disastrous effects on coastal geomorphology and may even cause damage to infrastructure (e.g. erosion of coastline may cause buildings to be lost into the water). It is often very difficult and expensive to fix problems that arise when coastal works go wrong, thus it is important that precautionary principle is applied.

In general, the following should be avoided:

- modification of coastal landforms through reclamation,
- construction of groynes and breakwaters,
- stabilisation of naturally mobile dunes, and
- similar measures involving impacts to landforms and landform processes

These measures should only be considered where consistent with the requirements of the Tasmanian State Coastal Policy 2005.

The two locations within the scope of this Management Plan where it may be necessary to investigate the possibility of undertaking coastal protection works are the spit at the mouth of the Curries River at Beechford and the old groynes at the mouth of the Pipers River at Weymouth.

2.10.1 Guidelines

- Before undertaking any form of coastal protection works, reclamation and other measures that involve modification of landforms it is essential to seek expert advice from DPIWE and approval from the relevant authorities which may involve one or more of the following: PWS, George Town Council, DPIWE and MAST.
- Coastal protection works should be carried out in accordance with the State Coastal Policy 2005 and the management guidelines in the Tamar Estuary and Foreshore Management Plan 2000.
- Breaching of spits should only occur if there is a significant threat to public safety, public health, public infrastructure or risk of severe damage to other structures, and only after full consideration is given to possible implications for natural and cultural values and natural processes. Existing procedures, where developed, will be adhered to.
- The use of marram grass as an erosion control measure will be in accordance with Section 5.6 (Land Rehabilitation) of the Tasmanian Reserve Management Code of Practice 2003.
- Coastal protection works should only occur for the protection of existing important structures and infrastructure following the production of an approved environmental impact assessment which examines the impacts and effectiveness of the proposed design, construction and monitoring.
- Rationalise and stabilise vehicle and pedestrian access tracks to reduce impact of erosion.

3 MANAGEMENT OF RECREATIONAL USE

3.1 Recreational vehicle access

Use of vehicles (4WDs, quad bikes and motorcycles) in the CMA has great potential to damage the natural environment. Vehicles operated above the high tide mark can remove dune vegetation leading to erosion. They can also impact bird species. The use of recreational vehicles other than on roads without authority is banned in the CMA other than the Bellingham Beach Reserve under *Crown Lands Act 1976* and Crown Land Regulations 2001. A policy based on current legislation was developed on the use of Recreational Vehicles in Tasmania by the Recreational Vehicle Working Group and ratified by the Dual Sport Motorcycle Riders Association, Forestry Tasmania, PWS, Hydro Tasmania and Recreational Vehicles Tasmania.

Bellingham Beach is legally able to be used for vehicle recreation purposes (4WDs, quad bikes and motorcycle riding). Many users are responsible, keeping to the foreshore area and access tracks. However, there are a small number of irresponsible drivers and riders who access the hind dune area and do not keep to standard tracks. This practise causes dune erosion, damages native flora and impacts on native fauna habitat in the CMA. It is difficult for PWS to police irresponsible behaviour due to the large distances ranges must travel and low staff numbers.

3.1.1 Guidelines

- It is recommended that the publication “Cruising without Bruising” be circulated biannually to residents of Bellingham. This document was written in conjunction with the recreational vehicle policy and explains responsible beach usage by recreational vehicle owners.
- Ensure adequate signage is maintained at the major entrances to Bellingham Beach instructing vehicle users to stay on the firm, damp shore sand, off the dunes and away from the river mouth.
- PWS to maintain current policing operations. Ensure presence corresponds with potential high recreational use days. For example, public or school holidays combined with fair weather.

- PWS to monitor Bellingham Beach dune degradation and impact on bird habitat caused by recreational vehicle usage and recommend/implement further action to control vehicle usage along the beach if necessary.

3.2 Dog Access in Reserve Areas

Uncontrolled dogs within the CMA may lead to a decline in the numbers of many native animal species, especially small marsupials and nesting birds¹⁰. The following dog control issues in the CMA need to be addressed:

- The significant number of “dogs at large¹¹” roaming the nearby Coastal Reserve in the Bellbuoy Beach area, especially when weekend owners are away.
- Poor knowledge within all five local communities of different declared dog areas (including: exercise, prohibited, restricted and training areas within the CMA).
- Poor local community knowledge of the restrictions that apply with in these declared areas, and
- Reports of dog attacks on penguins along Bellbuoy Beach.

The George Town Council is responsible for policing dog control within the CMA and has produced a Dog Management Policy 2005 and a Dog Management Plan¹² under the *Dog Control Act 2000*. Prohibited areas of note in the CMA include the penguin rookery at Low Head, the playground adjacent to the Weymouth Memorial Hall and the Beechford playground. There are several restricted areas in the CMA where dog use is not permitted between 9am and 6.30pm from 30 November 30^t until 30 April . Dog owner guidelines are included with rate information and sent by mail to local residents.

¹⁰ Thorp, V. 2003. *Community Coastcare Handbook : Caring for the Coast in Tasmania*. Tasmanian Environment Centre, Tasmania.

¹¹ According to the *Dog Control Act 2000*, a dog is at large if it is not under the effective control of a person in a public place or in or on premises without the consent of the occupier.

¹² These documents can be found at http://www.georgetown.tas.gov.au/webdata/resources/files/35_Dog_Management_Policy_2002.pdf

The George Town Council is limited in its ability to conduct regular patrols of the CMA due to manning, funding and distance from George Town.

3.2.1 Guidelines

The following strategies are recommended to minimise impact from dogs in the CMA:

- Council dog catcher visits to local areas when called out by residents to impound “dogs at large”.
- Improved signage clearly marking restricted and prohibited dog areas.
- Periodic assessment and review of dog management zones and sites within the CMA.
- Public awareness raised by:
 - Sending information to residents on dog impacts in the CMA, specifically on nesting bird populations.
 - Sending information to residents explaining the legislation and responsibilities involved with dog ownership (Dog Information Brochure), and
 - Generating articles for placement in local papers and NRM news letters on the impacts of dogs in the CMA.

3.3 Horse Riding within the CMA

Horse riding in the CMA is undertaken by a small percentage of the population, mainly in the Bellingham Beach area. There have been no reports of damaging equestrian practices in the CMA.

3.3.1 Guidelines

Horse riding should be allowed to continue at a low level in the CMA with the following recommendations:

- The level of horse riding in the CMA is monitored to ensure impact stays minimal.

- Relevant educational information on minimal impact riding, especially the need to remain below the high tide mark, is distributed to relevant horse riding clubs or prominent riders within the local area, and
- Encourage established riders who frequently use the CMA to promote minimal impact values among new users.

3.4 Water Sport Use of the Coastal Reserve

Recreational boating, fishing, windsurfing and sea kayaking occurs along the coastline covered in this Management Plan without significant impact. Recreational vehicle access to beach areas is covered in section 3.1 and is relevant for boat owners accessing the CMA to launch and recover personal craft. Conflict between Personal Water Craft (PWC – which includes the brand ‘Jetski’) users and other recreational users along the lower section of Pipers River has previously caused the local community concern and a meeting was held in Bellingham to discuss a usage plan for the area. This plan was developed by Marine And Safety Tasmania (MAST) and informative signage erected at the Weymouth and Bellingham boat ramps. Residents find the signs difficult to understand and many PWC users do not adhere to the allocated “fast craft” use area or speed limits outlined in the Agreement.

3.4.1 Guidelines

It is recommended that:

- The regulatory sign at Weymouth is re-oriented so that it aligns with the natural landscape. It will therefore be easier for local residents and visitors to the area to understand.
- Speed limit signs are erected on appropriate lateral marks to provide a visual reminder for private water craft to slow down when passing through designated swimming areas.
- The possibility of marking the “fast use” channel in the river is investigated.

Key Sources

This section provides a list of legislation, associated regulations and useful information sources for sections listed in Part D (Management Guidelines) of this plan. It is hoped that the Key Sources will provide a starting point for community groups and members wishing to find out more about issues covered in this Management Plan. Where ever possible, details on how to find the sources have also been provided.

- Unless otherwise stated, all relevant legislation and related regulations listed below are available at: www.thelaw.tas.gov.au
- Legislation can also be found in the reference sections of the Launceston, Devonport and Burnie State Libraries

Reserve Management: Legislation, Policy and Planning

- *Crown Lands Act 1976*
- *National Parks and Reserves Management Act 2002*
- *National Parks and Reserved Lands Regulations 1999*
- *Nature Conservation Act 2002*
- *Land Use Planning and Approvals Act 1993*
- *Local Government Act 1993*
- *Environment Protection and Biodiversity Conservation Act 1999 (EPBC)*
- *Aboriginal Relics Act 1975 (Tas.).*
- *Aboriginal Relics Regulations 1978*
- The Tasmanian State Coastal Policy 2005 is also available at www.rpdc.tas.gov.au then visit> State Policies> Tasmanian State Coastal Policy
- ANZECC best practice documents (for management) are available at: www.ea.gov.au/parks then visit> best practice reports
- Sparrow, L. & Eberhard, R. (eds), 2003. *Tasmanian Reserve Management Code of Practice 2003*, Parks and Wildlife Service, Department of Tourism, Parks, Heritage and the Arts, Hobart.
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