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Urban Design Framework Settlement Background Paper Tarwin Lower

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1. Introduction

1.1 Project Brief

South Gippsland Shire Council has engaged Connell Wagner to develop Urban Design Frameworks (UDFs) for the townships of Venus Bay, Tarwin Lower, Sandy Point and Waratah Bay. The UDFs will provide a vision for the future form and function of these townships and give greater certainty to the community and investors about what development is possible and appropriate.

This Settlement Background and Issues Paper forms part of the Tarwin Lower UDF and will address the following matters including:

- The approach undertaken to develop a UDF;
- The strategic regional context;
- The role and functions of the surrounding townships in relation to Tarwin Lower;
- The existing conditions; and
- The emerging issues and themes that will inform the town vision, objectives and design principles.

1.2 Background

Recent research undertaken by Department of Sustainability and Environment (DSE), *Basic Demographic Analysis of Coastal Towns from Towns in Time 2001 database*, May 2005 indicates:

"Australia's coastal regions are experiencing growth and pressure for development. The cause of this varies, but in Victoria it reflects an overall increase in population through migration and natural growth, changes in household types which has led to an increase in demand for housing stock, and a general trend to retire to coastal centres. Added to this has been a buoyant property market with greater investment in coastal areas as a lifestyle choice or simply as a financial investment.

As a result of these trends, many coastal settlements, particularly those outside of metropolitan Melbourne, are experiencing unprecedented levels of development related to the uptake of existing residential land, a rapid transformation in the form of building stock through redevelopment, and increasing use of rural allotments for residential living."

Within this current environment it is anticipated that some coastal settlements will expand significantly, whilst other coastal settlements are likely to remain small. Given this is the case, strategic planning is required, through State and Local Government to enable sustainable development to occur.

The State Government is planning through DSE's Coastal Spaces Study (2004). This comprises a number of strategic projects with the objective to clarify the strategic outlooks for settlements, protection of spaces between settlements, management of hotspot development areas and the capacity to manage change.

South Gippsland Shire Council is undertaking the development of UDFs for the townships of Venus Bay, Tarwin Lower, Sandy Point and Waratah Bay, with support funding from DSE. In managing this development a Project Control Group has been formed consisting of representatives from South Gippsland Shire Council, DSE Gippsland Region and the Gippsland Coastal Board. The role of the Project Control Group is to ensure the vision for Gippsland is achieved, as defined in *The Victorian Coastal Strategy*, 2002 (VCS) and the *Integrated Coastal Planning for Gippsland – Coastal Action Plan* (CAP).



"In 50 years the Gippsland coast will still be recognised as an area of outstanding beauty and ecological diversity, offering a range of recreational lifestyle and economic opportunities for both local residents and tourists. Areas of natural and cultural significance will be identified, widely appreciated and protected. Coastal development and land use decisions will adopt an integrated approach founded on the principles of ecological sustainability and will be based on consistent municipal coastal planning policies across the entire Gippsland coast" (GCB, 2002).

1.3 Objective

The Background Settlement Paper will form part of the Tarwin Lower UDF and will aim to direct development pressure and infrastructure provision to appropriate areas and manage them in defined settlement activity nodes, so as to ensure that development is respectful of the surrounding environment. The UDFs will provide a vision for the future form and function of the coastal settlements and give greater certainty to the community and investors about what development is possible and appropriate.



2. Urban Design Frameworks

An Urban Design Framework is a strategic planning document, prepared with input from the local community that presents a vision and future-planning framework for the development of a town. The process should produce both a framework articulating how the town will develop, and the actions needed to realise that framework.

The UDFs for the coastal towns of South Gippsland will:

- Identify the capacity of each settlement in relation to it's environment and capacity to sustain growth;
- Direct and manage development and infrastructure pressures into defined settlement areas;
- Develop broad planning principles of areas between defined settlements; and
- Implement a coordinated planning and design approach.

Actions undertaken to achieve this include:

- Identifying existing and projected socio-economic trends;
- Identifying areas of significance (ie. landscape, buildings, historical or cultural features, natural features);
- Identifying major opportunities and constraints for future development;
- Identifying preferred land use and development options;
- Identifying improvements to the visual quality of entrances and thoroughfares in the town; and
- Identifying improvements to vehicular and pedestrian traffic routes and linkages.

2.1 Urban Design Framework

As a final product, a UDF is a package of documents and plans. The UDFs for the coastal towns of South Gippsland will be made up of four documents and two plans. These include:

- 1. Strategic Regional Background Paper (document)
- 2. Settlement Background Paper (document)
- 3. Structure Plan (plan)
- 4. Master Plan/s (plan)
- 5. Principles for areas in between settlements (document)
- 6. Implementation plan (document)

A brief explanation of each of these sections is detailed below.

Strategic Regional Background Paper

This is a concise paper that provides an assessment of how existing policies, plans and local issues relate to the future planning of the project towns. The Strategic Regional Background Paper is delivered as an individual document as well as being incorporated into the initial section of the Settlement Background Papers.

Settlement Background Paper

This is a background paper that looks at existing conditions, future trends and current issues within each of the identified settlements and the surrounding environments.

Structure Plan

A structure plan is broad plan identifying township boundaries, land use types, environmentally sensitive areas, development or tourism opportunities, open space locations and connections, infrastructure and vehicular and pedestrian movement.

Master Plan

Master plans are prepared for key priority areas within the townships and provide detail for areas that have a specific function, such as a gateway entry point or tourism focus.



Principles for Areas in Between Settlements

This is a concise document detailing broad land use planning principles to guide future uses and development in areas between settlements.

Implementation Plan

Once the framework plan has been finalised, an implementation plan is prepared. An implementation plan outlines the actions that are required to implement the framework/guidelines, priority works, timing and responsibilities.

2.2 Project Approach

The State Government, Agencies, Council, investors and the community will use the UDFs for future planning. To gain ownership of the project from these groups and utilise their local knowledge the following approach has been applied.

Desktop study and literature review

A review of background literature and previous studies is required to gain an understanding of the history and key issues relevant to the study area.

Site inspections

Site visits to the project towns and surrounding areas. This provides an opportunity to detail the town layout, structure, character and surrounding environment.

Agency Workshop

A workshop will be coordinated with project officers and staff from organisations such as:

- Gippsland Coastal Board;
- South Gippsland Shire Council;
- Department of Sustainability and Environment;
- South Gippsland Water;
- West Gippsland Catchment Management Authority;
- · Parks Victoria; and
- · VicRoads.

The benefit of the workshop is to identify the strengths, weaknesses, opportunities and threats, (SWOT), for each town, explore strategic issues in the region, and identify which current or proposed projects may impact on the development of the UDF.

Community Consultation and Participation

Community consultation and participation occurs throughout the project in the form of community workshops focussed on information collection, information displayed on Council's web site, 24 hour phone access to the Connell Wagner project team, community workshops focussed on the draft documents and plans and a formal exhibition period of the UDFs.

A summary of the information and views of the community is detailed in Section 5.3 Community and Agency Views.



3. Regional Context

Coastal councils around Australia, including many in Victoria, have been heavily impacted on in recent years as a greater number of people migrate to the coast for holidays or to live. This shift in population creates challenges for councils in how to meet lifestyle and housing demands, provide sufficient infrastructure and ensure there is adequate council planning capacity.

In terms of strategic planning, *Melbourne 2030* sets future land use directions for metropolitan Melbourne and specifically designates urban growth boundaries for settlements. With this 'sea change' phenomenon occurring across Victoria there is now a need to replicate this planning process in coastal towns.

3.1 Future Trends

Victoria

Victoria boasts 2,000 kilometres of coastline with a wide range of natural and cultural values. Most Victorians use the coast, with an estimated 70 million recreational visits being made per year (DSE 2004). The Victorian coast contributes significantly to regional economies through tourism and related services.

Trends

Victoria in Future 2004 (DSE 2004), indicates that the future overall population growth rate in Victoria is declining and that our society is generally ageing with the 'Baby Boomers' generation close to retirement. However, even though the growth rate will be slower, the population will continue to increase with the majority of the population growth occurring in Melbourne. Regional areas will also continue to grow but at a slower rate than Melbourne.

The population of coastal Victoria increased by at least 10% between 1991 and 2001 (VCC 2002). This was consistently higher than Victoria as a whole. As the baby boomers retire and choose lifestyles away from Melbourne, and as the housing prices in Melbourne continue to increase, there will be a demand for affordable rural/coastal lifestyle opportunities within one or two hours of Melbourne. The main coastal municipalities this affects includes, Surf Coast, Mornington Peninsula and Bass Coast. However, these municipalities are 'filling up' causing the growth to spread further along the coast to the next layer of municipalities, such as Colac/Otway and South Gippsland, although, a limiting factor to this growth is likely to be travel distance to Melbourne of no more than two hours.

In terms of coastal population trends the VCS predicts we can expect:

- Increased housing density, particularly in key holiday areas, such as Mornington Peninsula, Surf Coast and Bass Coast;
- Coastal areas to increase in population not related to dwelling construction, but through conversion of holiday homes to permanent residencies; and
- Visitor numbers to coastal areas to continue to grow with improved mobility and regional access.





Map 1. Victorian Coastline. Source: Victorian Coastal Council, 2002.

3.1.1 Gippsland Region

The Gippsland region is located in southeast Victoria, extending from the edge of Melbourne's outskirts to the NSW/Victorian border. The coastline includes Phillip Island, Wilsons Promontory, the Gippsland Lakes, Ninety-Mile Beach and Croajingalong National Park. The region supports a population of a quarter of a million people working in a diverse number of industries including, education, farming, forestry and fishing. There are four major coastal councils across Gippsland - Bass Coast Shire, South Gippsland Shire, Wellington Shire and East Gippsland Shire.



Map 2. Gippsland Coastal Region. Source: Victorian Coastal Council, 2002.

Trends

The nominated southmost growth corridor of Melbourne (eg: Cranbourne, Pakenham and Dandenong) feed into the Gippsland region through the Shires of Cardinia, Bass Coast and Casey. The total population in the Gippsland Coastal region grew at an annual rate of 0.3% between 1991 and 2001, with an increase in total number of households of 1.1% per annum (DSE 2005). For population growth and future development, Bass Coast Shire is identified as having a growth rate well above the average for Victoria. The duplication of the South Gippsland Highway and the increased ease of access to coastal areas from Melbourne (approx 1.5 hours) have assisted this. Bass Coast Shire has recently developed the Bass Coast Strategic Coastal Planning Framework, which provides Council and the community with direction and advice on future development of coastal areas throughout the Shire. East Gippsland and Wellington Shire have also recently engaged consultants to develop UDFs for 16 coastal towns across their municipalities.



3.1.2 South Gippsland

This study is focused on the municipality of South Gippsland Shire. Located approximately 130km southeast of Melbourne the Shire stretches from Venus Bay in the west to Port Welshpool in the east. It covers approximately 3,297 square kilometres and has a population of 26,159 (DSE 2004). It is an important beef production and dairying region and the coastline is a popular holiday and retirement area.

South Gippsland abuts five municipalities: the Shires of Baw Baw and La Trobe to the north; Wellington to the east; Bass Coast to the southwest and Cardinia to the west. The Strzelecki Ranges form most of the northern boundary with the coast forming the southern boundary. The major towns include Leongatha, Korumburra, Mirboo North and Foster with other significant settlements being

Nyora, Toora, Welshpool, Sandy Point and Venus Bay. Most of the towns in the municipality serve the surrounding rural communities, however Venus Bay, Sandy Point, Waratah Bay and some of the other small coastal towns are predominantly tourist destinations with holiday homes.



Map 3. South Gippsland Coastal Towns. Source: RACV, 2005

Trends

Over the past two decades, most towns in South Gippsland have experienced population decline (DSE 2005). However, South Gippsland is projected to experience moderate population and household growth over the next 30 years (DSE 2004). Growth is likely to occur in the west of the Shire with the driver being urban growth from Melbourne and the central coastal areas. To support this growth, and assist Melburnians explore areas further afield, the South Gippsland Highway is being upgraded from Lang Lang to Sale.

Coastal towns also have a relationship to inland rural settlements. As with the sea change phenomenon there is also a 'tree change' trend occurring. In South Gippsland this is an increase in rural lifestyle living within proximity to the coast driven by increasing coastal housing prices and residents selling up, 'cashing in' and moving inland. This inland movement and growth creates development pressure in the large rural service centres and the smaller rural settlements. In South Gippsland this growth in rural areas is occurring in Nyora, Mirboo North, Foster, Fish Creek and Meeniyan.



Increased investment in the area is recognised as making a positive contribution to the long-term economic viability of the towns and providing increased employment opportunities. However, it is essential that any development and investment is undertaken within a defined framework and makes a significant contribution to the built form and natural environment of the area.

3.1.3 Coastal Settlements

UDFs are being developed for the settlements of Venus Bay, Tarwin Lower, Waratah Bay and Sandy Point. These settlements are predominantly coastal retreats and holiday destinations supported and serviced by Leongatha, Foster, Inverloch and Wonthaggi. The role and function of these settlements and how they relate to each other and the major centres in the region is detailed in Section 4 (Settlement Role and Function).



Map 4, Study Area as defined in the brief for Tarwin Lower and Venus Bay



Map 5, Study Area as defined in the brief for Sandy Point and Waratah Bay

3.2 Policy

Management of the coastal zone is a complex task shared by many authorities and levels of government. The Commonwealth, State and Local Governments all have a role to play, as does the community and industry. Coastal planning in Australia starts at broad level principles through Federal coastal policies down to day to day decisions made by the State Government and local councils. The Urban Design Frameworks are tools to help implement the state and regional coastal policies at a local level.

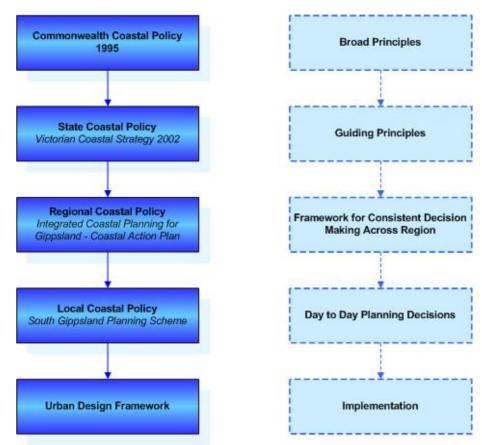


Figure 1. Integration of Australia's coastal policies and how they relate to the Urban Design Frameworks.

Federal

The Commonwealth Coastal Policy presents the Commonwealth's vision for a co-operative, integrated approach to coastal management. It provides both the means for the Commonwealth to manage its own coastal activities, and a range of initiatives whereby all Australian governments can work together to ensure best management of the coast.

The Policy aims to achieve specific practical improvements to coastal management through four broad fronts. These include:

- Increasing community involvement in coastal management.
- Addressing the most pressing coastal problems, such as coastal development and pollution.
- Enhancing awareness through promoting education and improving the knowledge, experience and information available to coastal managers, planners and users.
- Promoting Australian coastal management expertise in neighbouring regions.



State

The **Victorian Coastal Strategy (VCS)** is the key policy and planning document for managing the use and development of coastal resources in Victoria. The VCS sets out a vision and hierarchy of principles for coastal planning that provide a pathway for decision making.

The hierarchy of principles are:

- 1. Protection of significant environmental features.
- 2. Sustainable use of natural coastal resources.
- 3. Direction for the future.
- 4. Suitable development on the coast.

In relation to coastal development, the vision states, "....coastal villages will retain their seaside and village characters....townships will no longer grow like topsy, they will be recognisably coastal in character and grow within planning frameworks which respect the environment they are built in.Much of the coast between townships will be preserved undeveloped...".

The sections on suitable development and the description of activity nodes (existing settlements) and recreational nodes (outside of settlements) is also relevant to the UDFs. The VCS states, "development pressure and infrastructure will be directed away from sensitive areas and managed within activity nodes and recreational nodes".

The four project townships are defined as existing settlements (activity nodes) and the objective of activity nodes is to provide for development within defined limits and protect areas between settlements from inappropriate development.

Coastal Spaces Project, Department of Sustainability and Environment (DSE) 2004

To help guide the interpretation and implementation of the VCS in relation to coastal development, DSE is undertaking a project titled 'Coastal Spaces'. The aim is to improve and clarify strategic planning for sustainable growth in coastal Victoria, improve application of planning and environmental tools in coastal areas and develop new tools as appropriate, and build the capacity of practitioners to implement and apply Government policy for the coast.

The project will be undertaken from September 2004 to October 2005. The UDFs for the four coastal towns will be guided by the principles of the Coastal Spaces Project and shall become tools to assist Council with coastal planning decisions in the future.

Coastal Spaces Recommendations Report (DSE) April 2006

In May 2005, the Victorian Government released the Coastal Spaces Inception Report which identified a set of emerging issues to be addressed as part of the Coastal Spaces Initiative. The Coastal Spaces Recommendations Report follows on from the earlier Inception Report and provides a series of recommendations which seek to improve and clarify strategic planning tools for managing sustainable coastal development in non-metropolitan areas. One of the key recommendations of this report is to finalise and support implementation of Settlement Plans such as Urban Design Frameworks and Structure Plans in relevant Planning Schemes.

Siting and Design Guidelines for Structures on the Victorian Coast 1998 (S & D Guidelines)

The S & D Guidelines were developed by the Victorian Coastal Council to assist coastal managers, and ensure that developments on the coast complement the surrounding landscape and result in excellent design. The guidelines are used at a site-specific level by councils, coastal managers and developers to achieve appropriately sited and designed structures on the foreshore.

As the UDFs move to detailed design with the master plans and design elements the S & D Guidelines will provide guiding principles to follow and apply. This will be particularly important for public foreshore land and the interface between public and private land.



The three key areas of the S& D Guidelines are:

- 1. Functional Guidelines
 - (Efficient use of space, consolidation of structures, availability of public access).
- 2. Cultural and Aesthetic Guidelines
 - (Structures maintain/enhance coastal landscape and character do not impair views to and from water).
- 3. Ecological Guidelines
 - (Structures result in minimal change to natural systems, native vegetation disturbed as little as possible, avoid locating structures in dunes, protection of marine biological values).

State Planning Policy Framework (SPPF)

The SPPF sets out general policies and principles for land use and development in Victoria. These policies and principles form part of the South Gippsland Planning Scheme and are grouped into six headings including settlement, environment, housing, economic development, infrastructure and particular use and development.

Key components that are relevant to the UDFs include:

Environment Clause 15.01

• Refers to the protection of catchments, waterways and groundwater. The objective of this clause is to assist the protection, and, where possible, restoration of catchments, waterways, water bodies, groundwater, and the marine environment.

Coastal Areas Clause 15.08

The objective of this clause is to, protect and enhance the natural ecosystems and landscapes of
the coastal and marine environment, ensure sustainable use of natural and coastal resources and
achieve development that provides an environmental, social and economic benefit enhancing the
community's value of the coast.

Native Flora and Fauna Clause 15.09

 The objective of this clause is to assist in conserving native flora and fauna through protection and conservation of biodiversity, including native vegetation retention and provision of habitats for native plants and animals, and to control of pest plants and animals.

Open Space Clause 15.10

• The objective of this clause is to assist creation of a diverse and integrated network of open space in line with the needs of urban communities and rural areas.

General Implementation Clause 15.11.1

• This section of the State Planning Policy Framework identifies the need for responsible authorities to identify, conserve and protect places of natural or cultural value from inappropriate development.

This includes amongst other things:

Places of Aboriginal cultural heritage significance including historical and archeological sites.

Design and Built Form Clause 19.03

The objective of this clause is to achieve high quality urban design and architecture that reflects the
particular characteristics, aspirations and cultural identity of the community, enhances livability,
diversity, amenity and safety of the public realm and promotes attractiveness of towns and cities
within broader strategic contexts.

3.2.1 Regional

Implementation of the VCS at a regional level occurs through Coastal Action Plans (CAP). A CAP is a strategic planning document prepared by a Regional Coastal Board in accordance with the Coastal Management Act 1995. The Gippsland Coastal Board has prepared the *Integrated Coastal Planning for Gippsland (CAP)* 2002.



Integrated Coastal Planning for Gippsland (CAP) 2002

The CAP aims to provide an integrated approach to coastal planning for Councils in the Gippsland region. A key principle is the concept of 'activity nodes' and the need to avoid strip development along the coast. Implementation of this and other key principles occurs at a local level through the development of Coastal Management Plans and Urban Design Frameworks. The CAP encourages municipalities to identify town and settlement boundaries through new or revised local structure or framework plans with development to occur within these boundaries.

Coastal Spaces Landscape Assessment Study 2005

The Coastal Spaces Landscape Assessment Study aims to develop a comprehensive assessment of visually significant landscapes along the Victorian Coast. The study is now in its final stages and will provide an assessment of the existing distinctive landscapes, and assess the adequacy of current planning strategies and measures for landscapes along the Victorian coast and immediate hinterland. The study has local implications in relation to the UDF particularly in relation to the Tarwin floodplain, Venus Bay Dunes and the surrounding landscapes of Waratah Bay and Sandy Point.

Local

Local policies that relate to coastal planning and development include the South Gippsland Coastal Development Plan 2004 and sections of the Local Planning Policy Framework (LPPF) in the South Gippsland Planning Scheme.

The **South Gippsland Coastal Development Plan 2004**, is a strategic planning framework for the future development of towns along the coast. Some of the key features of this strategic planning document include:

- The use of a Coastal Policy Area as stated in the South Gippsland Rural Strategy 2001;
- Any growth to be concentrated in towns, not strip development;
- To promote compact or consolidated growth; and
- The development of eco towns with sustainability principles.

The LPPF provides policy guidance for the assessment of planning applications. It can provide a set of generic considerations that apply to all proposals for which a planning permit is required. To follow is a summary of the policies applicable to the South Gippsland Planning Scheme.

Sub Clause 21.04-1 Environment and Cultural Heritage

Council aims to ensure that sustainable land use and development can occur. It highlights areas
within the Shire, particularly coastal areas facing increasing environmental pressure from
residential development. This pressure is likely to continue in the foreseeable future given the
Shire's relatively close proximity to Melbourne.

Sub Clause 21.04-9 Venus Bay

 This objective is to maintain Venus Bay as a holiday settlement, allowing development to occur in an environmentally and socially sustainable manner that protects the delicate landforms and character of the area.

Sub Clause 21.04-10 Small Towns

- This sub clause aims to:
 - Maintain a network of small towns with a range of roles and services designed to cater for the needs of residents and visitors to the Shire.
 - Provide an attractive and safe residential environment and strengthen the economic future of the small towns within the Shire.
 - Promote Tarwin Lower as an important local centre serving the needs of the local community and tourists in the southern portion of the Shire.
 - Recommend the implementation of a townscape improvement program for Tarwin Lower aimed at revitalising the existing town centre and integrating the town with the Tarwin River;
 - Recommend restricting any further expansion of Sandy Point and Waratah Bay until reticulated sewerage becomes available.



3.3 Key Issues

Below is a summary of the key drivers of change and associated impacts and issues. The issues identified are discussed in the following section.

DRIVERS	IMPACT		ISSUE	
Population Growth	Township growth, greater number of subdivisions and development within township	٠	Increased pressure on infrastructure, eg: waste disposal, water and sewerage treatment, stormwater system	
		٠	Pressure on environment eg: if infrastructure is not adequate and causes seepage of septic systems into water ways and stormwater runoff into estuaries	
	Greater development occurring outside of existing township boundaries	٠	Loss of town structure through urban sprawl	
	The state of the s	•	Loss of landscape value along the coast through strip development and incremental growth of homes	
		•	Increased pressure on habitat values and biodiversity	
		٠	Misuse of 'Recreation Nodes' as described in VCS through branding of resort type developments eg: golf courses to justify their existence outside of existing settlements.	
Urban Development	Loss of coastal character and township amenity	Large package (house and land) development concepts imported from urban environments		
		•	Upgrade of infrastructure eg: roads with kerb and channel, more formal landscaping	
		•	Lack of strong planning controls to direct and maintain township character, eg: height controls, siting, materials, landscaping	
		٠	Improve integration of the township with the Tarwin River frontage	
Tourism	Continued focus on day visitors to the coast particularly over summer	Planning and management of foreshores and public infrastructure		
	Increase in resident population of coastal towns by 2 to 3	•	Affordable accommodation on the coast for all Victorians	
	times (or higher) during summer period	•	Infrastructure pressure eg. car parking.	
Management of Coastal Reserves	Interface of public and private land and the impact of the different activities	*	Impact of different uses, eg: invasion of garden weeds, fire fuel management, trampling of sand dunes through use of goat tracks from properties	
Climate Change	Accelerated erosion from increased frequency of storms, storm surge (mixture high tide and water from rivers), rise in sea level	•	Maintenance of existing infrastructure, future need for coastal protection infrastructure or strategies eggroynes, seawalls.	
		•	Appropriate siting for new infrastructure or relocation of existing infrastructure	



3.3.1 Township Growth

As outlined in Section 2, there is an increase in the growth rate of the population in Victoria particularly in the coastal areas located within 1-2 hours of Melbourne. This population growth consists of a combination of retirees moving to the coast, people changing their coastal holiday homes into permanent dwellings, and families moving out of Melbourne to more affordable areas. The increase in population growth creates demand for the release of new greenfield sites for development. This in turn adds pressure to the existing infrastructure and the surrounding environment.

Infrastructure

In terms of township growth and the effect on infrastructure, there is the issue of the capacity of existing infrastructure to cope with holiday residents becoming permanent residents, and the issue of new infrastructure that may be required for new development and how this will effect the surrounding environment.

Roads

Roads in small coastal towns are often unsealed with grassed drains and channels to manage storm water. Gravel roads are cheap to administer and contribute to the rural low key amenity of a town. With an increase in traffic and road use, more maintenance is required to grade the gravel roads. Development of new buildings and hard surfaces will result in an increase in stormwater runoff, which can cause erosion, sediment deposition in vegetation, sediment runoff and excess nutrients leading into the waterways. As townships expand there may be a need to provide a hard surface treatment to roads and the installation of a more sophisticated stormwater drainage system.

Power

All of the coastal towns in this study area are connected to main power supplies. However, it has been noted from general community comments that power outages occur frequently. This issue needs to be addressed by the appropriate power supply authorities.

Another source of power that is creating community interest in coastal areas is the installation of wind turbines. There have been a few recent proposals in the South Gippsland area and there may be more in the future. However, the issue is not the service and use of power but rather the loss of landscape values and local amenity.

Sewerage

As the population of towns increase so does the pressure on the sewerage and water systems required. Currently in the areas where septic systems are used there is a minimum lot size needed for the filtration to work adequately. In towns such as Venus Bay there are already problems with seepage of septic systems into the ground water and nearby Anderson Inlet.

Telecommunications

Currently the mobile coverage in some of the coastal towns is very limited with reception only possible at various vantage points. As people come to live on the coast from areas that already have good coverage there is an expectation that adequate coverage should also be provided in their adopted town. However, the siting of mobile phone towers is an issue in coastal towns, as ideally they should be co-located with other infrastructure and not near the foreshore or close to the residential areas.

Environment

The towns in the study area are situated in fragile environments highly valued for their flora and fauna, biodiversity and recreational use.

Venus Bay and Tarwin Lower are situated between the open coast and Anderson Inlet. Anderson Inlet is a significant estuary with seagrass, mangroves, wetlands and a host of bird species, some of which are listed on international migratory bird agreements (JAMBA, CAMBA).



Waratah Bay and Sandy Point are situated on the open coast and are also in close proximity to Shallow Inlet, which has significant environmental values.

People choose to holiday and live in these areas for these environmental assets, however, there must be an awareness that as the population increases so does the pressure on the environment. Issues such as septic leakages into waterways and stormwater drains, sediment and nutrient run off into estuaries and the clearing of vegetation must be identified and addressed.

3.3.2 Development Outside of Townships

With an increase in population growth, impacts of development are occurring not only within existing township areas, but also in areas of land between towns in rural areas. The development between townships often occurs when the use of land for housing creates greater economic opportunity than traditional farming.

This type of development causes issues such as loss of township structure and urban sprawl, incremental strip development, isolated resort type developments, loss of landscape values along the coast, and increased pressure on habitat values and the threat of habitat fragmentation.

Strip development and township structure

Strip development occurs between coastal townships when development overflows from one town into another with the coast forming one continuous housing strip. This phenomenon is especially prominent on the NSW coast.

Isolated resort developments (hot spots in Coastal Spaces Project)

With an increase in activity occurring in and around the coast, developments are being proposed that are outside of township areas but are residential housing developments packaged as recreational resorts eq: golf courses. In cases such as these, developers apply to rezone land from rural to residential and mitigate opposition by proclaiming they are designing township buffer zones and creating Recreational Nodes as described in the VCS.

Loss of landscape values

Coastal landscapes across Victoria have many significant features and characteristics. In the South Gippsland area there are three landscape setting types as classified by the Landscape Settings Types of Victoria (VCC, 1998). The landscape types range from high cliffs with inlets, to flat areas with estuarine environments. In all cases there are areas of outstanding scenic quality requiring appropriate planning controls to ensure development does not impact on the landscape values.

Habitat loss and fragmentation

In areas between towns there is evidence of remnant vegetation and large stands of good quality vegetation. When new developments occur, vegetation is cleared for both construction and coastal views. This clearance can disrupt precious habitat corridors that exist between and around townships. Habitat and vegetation corridors are critical for the health and genetic integrity of flora and fauna species that occur in local coastal areas.

3.3.3 Loss of Town Character and Amenity

An increase in housing and urban development can create a loss of township character and coastal amenity. This can be caused by large areas of land being developed by one company, the house and land package concept and ad hoc development occurring without adequate planning controls to guide the town character and amenity.

An increase in development also leads to a need for more substantial infrastructure and landscaping such as sealed roads, kerbs and channelling. This can consequently change the coastal character and low key amenity of towns.



3.3.4 **Tourism**

The Victorian coast continues to remain an attraction for intrastate, interstate and overseas visitors. A key characteristic of tourism in coastal Victoria is the huge influx of visitors and beach users over the summer period with most coastal towns more than doubling in size. This tourism pressure creates issues such as:

- Planning and management of the foreshores and the need to provide convenience facilities to meet both the needs to day tripper and overnight visitors;
- The 'loving it to death' scenario and the ability of the environment to cope with so much use: and
- As housing prices increase, the use of camping facilities and affordability of holidays on the coast for all Victorians.

3.3.5 Interface of Public and Private Land

An obvious indicator of how we value our coast is property prices. Homes with a coastal view or backing onto the beach are measurably more expensive than those without these features. However, the coast and beach is Crown land which can be used and appreciated by all. Those with the luxury of abutting the beach or foreshore reserves have a responsibility to limit and control their impact on the coast.

Conflicting issues between freehold land and coastal Crown land include:

- Spreading of weeds from gardens;
- Expectation of clearing coastal vegetation for a fire break;
- Clearing of coastal vegetation for views;
- Creation of informal tracks from properties and trampling of nearby sand dunes; and
- Visual impact of development and homes on the foreshore.

3.3.6 Climate Change

Science tells us that we can expect climate change with certainty and that sea level rise and changing weather conditions will have the most significant impact on coastal planning and management. Direct impacts are likely to be increased and altered patterns of erosion of beach and dune systems, undercutting of cliffs, increased peak flows in coastal rivers and estuaries and damage to coastal infrastructure (piers, jetties, breakwaters and seawalls). In built environments volumes of stormwater reaching the coast are likely to increase which will have an impact on the water quality of coastal estuaries and the near shore environment.

There is a need in any future planning to take into consideration these impacts and provide for the maintenance of existing coastal structures, and appropriately site any new coastal structures or developments. Along these lines the Gippsland Coastal Board is currently involved in a project which studies sea level change and coastal subsidence and the implications for geomorphic aspects and physical assets along the Gippsland coast. The result of this study should be considered for all future coastal planning decisions in this area.

4. Settlement Role and Function

4.1 **Settlement Categories**

When planning for growth and development it is important to explore the role and function of settlements in the region. For a consistent approach in describing the role and function of settlements along the coast of Victoria, the Coastal Spaces Recommendations Report (DSE April 2006) defines the status of existing coastal settlements into six categories. The categories are based on information relating to population size, land use zoning, utilities infrastructure, health, education and other general service provision and accommodation facilities. The six categories are:

Regional Centre A diverse population base which is over 10,000 people. All essential services are

> connected. These centres serve the role as a major interchange point for rail, bus, sea and air, and access is available to large hospitals. Regional centres also

provide for a large diverse employment base.

District Town A large population base of 2,000 to 10,000, with a diverse housing stock.

> Connection to all essential services with numerous accommodation stocks including motel/hotel and multiple caravan parks. These towns provide for a large business district with moderate employment base. Hinterland settlements of this type provide an important service support role for coastal settlements and other

rural activities.

Town Population of 500 to 2000. Connection is available to all essential services with a

> small business and /or industrial area. Coastal settlements of this type have moderate to high levels of home ownership. These settlements usually have

strong employment relationships with larger settlements nearby.

A small population base between 200 to 500. Access to services may include a Village

> general store and some form of accommodation, primarily through a caravan park or small establishment. There is connection to water but sewer connections can vary. Villages have moderate to high levels of holiday home ownership in

settlements closer to Metropolitan Melbourne.

Hamlet A very small population between 100-200, with the settlement being located in a

> singular urban zone. Limited access is available to reticulated water and sewerage. Generally there are no services within settlements. Some

accommodation is available in the form of a small caravan park.

Rural District Population 100 or less located in dispersed housing on smaller than average rural

allotment sizes. No access to reticulated water or sewer or services generally

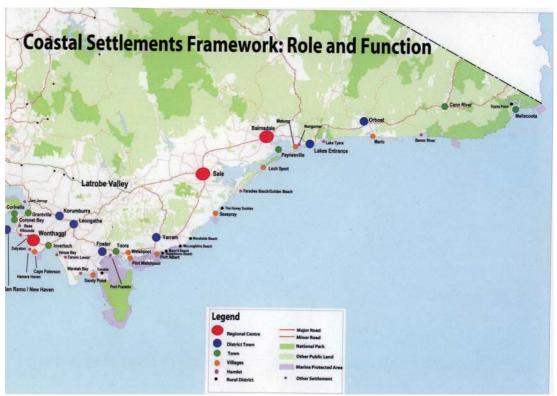
within the settlement.

More detail about the settlement categories can be found in the Coastal Spaces Recommendations Report, April 2006.

This categorisation lays a foundation for defining what role settlements fulfil in a regional context and what role settlements may play in the future. In relation to the South Gippsland area, within the Bass Coast Shire region, Wonthaggi is categorised as a Regional Centre and Inverloch is a Town. Within the South Gippsland Shire region Leongatha, Korumburra and Foster are categorised as District Towns, Toora is categorised as a town and Sandy Point is classified as a Village. Venus Bay, Tarwin Lower and Waratah Bay are categorised as *Hamlets*.



It is South Gippsland Shire Council's view that based on population data and existing infrastructure, categorisation of some settlements in the South Gippsland Shire region is incorrect and fit more appropriately into the category of *Village* as opposed to *Hamlets*.



Coastal Spaces - Recommendations Report April 2006

Role of Settlements

This section details the roles the towns Venus Bay, Tarwin Lower, Waratah Bay and Sandy Point play in the region. In the South Gippsland Shire coastal area Leongatha (District Town), serves the role of a higher order service and employment centre for the surrounding rural and coastal settlements, including Venus Bay, Tarwin Lower, Waratah Bay and Sandy Point.

Tarwin Lower

Tarwin Lower is a small rural settlement approximately 25km south of Leongatha and 4km east of Venus Bay. It is located on the banks of the Tarwin River and contains a primary school, sporting facilities, local hotel and a range of commercial services. In the 2001 Census the township of Tarwin Lower had a population of 139 (based on the Australian Bureau of Statistics). Tarwin Lower has limited infrastructure including no reticulated sewerage. It has three key functions in the region.

- It plays the role of a small country hamlet with a permanent population;
- It provides lower order services to surrounding rural areas including Venus Bay; and
- Is an entry point for tourists to access Anderson Inlet.

Venus Bay

Venus Bay situated 4km east of Tarwin Lower and 35km south of Leongatha. This hamlet was created from the donation of land by a local farmer and established in three parts, commonly known as the first, second and third estates. All the estates are situated between large sand dunes and Anderson Inlet. Venus Bay's enumerated population in 2001 was 405 based on data from the 2001 Census (Australian Bureau of Statistics). This figure is said to triple during holiday periods. Venus Bay contains a limited number of shops with the settlement reliant on tank water and on-site waste-water disposal systems. Venus Bay as a small coastal hamlet has three roles.



- Primarily it is a holiday destination for people from Melbourne and the surrounding district;
- Secondly it plays the role of a small hamlet for a permanent year round population; and
- Is a destination for day-trippers to Anderson Inlet and Cape Liptrap Coastal Park.

Waratah Bay

Waratah Bay is situated 40 kilometres south east of Leongatha, 10km west of Sandy Point and adjoins Cape Liptrap Coastal Park. It is a holiday hamlet with a small permanent population (approximately 47 in 2005, based on the Shire's rates database). Waratah Bay has one Caravan Park and long flat sandy beaches that are used for swimming and fishing. The town has few services with most people relying on the caravan park for incidental supplies, and Sandy Point and Foster for more convenience goods Reticulated sewerage has recently become available and it is planned to construct a waste-water treatment plant near the town. Waratah Bay's primary role is as:

- A holiday destination for Melbourne and the surrounding rural areas;
- It also plays a minor role supporting a small permanent year round population; and
- Is an entry point for tourists to the beach and Cape Liptrap Coastal Park.

Sandy Point

Sandy Point is located 201km south east of Melbourne, 40km south of Leongatha, 5 minutes from Shallow Inlet with Wilsons Promontory National Park to the east. Sandy Point was developed as a small holiday coastal hamlet in the 1950s and has remained a popular destination for surfing, fishing and boating. There is a surf club, tennis court, local hall, caravan park and shopping strip with a cafe/restaurant, general store, and mini golf facilities. The estimated population is approximately 130 (based on the Shire of South Gippsland rate database). The township has a lack of infrastructure and a limited range of commercial services and community facilities. Sandy Point as a small coastal hamlet has three roles:

- Primarily it is a holiday destination for people from Melbourne and the surrounding district;
- It is also a settlement for a small permanent year round population; and
- Is a destination for tourists to Shallow Inlet and the surrounding Coastal Parks.

4.2 Coastal Development Infrastructure

An essential component of township categorisation is the consideration of existing or potential infrastructure, this is particularly important in regards to regional planning to direct where growth should occur along the coast.

As a guiding principal urban growth should only occur in areas which have capacity to accommodate all necessary infrastructure. In regards to the South Gippsland region the Integrated Coastal Planning for the Gippsland CAP contains guidelines to assess the capacity of coastal settlements for further development. The CAP contains an 'Infrastructure Development Rating' for Gippsland coastal settlements which gives an indication of development potential based on existing infrastructure capacity and potential for infrastructure upgrade and expansion.

Venus Bay, Tarwin Lower, Waratah Bay and Sandy Point have been assessed as having an infrastructure rating of 3. This signifies that the available infrastructure is a major impediment to any further development and that even if land is identified for growth this should only occur if adequate infrastructure is provided.



4.3 **Future Growth and Development**

Future growth across a region should occur in a cohesive and strategic manner. The Victorian Coastal Strategy is the guiding policy document; which states that development on the coast will be;

- directed away from sensitive areas;
- managed within defined existing settlements; and
- strategically planned so that inappropriate development between settlements can be avoided.

The ability for coastal settlements to accommodate further growth is a function of the physical, environmental, cultural and landscape characteristics and the availability and capacity of infrastructure (power, water, sewer and access).

In the South Gippsland region, there are environmental, cultural and landscape constraints which will affect growth in all four towns.

- Tarwin Lower is close to the river and associated river flood plains. It is also affected by acid sulfate soils.
- Venus Bay is surrounded by sand dunes Cape Liptrap Coastal Park, Anderson Inlet, the Tarwin River flood plains and land affected by Acid Sulphate Soils. The town has also been identified as containing areas of cultural heritage significance.
- Waratah Bay adjoins Cape Liptrap Coastal Park, significant flora and fauna, the ocean beach and floodplains.
- Sandy Point adjoins a beach reserve and is in close proximity to Shallow Inlet. Floodplains are identified to the east and west of the town, however anecdotal evidence suggests that rural land between the north boundary of the town and Sandy Point Road is also affected by poor drainage which is contributing to flooding in that area.

Therefore, taking into consideration both infrastructure capacity and environmental constraints, future growth on the coast in the South Gippsland region should be limited and apportioned across the four towns within defined settlement boundaries.

4.4 **Future Settlement Roles**

Based on the above assumptions of where future growth should occur along the coast the future roles of the settlements is envisaged as follows:

- Leongatha will continue to be a higher order service centre for the region and will provide ongoing urban development opportunities.
- Tarwin Lower will act as a permanent rural hamlet and lower-order service centre for Venus Bay and surrounding rural areas.
- Venus Bay, Sandy Point and Waratah Bay will continue to primarily be holiday destinations and recreational based seasonal settlements. Their secondary role will be to accommodate a small permanent population consisting of predominantly retirees who wish to enjoy the benefits of a sea change lifestyle.

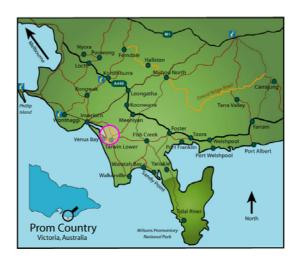


5. Tarwin Lower

This Settlement Background Paper explores the existing conditions of Tarwin Lower and provides an analysis of the information to guide future growth and development. The existing conditions detail population, town character, environment, lot supply and demand and infrastructure.

Tarwin Lower is a small holiday hamlet that is set on the banks of the Tarwin River serving as an entry point for tourists who wish to access Anderson Inlet and Venus Bay. The hamlet includes one primary school, a health centre, aged care facility, sporting facilities, a local hotel and a small range of retail uses. There is limited infrastructure and the town is reliant on tank water and on-site wastewater disposal systems. In context of its location in relation to other towns Tarwin Lower is located approximately:

- 4 kilometres from Venus Bay;
- 18 kilometres from Meeniyan;
- 20 kilometres from Leongatha (40 minutes north); and
- 145 kilometres from Melbourne (2 hours).



Map 6. Tarwin Lower in the region Source: www.promcountry.com.au



Map 7. Tarwin Lower Township Source: DSE, www.dse.vic.gov.au

5.1 **Existing Conditions**

Population

Urban Enterprise Pty Ltd was engaged to analyse demographic trends within Tarwin Lower. There were limitations on the availability of demographic data due to the small size of the township. The demographic information and trends are based on data from the 2001 Census (Australian Bureau of Statistics). Tarwin Lower has a total permanent population (as at 2001) of 139 of which 47% are male and 53% are female.

Age	% of Total Population
0-19	26%
20-34	16%
35-59	37%
60+	22%

Source: ABS CDATA 2001

Household Structure

The majority of people living permanently in Tarwin Lower are couples without children (54%). This is reflected in the age profile of the resident population. The average household size for the population of Tarwin Lower is 2.4 persons.

Family Type	% of Families		
Couple family	54 %		
Couple family without children	35%		
One parent family	8%		
Other family	3%		
Total	100%		

Source: ABS CDATA 2001

Trends

Tarwin Lower has a mix of permanent residents and non-permanent residents who reside in holiday homes. However, this mix is changing with continued growth in the number of holiday homes. Nonresidents own a high proportion, 84%, of the vacant residential land. At the current rates of growth, the supply of land is likely to be exhausted in 15-20 years.

There are fluctuations in the population of Tarwin Lower throughout the year due to the holiday home sector. Holiday homes are characterised by a seasonal form of occupancy and have distinctive visitation patterns throughout the year. For example, holiday homes within South Gippsland Shire are occupied 42% of the time on average during the summer season (Source: The Economic Impact of Tourism in Prom Country). This is more than double the occupancy experienced during the winter season.

Town Character

Describing a sense of a place or character of a town is done through an analysis of various attributes including land form, physical boundaries, town entries, roads and streets, building character, and town landmarks and focal points.

Land Form

The landform of Tarwin Lower is characterised by its flat rural landscape and its location next to the Tarwin River and nearby floodplains. The Tarwin River flows down from the Strzelecki Ranges along the northern edge of the hamlet through to Anderson Inlet.

Physical Boundaries

The township has four edges:

- To the north is the Tarwin River:
- To the east is a golf course and a nature reserve;
- To the south is rural farming land; and
- To the west is emerging low-density residential development.

Town Entries

Access to the town from the north is via Tarwin Lower Road, which links Venus Bay to the west and Tarwin to the north-east. Entry into the town is announced through the presence of low-rise dwellings next to the golf course, and fleeting views of the Tarwin River.

The southern entry is characterised by rural farming land at the intersection of Tarwin Meadows and Walkerville Roads. At this point there is a transition from rural to urban character.

The third entry is from Venus Bay along Evergreen Road. This road passes through open floodplains and a Low Density Residential Zone on the edge of town. The road follows the curve of the River and arrives at a recreational reserve and boat ramp. The reserve is well established and forms a pleasant focal point for the town.

Roads and Streets

The principal streets and roads are fully constructed and asphalt-sealed with grassed swale drains.

Built Character

There are three distinct built character precincts within Tarwin Lower.

- 1. Urban Character:
- 2. Commercial Character: and
- 3. Semi-Rural Character.

The urban character precinct is the residential and civic area located between Walkerville Road, Tarwin River, the golf course and the flora and fauna reserve. There is a recreational and community area, which includes a football oval and health care facilities. The housing in the urban character precinct is generally single storey, although there is some evidence of emerging two storey dwellings. The precinct is well treed, informal and relaxed with a rural atmosphere.

The commercial character precinct, (refer to photo 2), is on the south side of the river along Evergreen Road. The town is serviced by a number of businesses, including a service station and supermarket, real estate agents, tourist accommodation, shops, restaurants, a hotel and other service and trade related businesses. The buildings are single storey and are diverse in scale, colour and built form.

The semi-rural character precinct of Tarwin Lower includes the Low Density Residential Zone to the west of the town, known as River Palms Estate. This newly formed subdivision is in the early stages of development and is identified by the larger lots that form part of the subdivision and the more modern forms of housing development that have been established.







Photos 1 & 2: Commercial Precinct Area

Township Focus

The focus of Tarwin Lower is the river front and commercial area. The shops and stores are located along the main thoroughfare of the town to service visitors and local residents. On the riverside there is a picnic area, fishing platform and boardwalks, which assist in enhancing the river frontage.





Photos 3& 4: Long Picnic Table and Car Park near boat launch

Overall Town Character

The hamlet's location adjacent to the Tarwin River, its defined commercial and recreational precinct and its mixture of older residential areas help contribute to the character of Tarwin Lower which is a small country hamlet with a strong community focus.

Environment

The condition of the natural environment has important implications for the use and future growth of an area. This section provides an analysis of the environmental values including, landscape, flora and fauna, cultural heritage and features of significance, and constraints such as flooding and acid sulphate soils.

Landscape

As described in the town character section, the landform and landscape of Tarwin Lower is dominated by the Tarwin River and surrounding flood plains. The river meanders alongside the town flowing towards Anderson Inlet. The views and vistas to and from the river and the vegetation on the riverbank are important in creating a natural feature and focus for the town.



The other important landscape element is the open floodplains with views across to the Venus Bay dunes. This creates a sense of space and clearly defines the boundaries between Tarwin Lower and Venus Bay.



Photo 5. Surrounding rural landscape.

Flora and Fauna

The two key flora and fauna areas in Tarwin Lower are the Nature Reserve at the south-eastern edge of the town and the vegetation along the riverbanks. The Nature Reserve is a large stand of native woodland with a mix of under storey eucalyptus trees. This Reserve provides habitat for a range of native fauna, however specific data on flora and fauna for the Nature Reserve has not been undertaken as part of the project.

The riverbanks contain a mix of exotic and native vegetation with more open areas being dominated by reeds and grasses and shaded areas with Melaleuca and Eucalyptus. The road reserves leading out of the town are also vegetated with large woodland trees, which may provide a habitat corridor for flora and fauna. The river also supports a range of aquatic fauna species and other organisms living in the river habitat. The Tarwin River feeds into Anderson Inlet, which is an important estuary and feeding and roosting area for a wide range of birds.

The Ecological Vegetation Classes (EVC's) around Tarwin Lower include:

- Cleared/Severely Disturbed; and
- South Gippsland Coastal Heathland Scrub.

(Refer to **Appendix A** for EVC Map)

The South Gippsland Coastal Development Plan classifies the Bioregional Conservation status of the majority of the EVC's as of 'least concern'. However, there are some small areas classified as 'vulnerable'. Threats to the flora and fauna in the area come from domestic pets and disturbance to coastal vegetation.





Photos 6 & 7: Nature Reserve and roadside habitat corridors.

Features of Significance – Anderson Inlet

Anderson Inlet covers an area of 2498 hectares and consists of mobile sand belts, which are permanently open to the ocean. A foreshore reserve, agricultural grazing land, rural properties and the townships of Inverloch, Tarwin Lower and Venus Bay surround this inlet. Mangroves and salt marsh fringe the shoreline, with seagrass in the intertidal and subtidal zones. Anderson Inlet is used all year round by thousands of birds, which migrate to the area for breeding and feeding. This area is also subject to two international wader bird agreements known as the Japanese Migratory Bird Agreement and the Chinese Migratory Bird Agreement (JAMBA and CAMBA). It has also been recognised as having all the required criteria to be listed as a Ramsar site.



Photo 8. Salt marsh of Anderson Inlet

Flooding data

Historical flooding data provided by the West Gippsland Catchment Management Authority (CMA) shows land affected by a 1 in 100 year flood event (refer to Appendix D). The historical flood mapping for Tarwin Lower shows that at times of flood the Tarwin River overflows and floods the nearby rural land between Tarwin Lower and Venus Bay. Evidence of flooding in and around the township appears to have been restricted to Tarwin Lower Road near the river bank. The CMA has initiated a study to improve the estimated 1 in 100 year flooding data, but the outcomes of this research are not yet available.

Acid Sulfate Soils

Acid sulphate soils are wide spread throughout Australia, with an estimated 40,000km2 of coastal soils being considered acid sulphate prone. acid sulfate soils are initially formed under marine conditions and therefore often found in coastal areas. The soils contain iron sulfide layers and when disturbed oxidisation of the iron sulphate results in the formation of sulfuric acid.



The mobilisation of sulfuric acid into the ground water has many impacts including:

- Reducing the water quality of surrounding water ways;
- Toxicity to fish and marine organisms:
- Reduction in biodiversity of surrounding wetland;
- Reduced agricultural productivity;
- Threats to human and animal health; and
- Corrosive impacts on buildings and infrastructure (SGSC, 2004).

The Acid Sulfate Soils Hazard Map Guidelines for Coastal Victoria, shows that the estimated extent of probable acid sulfate soils affects a large area around the edges of Anderson Inlet and a large proportion of the township of Tarwin Lower (refer to Appendix B). The mapping has been designed to indicate where caution is needed or further investigations and analysis is required before any land is disturbed.

Cultural Heritage

The Gunai / Kurnai and the Boonwurrung Aboriginal peoples have a strong traditional association with the South Gippsland coast. Many examples of prior occupation by these Aboriginal groups have been identified as a result of regular survey and investigation. These include coastal shell middens, flaked stone artefact scatters, burial sites and other camp sites. This evidence continues to increase as further heritage assessments are undertaken.

In Victoria, all heritage places, sites and objects are protected under State (Archaeological and Aboriginal Relics Preservation Act 1972) and Commonwealth (Aboriginal and Torres Strait Islander Heritage Protection Act 1984) legislation. Development of Victoria's coastal fringe that does not consider Aboriginal heritage at the planning stage has the potential to adversely affect these values.

The Central Gippsland Aboriginal Health and Housing Co-operative Limited (CGAHHC) in Morwell is the organisation with statutory authority for Aboriginal heritage. The CGAHHC and the Gippsland regional Cultural Heritage Unit provide advice on any Aboriginal heritage matters.

A new State Aboriginal Heritage Act has been developed and will be introduced in the near future (possibly early 2007). Broad protection of Aboriginal heritage places, sites and objects will remain although some other statutory arrangements across Victoria will be different. It will be necessary to review this section when this Act is in place. Details of the new Aboriginal Heritage Act are available at www.heritage.gov.au.

Lot Supply and Demand

Residential

The table on the following page outlines the numbers of vacant and improved residential properties in Tarwin Lower.

There is a substantial supply of vacant residential land available in Tarwin Lower. Of the 164 residential lots in the town, 96 have been developed and 68 are vacant. Of the vacant residential land available 84% is in ownership of non-resident ratepayers.

Commercial

There are 13 commercial properties in Tarwin Lower, with a limited supply of vacant properties for development (5).



Land Use	Number of properties	70 01 10101
Residential Dwellings	96	54%
Vacant Residential Lots	68	38%
Commercial Properties	8	5%
Vacant Commercial	5	3%
Land Owners	177	100%

Source: Connell Wagner, compiled from a count of properties and aerial photography

Dwelling Approvals

There has been generally very slow growth in dwelling approvals in Tarwin Lower, with only 15 dwellings approved between 2002 and 2004 (inclusive). Other building applications generally included sheds and outbuildings.

There is also a distinction between the number of building approvals granted and the number of dwellings that have received a Building Occupancy Permit (BOP). The BOP is evidence of a dwelling approval being carried through to completion of construction and fit for habitation. In Tarwin Lower the proportion of dwelling approvals that have carried through to a building occupancy permit since 2002 has averaged 40%. The approvals that have not proceeded to BOP stage could represent dwellings still under construction as well as those not yet commenced. Accordingly, these figures need to be treated with caution.

	2002	2003	2004	Total
Total Dwelling Approvals	4	6	5	15
Proportion with BOP	50%	50%	20%	40%

Source: South Gippsland Shire Building Approvals Database, 2003 to 2005

Dwellings Completed.

There are 96 private dwellings in Tarwin Lower of which 33 (approximately 34%) are holiday homes. Since 2002 there have been 6 additional dwellings developed in Tarwin Lower.

Urban Development Proposals

Amendment C19 proposes the rezoning of part of the existing Golf Course on the western side of the town currently zoned Rural to Low Density Residential. The proponent has indicated a yield of 10 additional lots as part of potential future subdivision. The amendment is currently on hold at the direction of Planning Panels Victoria pending further investigation into flood data at the site and pending the outcome of the Tarwin Lower Urban Design Framework.

Infrastructure

A preliminary investigation has been undertaken of the current infrastructure capacity of Tarwin Lower, and the requirements for future upgrading.

Water Service Infrastructure

There is currently no reticulated water supply service provided by South Gippsland Water. Potable water is obtained from rainwater tanks and bore holes on individual properties. Based on the current developed lot numbers of approximately 104 the estimated current potable water demand is approximately 18 ML/year. It is expected that demand will increase to approximately 43 ML/year based on forecast growth over the next 20 years (Source South Gippsland Water).

South Gippsland Water provides no reticulated wastewater service to Tarwin Lower. Waste water in Tarwin Lower is managed through on-site waste water disposal systems, the majority being septic systems.



Investigations by Southern Rural Water have identified ground water contamination from septic tanks in Venus Bay and Sandy Point. In response to this and to help address this issue the Environmental Protection Authority (EPA) has introduced interim guidelines on the protection of groundwater in townships with sandy soils. The predominate geology in the Tarwin Lower area consists of low level terrace deposits with sand, silt and clay. Therefore the guidelines prepared by the EPA can be used as a reference document although some information may not be directly relevant.

In response to issues relating to wastewater disposal, Council has developed Wastewater Management Plans for the townships of Nyora, Poowong, Loch and Meeniyan. Following direction from the State Government, this process has now evolved into the development of a Municipal Domestic Wastewater Management Plan (DWMP) that has recently been exhibited in draft form. The DWMP incorporates the Tarwin Lower township and sets out a future action plan to assess and address issues relating to wastewater management.

Council also has an adopted list of townships prioritised to reflect their need for reticulated sewerage infrastructure. Tarwin Lower is high on that list of Councils preferred townships for sewerage infrastructure. It is also understood that South Gippsland Water has investigated the options for installing reticulated sewerage for Tarwin Lower, however, no funding has been identified for future implementation.

Services and Roads

Current power and telecommunication services are reported to be generally acceptable and upgrades to improve reliability are not perceived by the community to be of a high priority.

Tarwin Lower Road which is the principal access road leading into the town is a sealed, single lane carriageway in each direction This road is listed as a Road Zone Category 1 which is managed by Vic Roads. The main connecting roads around Anderson Inlet are sealed.

Sandy soils provide a natural means of infiltration for stormwater runoff from hard pavement/roof surfaces. The use of grassed swales as the major form of conveyance of storm flow is preferred as it assists in maintaining the informal ambience of the town and serves to provide a secondary level of treatment to the stormwater before discharge to adjoining waterways.

Community Infrastructure

There are several community infrastructure elements in Tarwin Lower, these include:

- A sporting precinct to the west of Walkerville Road which includes a football oval netball courts, bowls club and surrounding open space.
- A community precinct to the west of Walkerville Road and north of the sports oval that includes a primary school, health centre, age care facility, plantation, recreation and open space areas.
- A double lane boat ramp with a finger jetty and car park with toilet facilities. There is also a long picnic table area in the Recreation Reserve.
- A range of boardwalks, viewing platforms and picnic areas along the riverbank, which provides both local residents and visitors the opportunity to enjoy the atmosphere and experience of the Tarwin River.







Photo 9: Park and Facilities

Photo 10: Boardwalk and Viewing- fishing Platforms

5.2 Planning and Land Use

Management of land use is achieved primarily through the application of State Policies and Planning Schemes, in this case the South Gippsland Planning Scheme (refer Section 3.2 of Regional Context). The use of land is controlled to limit impacts on the environment and so townships can evolve and develop in a sustainable manner. Planning Schemes provide specific controls with regard to the preferred land use for each parcel of land.

Through the application of the South Gippsland Planning Scheme controls, Tarwin Lower has developed into a quiet, coastal hamlet. Housing is concentrated around the centre of the town, with low-density development on the western outskirts of the settlement, which provides a transition to the surrounding rural environment.

Below is a description of the Planning Scheme policies and controls that apply to Tarwin Lower. An analysis of the application of these controls in Tarwin Lower is also provided.

Local Planning Policy Framework

The Municipal Strategic Statement sets the broad strategic framework and direction for the South Gippsland Municipality, and identifies key issues and areas to be addressed. Within the South Gippsland MSS particular areas that relate to Tarwin Lower include:

- Environment and Cultural Heritage; and
- Small Towns.

Sub Clause 21.04-1 Environment and Cultural Heritage

Council aims to ensure that sustainable land use and development occurs. It highlights areas within the Shire, particularly coastal areas that face increasing environmental pressure from residential development. This pressure is likely to continue in the foreseeable future, given the Shire's natural beauty and proximity to Melbourne.

Sub-Clause 21.04-10 Small Towns

- This sub-clause aims to maintain a network of small towns with a range of roles and services designed to cater for the needs of residents and visitors to the Shire. Additionally, this sub clause aims to provide an attractive and safe residential environment and strengthen the economic future of the small towns within the Shire.
- A key objective of this sub-clause is to promote Tarwin Lower as an important local centre serving the needs of the local community and tourists in the southern portion of the Shire. The implementation of a townscape improvement program is recommended for Tarwin Lower, aimed at revitalising the existing town centre and integrating the settlement with the Tarwin River.
- Clause 21.04-10 also makes note of zoning strategies currently in place for townships including Tarwin Lower.
 - The Township Zone has been applied to facilitate a range of suitable uses within the towns.
 - The Rural Living Zone has been applied to the existing rural residential areas surrounding small towns.
 - The *Rural Zone* has been applied to land outside the existing town boundaries to restrict the expansion of the towns.

These sub clauses will guide the objectives and strategies developed as part of the UDF.



Zoning

A key element of planning controls is the application of zones, which guide land use and development within appropriate areas of the Municipality (refer Map 8). Zones control the uses that can occur on particular parcels of land, and there are four different zones within Tarwin Lower. These include:

- Township Zone;
- Low Density Residential Zone;
- Public Conservation and Resource Zone:
- Rural 7one.

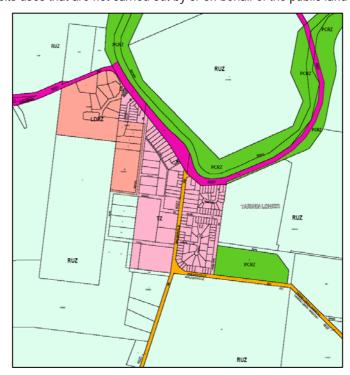
The zoning of Tarwin Lower and surrounds reflects the 'small-hamlet' nature of the settlement, as well as the surrounding natural environment. The use and application of each zone is discussed below.

A significant proportion of the built up area of Tarwin Lower is zoned Township, which allows for a variety of uses including residential, commercial and industrial. The zone requires that services must be provided to new subdivisions and development, and a strong emphasis is placed on the established neighbourhood and township character when deciding on applications for new developments.

The Low Density Residential Zone applies to land on the north western edge of the town. Uses allowed in this zone are generally semi-rural/residential. Limited commercial uses are also permissible in the Low Density Residential Zone. There is a threat that further expansion of the existing Low Density Residential Zone will result in the possibility of flooding and exposure of acid sulphate soils.

The Rural Zone applies to land surrounding the Tarwin Lower township. The purpose of the Rural Zone is to promote agricultural and horticultural uses, whilst allowing for limited residential and commercial uses in appropriate areas.

Land on both banks of the Tarwin River, and within the Tarwin Lower Flora and Fauna Reserve is zoned Public Conservation and Resource. The intent of this zone is primarily to protect and conserve the natural environment, whilst allowing for appropriate resource based uses. This zone effectively prohibits uses that are not carried out by or on behalf of the public land manager.



Map 8: Zoning Map of Tarwin Lower



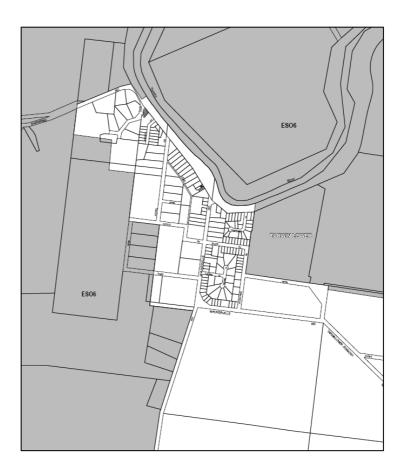
Source: DSE Planning Website

The Township Zone consists of an area of approximately 34 hectares. It includes a primary school and a large recreational area including a sporting oval, courts and amenities. Of approximately 164 residential lots in the township, 38% are undeveloped. The current Low Density Residential Zone occupies approximately 18.5 hectares (40 lots) and is approximately 50% developed. The flora and fauna reserve occupies approximately seven hectares.

Overlays

Overlays are additional controls over land that offer a further level of direction in relation to areas that have a particular sensitivity or unique circumstances. While no overlays affect the township of Tarwin Lower, the surrounding land to the north, south and west is subject to the Environmental Significance Overlay.

The Environmental Significance Overlay Schedule 6 applies to land on the northern side of the Tarwin River, land generally to the east of Fauna Park Road, and to the west of Tarwin Meadows Road. The ESO 6 relates to areas susceptible to flooding. Within this overlay a permit is required for a majority of buildings and works, to ensure that the free passage, and temporary storage of floodwater can be maintained, and to minimise flood damage, soil erosion, sedimentation and silting (refer Map 9).



Map 9. Environmental Significance Overlay 6 Source: DSE Planning Website

Adequacy of Current Planning Controls

The shortcomings of the South Gippsland Planning Scheme relate to the Municipal Strategic Framework and Local Planning Policies, in particular the lack of a "vision" or township policy for Tarwin Lower. If the growth of the town continues as expected, issues of town character and urban design will become more important. As such there are gaps that exist in the current planning controls that need to be addressed and a detailed analysis of these gaps and inadequacies is provided below.

Local Planning Policy Framework

Clause 22 of the LPPF has limited relevance to Tarwin Lower. The Local Planning Policy needs to be expanded upon to include a set of objectives and design guidelines that will reinforce the preferred vision for the town and that reinforce protection of land likely to be exposed to flooding and Acid Sulphate Soils.

Township Zone

The Township Zone provides the flexibility for a wide variety of uses that may be required in small towns. In the case of Tarwin Lower the Township Zone appears to be appropriate given the land use mix that has occurred over time. Despite this, further consideration of supporting planning controls needs to be considered to prevent inappropriate commercial and industrial uses from expanding beyond the current boundary of the commercial precinct.

New Rural Zones

The Department of Sustainability and Environment (DSE) has introduced new zones into the Victorian Planning Provisions that guide the function and use of rural zoned land. The new zones include:

- A *Farming Zone* which replaces the Rural Zone. This will be the new zone for agricultural areas.
- A Rural Activity Zone. This is a new zone providing flexibility for agriculture and other land uses to co-exist.
- A Rural Living Zone. This upgrades the existing zone and will be the new zone for rural residential areas.
- A Rural Conservation Zone. This replaces the Environmental Rural Zone and will be the new zone for areas with significant environmental considerations.

The application of new Rural Zones to rural and surrounding Tarwin Lower will be considered by South Gippsland Shire Council as part of a separate project and does not form part of this study.

Low Density Residential Zone

The Low Density Residential Zone provides a transition between the Township Zone and the surrounding Rural Zone. This area is in varying stages of development and offers potential buyers a choice of purchasing larger allotments as opposed to more conventional lots associated with the Township Zone. Limited commercial uses are also permissible in the Low Density Residential Zone. However there is a threat that with further expansion of the Low Density Residential Zone there is also the possibility of exposure to further flooding and acid sulfate soils.

Overlays

There are currently no overlays that reinforce town character and visions for suitable design outcomes in Tarwin Lower. The only existing overlay in Tarwin Lower relates to land that is susceptible to flooding. There is no specific overlay control to support and encourage desired urban design outcomes for the town or particular environmental and landscape objectives. The application of a Design Development Overlay would assist in achieving the objective of reinforcing particular urban design outcomes for the hamlet, however the application of this overlay should be restricted to the commercial area along Evergreen Road. From examination of this particular location there is clearly a threat of continued ad hoc commercial development which could otherwise be managed through appropriate design guidelines which control building heights, setbacks, landscaping and signage. The introduction of a DDO for this area will also assist in developing an entry statement for the hamlet.

Environmental Significance Overlay 6 – Areas Susceptible to Flooding

This Overlay serves to identify land that is at most risk of flooding, and to provide controls on development in areas likely to be effected by flooding. The aim of the overlay is also to generally protect water bodies and watercourses. The ESO 6, however, only identifies those areas at risk to flooding, and is not based on reliable flood mapping. It is therefore essential that further investigations are undertaken to improve the reliability of flood data which can then be translated into a Land Subject to Inundation Overlay (LSIO). This overlay is considered to be the most appropriate planning tool to address issues relating to definitive flood data, and therefore it is recommended that the LSIO replace the existing ES06.

In addition to reinforcing the importance of flood data, there is also a clear absence of quiding controls that would assist in addressing areas of land affected by acid sulfate soils. In the absence of an appropriate overlay that could be used to address this issue it is considered appropriate that a Local Planning Policy is introduced into the Planning Scheme which can provide guidance in relation to development on or near sites which may be affected by ASS. In preparing such a policy careful consideration should be given to the recommendations of the Coastal Spaces-Recommendations Report (April 2006), which reinforces commitment to the objectives of a National Strategy for the management of coastal acid sulfate soils.

5.3 Community and Agency Views

As detailed in the Project Approach, two actions undertaken to develop ownership of the project and collection of information was the completion of an Agency Workshop and three community workshops. A summary of this consultation is detailed below. The complete summary of the Tarwin Lower community workshops can be found in **Appendix C**.

Agency Workshop

The Agency workshop was undertaken in a SWOT analysis format.

The main strengths and opportunities seen by the agencies include:

- The role of Tarwin Lower as a service town;
- The primary school and sense of community it creates in the town;
- The recreation reserve and its role as a formal sports hub for the region;
- The boat launch and access into Anderson Inlet;
- Fishing and recreation opportunities along the river;
- Fishing platforms, the boardwalk access to the Tarwin River and Anderson Inlet;
- Potential for retirement units on Council land.



The main weakness and constraints seen by the agencies include:

- Lack of reticulated water and sewerage;
- Mosquito outbreaks;
- Flooding constraints.

Community Workshop

Three community workshops were held to capture the views of the permanent and non-permanent residents of the community.

Information collected at the workshops was focussed on:

- What the community valued about Tarwin Lower;
- The community's vision for the future; and
- The issues that may stop the vision being realised.

The Tarwin Lower community values the family friendly nature of the township, its focus on the local community, and its role as a service centre and gateway for the local region. The community also values the local school and commercial facilities but would like to see more facilities provided such as aged care, an ambulance station and transport services.

The Tarwin River is a focal point valued by the community for its environmental and recreational values. Measures should therefore be taken to enhance these opportunities through more detailed Master Plans.

The community also envisages the town growing to accommodate a larger population provided that appropriate employment opportunities are available. Further development in Tarwin Lower however is constrained by acid sulfate soils and land affected by flooding. These constraints place a burden on growth and as a consequence opportunities for expansion must be treated with caution.

Other outcomes from the workshop included recommendations for Master Planning in defined areas of the hamlet. The areas suggested include:

- The tennis court/recreation area;
- The river bank and fishing platforms;
- The playground; and
- Nature reserve:

Exhibition of draft documents

The draft Settlement Background Papers and Structure Plans for the UDF project were exhibited for public comment over a six week period between 23 January and 11 March 2006. A total of 170 submissions were received, 26 of which were received in relation to Tarwin Lower. A summary of the information and concerns in the submissions is detailed below. A response to these comments can be found in Appendix E.

- There was wide ranging support for the proposal to develop accommodation on the existing golf club site and concern about the possible closure of the Tarwin Lower Golf Course. The Tarwin Lower Golf Course is a valuable asset and the owners indicated that they need to subdivide the land in order to keep it viable.
- Requests were made to reconsider the findings of the study to allow part of the golf course to be redeveloped. Some submitters outlined that if the golf course closes visitation is likely to decline.



- There was some concern that the community was not consulted in relation to the Structure Plan and that the public exhibition period was too brief and poorly advertised. It was also suggested that there was no consultation in relation to the future of the golf course. Some believe that selective consultation occurred, and that there should have been a meeting at Tarwin Lower (not Venus Bay).
- Some submitters believe that the direction of future growth should be east and south following the trees and sand ridge, and guestion the justification for growth to the west.
- There was some disagreement with the suggestion for the tennis court to be relocated to the recreation ground and a suggestion that the area be enhanced through an upgrade and addition of picnic/bbg facilities.
- Some submitters welcome acknowledgment of potential for residential development of their land however it was suggested that their land should be included within the proposed township boundary. It was also suggested that development of these areas should not be dependent on existing vacant lots being developed within the hamlet.
- There was concern about 'sweeping statements' made as to the extent of acid sulphate soils and flooding, which should be confirmed before the report is finalised.

5.4 Settlement Analysis

This section identifies issues that have the potential to impact on the future use and development of Tarwin Lower. The rationale for any future change or development in Tarwin Lower is demonstrated by addressing these issues through a vision, objectives and strategies. The vision, objectives and strategies that provide the future strategic direction for Tarwin Lower are identified in section 5.5.

A general SWOT analysis was undertaken to guide the issues investigation. The diagram below provides a summary of the strengths, weaknesses, opportunities and threats for Tarwin Lower in relation to planning, land use and development.

Strengths	Weaknesses
 Established recreation area and community centre Gateway for local region Service centre for surrounding area School Small commercial base Provision for aging population 	 No ambulance station Lack of public transport Lack of adequate road access Commercial area restricted due to proximity to river Lack of built form and character in commercial precinct Lack of reticulated water and sewerage

Opportunities	Threats
 River frontage improvements and integration with town Development of commercial and light industrial uses Community would like to see medium-high density residential on higher ground (500-1000sqm lots) Continued education and interpretation about flora and fauna of the river 	 School may not continue Inappropriate development Flooding, restricting available land for development within township Potential Coastal Acid Sulfate Soils Dust and sediment from gravel roads leading to Tarwin River

Key Issues

Loss of town character through introduction of hard edges, formal road landscaping and sealing of roads

The town character of Tarwin Lower could best be described as that of a typical small rural settlement. This is reinforced by the form of the existing road design, which consists predominantly of sealed roads with unmade shoulders. It is expected that with increased visitation there is likely to be increased pressure placed upon the road infrastructure. This will result in increased pollution through dust emissions and sediment run off. A solution to reduce dust and erosion is the implementation of a more formal road system including fully sealed roads with kerb and channels, however this may reduce and threaten a key characteristic of the town character.

Lack of reticulated water and sewerage

Council acknowledge the need for reticulated sewerage to be provided to Tarwin Lower as a priority township for the future. However, sewerage reticulation is unlikely to occur in the short term as a consequence of a recent announcement from the State Government advising that short term funding would not be released for the implementation of a sewerage scheme for the township.

Loss of town character through urban development

The dwellings and buildings within Tarwin Lower are of two basic types, low-key older style holiday homes, and larger more established homes. The older style holiday homes with wide frontages set amongst the vegetation add charm to the low-key character of Tarwin Lower. As development occurs and existing dwellings are replaced, there is a threat that future dwelling stock may not be in keeping with the town character.

Enhancement of town character through tighter design and control of the commercial area

Currently the commercial centre of Tarwin Lower is situated along Evergreen Road. This area consists of a petrol station, hardware store, newsagents, hotel, motel and other commercial uses. In the *Tarwin* Lower-Venus Bay Strategy Plan 1993, it was recommended that small cottage industries be encouraged in the town. Issues were also raised in relation to identifying appropriate locations for commercial activities. In terms of town character there is a threat that the existing commercial centre may continue to develop in an ad hoc fashion unless a boundary is established which clearly defines the commercial precinct and design quidelines are introduced to create a cohesive and attractive character for the commercial strip. Reduction in existing advertising signage and restrictions on future advertising could also improve the commercial streetscape.

Enhancement of town character through improved linkages between the town and the river

The community has emphasised the importance of the Tarwin River frontage and the need to integrate this area with the main thoroughfare of the town. Although glimpses of the river are noticeable when travelling by car through the town, there are opportunities to improve visual connections through signage and improved pedestrian access. In this regard, opportunities exist for considering the relocation of the tennis courts to an appropriate location within the recreation reserve. This will provide a logical alternative to the river frontage, which at present has no defined link to other nearby sporting



facilities. Through the relocation of the tennis courts, further opportunities will be created for improved linkages along the river as well development of barbeque and picnic areas.

Enhancement of town character through improvements to town entries and traffic circulation including bike paths and walking tracks

Town character usually stems from the established layout and access circulation of a town. Currently Tarwin Lower has three entry points, the main entry from the direction of Tarwin and Inverloch along Evergreen Road, the entry from Venus Bay along Evergreen Road, and the entry from the south via Walkerville Road. These entry points can be enhanced through signs and landscaping to create a real sense of arrival at the hamlet. In addition, circulation to and around the town is focussed on vehicle access only rather than bicycle tracks and pedestrian links within the hamlet and between Tarwin Lower and Venus Bay. In this regard construction of the Tarwin Lower-Venus Bay bike track (in progress) will address the issue of circulation within and between these townships.

Threat to the identified town character through an increase in housing density

Based on current and forecast trends in both population and dwelling approvals it is unlikely that dwelling densities will increase beyond one dwelling per lot within the foreseeable future. The current housing density is in keeping with the rural town character and it is likely that this will remain. If however, there were proposals to increase housing density, it should only occur if the town's character is not compromised.

Loss of vegetation from installation of new or upgraded septic systems that need a specified amount of land for filtration

A source of vegetation loss is through clearing to accommodate new or upgraded septic systems. The EPA Guidelines on Septic Systems for Townships with Sandy Soils specifies the area required for a septic system irrigation facility. These values are approximately 5 to 10 times greater than what was previously required, and hence there is a potential for loss of further vegetation in order to accommodate these new systems.

Loss of vegetation from new development footprints

In the absence of suitable planning controls, there will inevitably be opportunities for land owners to maximise the development potential of their land to accommodate larger dwellings and outbuildings. Clearly there is a threat that significant tracts of vegetation may be cleared unless design guidelines are established which recognise the importance of vegetation in certain areas.





Photos 11 & 12: Tarwin River and surrounding vegetation

The impact of failed septic systems and effluent discharged into the environment

Many people are generally unaware that septic tank systems are not designed as a permanent form of waste treatment. As these systems age ongoing 'decay' may cause eventual failure. When this occurs raw or partly treated sewerage may be discharged into the environment. Septic system breakdowns can also occur when usage is irregular (eg: peak times in summer, off peak in winter) resulting in the potential for transmission of disease and environmental degradation. The soil in Tarwin Lower also consists of silt, sand and clay. In sandy soil areas there is potential for seepage into the soils and ground water. Seepage from septic tanks may contain heavy metals, toxic organisms, nutrients and micro organisms which are considered a source of water pollution. The impacts of septic systems on the surrounding environment include, alga blooms, toxicity to native flora and fauna and contamination of ground water. Seepage may also rise to the surface and enter directly into waterways and coastal waters (SGSC, 2004).

The extent of flooding is seen as a constraint to further development in Tarwin Lower As noted under Section 5.1 flooding has been recognised as having occurred along Evergreen Road and over rural land between Tarwin Lower and Venus Bay. Some flooding has occurred on the west side of the hamlet, which is currently undeveloped. The extent of flooding is seen as an environmental constraint and development should not be encouraged in these areas until the full extent of potential flooding is understood.

Potential for Coastal Acid Sulfate Soils to be disturbed through the development of land Coastal Acid Sullfate Soils (CASS) has been identified in the Tarwin Lower area and part of the township is already developed in areas that have been identified as being potentially affected by CASS. The primary objective of managing acid sulphate soils is to avoid disturbance, which would otherwise create potential for environmental damage. Activities likely to disturb CASS include excavation and drainage of coastal swamp areas. Careful consideration therefore needs to be given to promoting development of greenfield sites until the true extent of the problem is identified.

The impact of incremental urban growth outside of townships on the landscape Incremental growth of dwellings outside of the main township area can create strip development and urban sprawl. This in turn threatens the shape and character of the hamlet and leads to loss of landscape values between townships. There is also the potential for development pressure to create strip development between Venus Bay and Tarwin Lower.



Photo 13: Landscaped Area of Riverfront.

Impact of population growth on Tarwin Lower

It is predicted that with the general Victorian population increase and the boost of the 'sea change' phenomena, the population of Tarwin Lower and other surrounding coastal areas is also expected to increase.



The permanent population is predicted to increase from 139 in 2001 to 304 in ten years and while there is no data for the predicted increase of holiday residents it is likely that a proportion of vacant sites owned by non permanent residents will be developed as holiday homes. On the basis of this information growth within the hamlet will continue to be slow within the foreseeable future.

Impact of development on sites of cultural heritage significance

Through AAV, the Department for Victorian Communities (DVC) has responsibility for administering cultural heritage legislation which includes the Commonwealth Aboriginal and Torres Strait Islander Heritage Protection Act 1984 and the Victorian Archaeological and Aboriginal Relics Preservation Act 1972. Section 5 refers to the importance of South Gippsland to the Gunai/ Kurnai and Boonwurrung Aboriginal peoples as a place of cultural heritage importance. As such there is a need to protect Aboriginal heritage places that may be identified within the Shire and which need to be managed through a series of appropriate guidelines. A new State Aboriginal Heritage Act has been developed which is likely to be introduced in 2007, and which will require a review of current statutory arrangements. It is expected that this legislation will establish clear guidelines for the preservation and management of sites considered to be of cultural heritage significance.

5.5 Strategic Directions

For Tarwin Lower to evolve and develop in line with policy, legislation and government and community aspirations there is a need for a common vision and objectives and strategies to realise such a vision.

Vision

This vision has been developed from the values expressed by the community, planning policy and other relevant influences. In the future Tarwin Lower will be known as:

- A small country hamlet with a vibrant supportive community.
- A hamlet where the community will have access to infrastructure that supports community growth such as, local schools, sporting facilities, aged care and health facilities and recreation and open space areas.
- A hamlet which has a healthy commercial precinct and which provides services to Venus Bay and surrounding rural areas.
- A hamlet where future population growth will be promoted within the existing township boundaries, and clearly defined growth areas to be confirmed following detailed investigation of the extent of site constraints associated with issues including flooding and acid sulfate soils. Development will be unobtrusive and demonstrate the low-key character of the hamlet.
- A place that provides an important link for recreational access to the Tarwin River and Anderson Inlet.
- A place in which environmentally sustainable practices are promoted and widely used.
- A place for day tourists as well as being a place where residents will have convenient access by foot or bicycle to all its features and facilities.

With regard to its regional context, the role of Tarwin Lower will be as a Small Hamlet supporting a permanent population. It will be a service centre to Venus Bay and surrounding areas and will rely on Leongatha for access to major retail, industrial and commercial facilities.



Objectives

To realise this vision the following broad level objectives are required. These link to the strategies identified in Section 5.5.

Managing Growth

- Where demand can be demonstrated, facilitate development within the existing town boundary and clearly defined growth areas to be confirmed following detailed investigation of issues including the extent of flooding and acid sulfate soils (refer to strategies 4 & 5).
- Maintain the low-key rural character of the hamlet and enhance the character of the commercial precinct. (Refer to strategies 1, 2, 3 & 4).
- Promote development that will respect and enhance the rural character of the hamlet (refer to strategies 1, 2, 4, 5 & 6).

Enhancing Environmental Benefits

- Promote environmental sustainable principles within the hamlet (refer to strategies 7-11).
- Protect the environmental values of the Tarwin River environment and Anderson Inlet (refer to strategies 10&11).

Balancing Service Provision

Provide infrastructure services that address the ongoing needs of the community while protecting the environmental values of the area (refer to strategies 1, 4, 7, 8, 9, 10 & 11).

Strategies

To implement and achieve these objectives a range of detailed strategies are required. These include:

Managing Growth

- 1. Develop appropriate planning controls and policy provisions to reinforce the identity of the commercial precinct including siting and design aspects, built form, materials, colours, fencing and landscaping treatments.
- 2. Develop guidelines to improve the design of key entry points into the township through the implementation of signage and planting schemes.
- 3. Develop a Master Plan for the town which focuses on creating a cohesive commercial precinct, defined open space linkages and frontage to the Tarwin River, and pedestrian and cycling links around the town and to Venus Bay.
- 4. Encourage infill development of suitable vacant lots within the Township Zone and Low-Density Residential zone before considering any further expansion beyond the town boundary.
- 5. Define the hamlet boundary through implementation of a Structure Plan.
- Maintain the rural buffer between Tarwin Lower and Venus Bay.

Enhancing Environmental Benefits

7. Continue the development of the Municipal Domestic Wastewater Management Plan to comprise assessment of wastewater management issues for Tarwin Lower and devise strategies and action plans as appropriate.



- 8. Use best practice water sensitive urban design measures for new developments.
- 9. Review the suitability of ESO6 control and develop amended or new controls as appropriate, to address land potentially affected by flooding and acid sulfate soils.

Balancing Service Provision

10. Review the suitability of planning controls relating to land potentially affected by flooding and acid sulfate soils. Develop amended or new controls as appropriate.



5.6 Managing Growth

A key element of the UDF is the relationship between growth and available land that is suitable for development. In Tarwin Lower there is an expectation that the ratio of permanent residents to nonresidents will continue to fall with continued growth in the number of holiday homes. While the role of Tarwin Lower is to remain as a small hamlet reliant on Leongatha for more substantial services, it can be expected that where suitable land is identified, development should be encouraged that is respectful of town character.

Figure 1.0 in Appendix D shows the key features that constrain the land available for development in the future. These constraints include:

- Areas subject to flooding
- Land potentially affected by Acid Sulphate Soils.

Figure 2.0 in Appendix D provides a Site Analysis of the town, and Figure 3.0 in Appendix D outlines details of Initial Investigation Areas, which were selected for the following reasons:

- 1. The availability of larger lots within the township provide further opportunities for development.
- 2. The existing Rural Zone west of the town have potential for inclusion within the Township Zone and as an extension to the existing low-density residential subdivision created at the River Palms Estate.

Following further detailed examination of the Initial Investigation Areas it was determined that the existing available land within the Township Zone and the existing available land within the Low Density Residential Zone will best accommodate any future growth. The reasons for this are as follows:

- 1. There is an adequate supply of land within the township for the projected population demand.
- The use of this land will minimise impact on land potentially affected by flooding and acid sulphate soils.

Growth Scenario

In the next 15 years Tarwin Lower is expected to experience slow growth. The brief for this project was to investigate available land for development for the next 15 to 20 years. However, it is worth noting that the Planning Scheme requires investigation of potential growth areas to be identified for the next 10 years.

To manage this future growth in line with the vision for Tarwin Lower it is important to develop a growth program. This program is based on reticulated sewerage being installed in the town to respond to the existing problem of contamination from septic systems. Regardless of any future increase in population the problem of contamination needs to be addressed. However, if no reticulated sewerage is to be installed then no further expansion or growth of the town should occur beyond its current boundaries.

The growth program designates what land is available for development, how many lots this equates to, an estimate of how many people this will accommodate and the timeframe in which it will occur. The following assumptions have been made in developing the growth program:

- 1. That the current average household size remains unchanged (2.4 persons per household).
- 2. That the current proportion of non-residents owning vacant residential lots remains unchanged (84%).



- The growth scenario includes estimates on the following:
 - Permanent population.
 - Peak population of non-permanent` residents occupying holiday homes during
 - Total population during the peak summer period.

Land Available for Development

There are currently 68 vacant residential lots including low and conventional density across Tarwin Lower that can be developed. Although some small pockets of land including some remaining lots within the River Palms Estate are affected by possible acid sulphate soils, it is not feasible at this stage of the towns approved growth pattern to prohibit development from these defined areas.

The growth scenario assumes that the existing 68 remaining vacant lots will be developed. The full development of these existing lots will lead to an estimated permanent population of 165 persons with a further 144 persons occupying holiday homes at any one time during the peak summer period. Hence the estimated total population in the peak summer period is expected to be 309 persons. With these assumptions it is estimated that the available land supply will be exhausted in 13 - 14 years.

There may also be potential to accommodate further development within the existing urban areas through re-subdivision of the larger lots within the town when sewerage becomes available This will be dependant upon existing site conditions that will determine whether this option is feasible. There is also uncertainty with the potential impacts of flooding and acid sulfate soils in areas south of the River Palms Estate. This will require further investigation to confirm the extent of the problem before any further development can occur outside the defined settlement boundary.

6. Structure Plan

The structure plan for Tarwin Lower aims to reflect the community's vision for the town and cater for expected growth as highlighted in Section 5 of this Settlement Paper. It is important to note that the structure plan does not identify all of the planning scheme and related controls that will be used to address matters relating to building design, vegetation control, and other matters. This will be addressed in the implementation phase of the UDF process.

In essence the Structure Plan identifies the key strategies within the Settlement Background Paper noting in particular:

- The current and preferred future extent of the settlement, which reflects (where appropriate) a 15 year period having regard to population and development forecasts, infrastructure capacity, settlement role, environment and heritage considerations.
- Identification of the relationship between the settlement and its public land surroundings, assets and values.
- Identification of preferred locations for the land use types required to achieve the vision.
- Connectivity of open spaces.

Below is a summary of the preferred land use patterns set out in the Structure Plan under Figure 4.0 Appendix D. It is envisaged that the format of the Structure Plan will form the basis of the final implementation of the Urban Design Framework for Tarwin Lower.

Proposed Township Boundary

The Coastal Spaces Recommendations Report dated April 2006, advocates the use and establishment of settlement boundaries to:

- Establish a town edge so that the coastal and landscape values of non-urban areas are protected;
- Protect areas of environmental and landscape significance and productive agricultural activity;
- Optimise the use of existing infrastructure and services within settlements to minimise resource use and cost;
- Meet community desires to have separate, clearly identifiable settlements; and
- Provide clarity of what is considered urban and non-urban.

The proposed township boundary for Tarwin Lower is shown on the Structure Plan in Figure 4.0 Appendix D.

- The northern boundary is defined by the commercial precinct which fronts Evergreen Road and the Tarwin River.
- The eastern boundary is defined by the eastern edge of the Township Zone abutting the golf course and the Flora and Fauna Reserve.
- The southern boundary is defined by the edge of the Township Zone abutting Walkerville Road and the Crown Land Reserve.
- The western boundary is defined by the boundaries of the existing Township Zone and Low Density Residential Zone.

Justification for the selection of the east and west boundaries of the hamlet are detailed under the heading of Development Prerequisites.



Development Prerequisites

In context of the population forecasts that have been assumed for the hamlet, caution needs to be applied when considering the release of new land parcels for residential development.

Although it is acknowledged that a high proportion of the existing vacant land within the hamlet is owned by non-resident ratepayers, it is also clear that growth in the hamlet has been slow as evidenced from the lack of residential building approvals in recent years. It is also recognised that the hamlet is constrained by flooding and acid sulphate soils which will require evaluation and assessment before any further growth can be considered outside of the defined boundaries of the settlement.

In acknowledging the need to further analyse these constraints, it is also important to assess the appropriateness of the current boundaries of the hamlet in order to determine where growth could be directed to. To follow is a summary of the assessment made in relation to the eastern and western boundaries of the hamlet, which are considered to be the most logical areas that could be considered for further expansion.

Rural Zone West - School Road & Ripple Landing

The western side of the hamlet has no defined boundary as evident from the lack of distinct edges formed by built up areas. It is also an area which is showing evidence of emerging residential expansion within the River Palms estate. Although this subdivision is developing slowly, its basic structure has been defined and could logically extend south at some stage depending on the outcome of further investigations of site constraints associated with acid sulfate soils and flooding.

The consequence of this emerging development has resulted in the western edge of the hamlet being less distinctive in terms of built character, which is reinforced further by the fact that this western edge consists of three zones including the Township Zone, Low Density Residential Zone and Rural Zone. These factors combined with the fragmented housing development that has occurred in this area and the lack of distinct landscaping buffers suggests that opportunities for expansion would be more appropriate in this location.

Rural Zone East - Golf Course

Amendment C19 affects part of the golf course site on the western boundary of the township. While no decision has been made on the Amendment, it is considered that the current boundary of the eastern edge of the town is better defined by the Township Zone and the Public Conservation and Resource Zone. Although it could be argued that the western side of the hamlet shares similar constraints to the golf course land on the eastern side (i.e.flooding and acid sulfate soils), it is considered that the eastern boundary is already clearly defined by housing, which forms a distinct edge to the hamlet. This edge is further reinforced by the western boundary of the golf course and the flora and fauna reserve.

From an urban design point of view, the Structure Plan recommends that the eastern boundary of the Township Zone and the Fauna and Flora Reserve to the north form the edge of the town boundary.

Having established that the western side of the hamlet is the preferred location for directing any future growth, any immediate expansion west of the township should not occur until the following prerequisites have been met:

- That before any long term development areas are identified to the west of the town boundary further investigation must be undertaken to confirm the extent of acid sulphate soils and flooding.
- That any immediate rezoning to the west of the hamlet should be delayed until a significant proportion of the available remaining vacant lots within the Township Zone and Low Density Residential Zone have been developed;
- Reticulated water and sewerage is made available;



- Further investigation is undertaken to confirm the location of sites of recognised cultural heritage significance: and
- Further investigation is undertaken to confirm the location of sites of recognised environmental significance.

As part of these prerequisites, prospective developers should document findings of their investigations, and in consultation with Council officers confirm whether any specific development guidelines need to be established before development occurs.

As a quiding mechanism for determining when land should be released Council should monitor demand trends to assess the progress of the town's infill expansion, particularly after the introduction of reticulated sewerage. If development pressure is such that demand exceeds the available supply, then Council should apply discretion and release land in stages once any long term development areas are identified. The implementation of a 3-5 year review process should also form part of a guiding mechanism within the Municipal Strategic Statement to inform Council of when to exercise such discretion.

Township Zone and Low Density Residential Zone

In context of the population forecasts that have been assumed for the town it is clear that the existing vacant lots within the Township Zone and Low Density Residential Zone will be sufficient to sustain growth within the hamlet at least in the medium term. The Structure Plan for Tarwin Lower recommends retention of the Township Zone, primarily due to its limited size, which is considered in line with the purpose of the zone. The Low Density Residential Zone, although progressing slowly with new development is fully subdivided and should be retained. It is also acknowledged from a review of Section 5 of this report that the hamlet has no definitive controls that can guide design and built form within the hamlet, and which also provide direction in terms of addressing potential impacts from areas affected by acid sulphate soils in both zones. In this regard a Design Development Overlay is considered to be the best tool to manage design and built form, however the application of this overlay should be restricted to the commercial precinct identified in the Structure Plan. Future development within this precinct requires definitive controls that will reinforce the implementation of a Master Plan for this area. The Master Plan will identify amongst other things streetscape improvements that will provide an entry statement for the hamlet.

Township Zone - Commercial

Consideration has been given to defining the extent of the Commercial precinct; however the Structure Plan does not recommend any rezoning of the Commercial Centre to Business 1, as it is unlikely to be commercially viable given the available data on current and forecast growth rates. The Structure Plan therefore recommends design control measures which will be implemented through appropriate master planning of the town centre, and by introducing a Design Development Overlay with an appropriate schedule that can be used to define the boundaries of the commercial precinct and set design quidelines that can reinforce the recommendations of the Master Plan. Such measures may include controls on building heights and setbacks, materials, signage and landscaping.

Design Controls for Areas susceptible to flooding

It is recognised that reliable flooding data is unavailable which would otherwise assist in determining the extent of the areas susceptible to flooding in and surrounding the hamlet. On the basis of this information it is recommended that further investigation be undertaken to determine the extent of the areas affected by flooding, so that the existing ESO6 can either be amended or replaced with a Land Subject to Inundation Overlay (LSIO). Supporting mapping and definitive controls should then be established to better inform Council officers when assessing particular applications within these affected areas.



Design Controls for Areas affected by Acid Sulfate Soils.

Information available on the location of acid sulfate soils is still lacking in terms of what can be readily translated as guidelines into the Planning Scheme. The Coastal Spaces-Recommendations Report (April 2006), will provide guidance in relation to managing areas affected by ASS. In the absence of suitable overlay controls that could be used to control the use and development of land in areas affected by ASS, it is recommended that a Local Policy be introduced into the South Gippsland Planning Scheme. In preparing a new policy it is recommended that dialogue commence with appropriate officers from the Department of Sustainability and Environment to determine best practice quidelines which are consistent with the National Strategy for the management of coastal acid sulfate soils.

Reticulated Water and Sewerage

In terms of reticulated services the Settlement Background Paper clearly identifies the issues associated with poor septic systems and the need to control development until reticulated water and sewerage is made available to the town. The structure plan notes that growth should only occur once a significant proportion of the available vacant lots within the township have been developed and only when the prerequisites for growth have been met. At this stage Tarwin Lower is identified as being high on the Council priority list of townships where reticulated sewerage is required. South Gippsland Water has developed concepts for reticulation systems, however funding has not been identified and implementation is uncertain.

Transport Movement / Linkages

Key entrance nodes and vehicular, pedestrian and cycling links have been delineated on Figure 2.0 Appendix D and traffic calming should be investigated for the township to ensure pedestrian, cyclist and motor safety. As noted in Section 5.4 construction is underway in relation to the Tarwin Lower – Venus Bay bike track which will assist in improving linkages between both towns.



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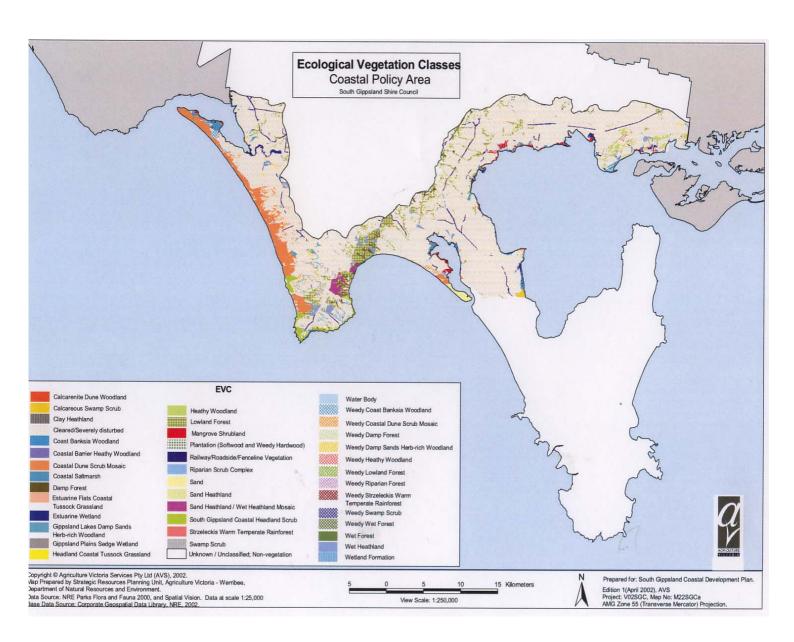
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Appendix A

Ecological Vegetation Class Map





Appendix B

Acid Sulfate Soils Hazard Map



Appendix C

Summary of Community Workshops



Appendix D

Figure 1.0: Existing Conditions - Context Analysis

Figure 2.0: Site Analysis

Figure 3.0: Land Capability Analysis – Future Opportunities for Growth

Figure 4.0: Structure Plan



SOUTH GIPPSLAND

COASTAL URBAN DESIGN FRAMEWORKS

Community Workshops January/February 2005

Summary of Workshop Outcomes for Tarwin Lower

South Gippsland Shire Council has engaged Connell Wagner to develop Urban Design Frameworks (UDFs) for the townships of Venus Bay, Tarwin Lower, Sandy Point and Waratah Bay.

The UDFs will aim to:

- Provide a vision for the towns for the next 15 years.
- Identify town character and actions to retain and enhance the character.
- Provide a structure for the growth of the towns.
- Develop planning principles for areas in between towns.
- Develop Master Plans for certain areas.

A key part of the project is consulting with community, seeking their input on issues relating to the future planning, development and design in each town.

The local community has local knowledge and a history of the area, which needs to be collected as part of the information gathering stage. The community is the future of the area and needs to be involved in the project and listen to other community member's ideas. To this end community workshops have been undertaken.

Below is a summary of the outcomes of the Community Workshops held in Venus Bay on January 18th 2005 and at the Malvern Town Hall on Thursday 17th February 2005. Interested parties were also given the opportunity to submit comments in writing. A summary of the outcomes is provided below. More detail regarding responses to the workshop questions are available in the attachment to this summary.

The questions raised at the workshops required the community to outline their vision for their town, highlight areas suitable for a master plan and respond to issues of town character, growth and the environment.

7.1.1 Tarwin Lower

The Tarwin Lower community values the family friendly nature of the township, its focus on the local community, and its role as a service centre and gateway for the local region. The community also values the local school and commercial facilities but would like to see more facilities provided such as aged care, an ambulance station and transport services.

The Tarwin River is a focal point valued by the community and its significant trees are recommended for protection. The river provides scenic, recreation and livelihood value to the township.

The community sees the town growing to accommodate a lager population in both low density and medium density development provided the appropriate employment opportunities are available. Such development should be undertaken in an orderly and planned manner, with a recommendation to extend residential growth along the Tarwin Meadows Road and commercial/light industrial growth on the Tarwin Lower-Walkerville Road.

Development in Tarwin Lower is constrained by the floodplain and the lack of a reliable electricity supply.

Master Plans are recommended for the following areas:

- Tennis Court / Recreation Area
- River Bank
- Play ground



- Boat Storage
- Nature Reserve
- Fishing Platforms

7.1.2 ATTACHMENT – DATA FROM WORKSHOPS

7.1.3 Tarwin Lower

What to do you value about your town

Recreation area & community centre

River: proximity, potential for integration into community, recreational uses

Hub/gateway for local region

Service centre for surrounding area

Schools (survival of school an issue), commercial (service station)

2. How does your town relate to the surrounding communities and what role does it play in the region?

Service centre for surrounding area

Hub / Gateway for local region (Venus Bay / Inverloch)

Strategy Plan 1993 - Setting up of small cottage industries, issue of where commercial focus for the area is located. Tarwin Lower vs Venus Bay. Needs to be centralised

3. Describe your vision for the town for the next 15 years/

Family friendly

Catering for all age groups (inc young families and older people)

Provision for retirees, aged care facilities (located behind community centre)

Tarwin Lower seen as "San Remo" (focussed on local community)

Venus Bay, Cowes focussed on tourism

Future growth to be staged in a planned/orderly manner

Need for an ambulance station

Enhanced quality of life in elderly, able to stay in local community

Transport facilities – community vehicle?

Keep community facilities (ie bank)

Local growth focussed in Tarwin Lower rather than Venus Bay (build on existing facilities)

Focussed on permanent population in addition to seasonal tourist population

Development of commercial & light industrial facilities (Tarwin Lower – Walkerville Rd)\

Desire to keep spending "in town" ie nursery



4. What style of future development should be encouraged and where?

Future growth to be stage in a planned / orderly manner

Future residential growth along Tarwin Meadows Rd (located away from flooding).

Medium – High residential density on high ground (500 – 1000m2 lots)

Low Density needed for families

Future township boundary – contained within existing node (coastal development plan), roughly within arc from roundabout (nominally 1.5km).

5. Nominate a specific area where a Master Plan could be prepared and what improvements would be gained?

Tennis court – moving recreation reserve, CFA moving? Recreational reserve (oval no 2). Then redevelopment of these areas.

River bank

Toilet block provides opportunity for tourist/buses to stop

Playground incorporated into overall development

Boat house (storage) re canoe club, next to existing toilets

Nature reserve (public open space) – walking track for easy access

Fishing platforms (4 No proposed)

6. How would you describe the town character and what do you most value about it?

Family friendly

Catering for all age groups (inc young families and older people)

Tarwin Lower seen as "San Remo" (focused on local community)

Focused on permanent population in addition to seasonal population

7. Are there particular town character elements that should be maintained and improved and, if so how?

Road access between Tarwin Lower and Venus Bay not good enough, needs widening, improving

Use of bollards/sleepers to protect tree roots (remove parking)

Keep community facilities (ie bank)

Caravan Park? 10 –15 acres? Not too far from shops, recreation

Parking behind commercial shops

Potentially rezone land between hardware and motel to commercial

8. What is the key environmental features and values of the area?

Recreation Area

Tarwin River



9. What is the main environmental issues and threats in and around the town?

River bank verge (b/w road and river) significant trees dying possibly due to compaction from car parking.

Bridge across Anderson Inlet

Fire access, providing alternative road access to the area

10. Are there opportunities to protect and promote the key environmental features? And what infrastructure would you like to see improved?

Old pine plantation to be developed for horse events

Need for service road access to light industrial development

Constraints on bringing in fill to build up areas

Commercial area – parking area available at rear of shops

Sewer, reticulated water is seen as inevitable

Lack of reliable power big issue

Development constrained by flood prone land.

River restricts development of commercial area. Not much undeveloped land available that is zoned commercial.

Future development to be constrained to existing commercial zone

Reference to coastal development plan – identifies future residential growth areas

Aged care facility – needs to be close to existing facilities

Availability of sewerage seen as a limiting factor.

Future population – 2000/3000 people subject to local employment opportunities

Size is not seen as a critical issue – availability of infrastructure critical

11. Are there any other issues you would like to provide comment on?

Are Coastal Development Plans freely available to everybody?



Appendix E

Summary of Comments & Suggested Changes: Responses

Appendix E

Summary of Comments & Changes from Submissions for Tarwin Lower

Summary of Comments & Suggested Changes from Submissions	Recommendation/Response
There was wide ranging support for the proposal to develop accommodation on the existing golf club site and concern about the possible closure of the Tarwin Lower Golf Course. The Tarwin Lower Golf Course is a valuable asset and the owners indicate they need to subdivide the land in order to keep it viable. Submitters requested a review of the recommendations of the UDF, and in several instances expressed concern about a possible reduction in visitation to the hamlet if the golf course closes. Some submitters believe that the direction of future growth should be east and south following the trees and sand ridge and question the justification for growth to the west.	Amend text in Section 6 titled Structure Plan in the Settlement Paper to more clearly justify the expansion of the town to the west rather than the east.
There is some concern that the community was not consulted on the development of the Structure Plan, and the public exhibition period was too brief and poorly advertised. It was suggested that there was no consultation in relation to the future of the golf course land. Some submitters believe that selective consultation has occurred. It was also felt that there should have been a consultative meeting at Tarwin Lower (not Venus Bay).	These comments have been noted for the organisation of any future consultation activities.
There was some disagreement with the suggestion for the tennis court to be relocated to the recreation ground and a suggestion that the area be enhanced through an upgrade and addition of picnic/bbq facilities.	The Settlement Paper justifies the relocation of the tennis courts as part of a broad Master Plan action for the hamlet. Refer Section 5.4
Some submitters welcome acknowledgment of potential for residential development of their land, however would like their land within the proposed township boundary.	No change to the town boundary proposed in the Structure Plan. A series of Development Prerequisites have been recommended.
Some submitters raised concerns in relation to the restrictions placed on growth beyond the town boundary.	As above.
Comment about large lots being subdivided once reticulated sewerage becomes available, however some of these have large gardens and are unlikely to become available for redevelopment.	Noted
It was highlighted that the revised flood extent data indicates land to the west of the township is subject to flooding as a result of overtopping of Tarwin Lower-Venus Bay Road.	Information added to the Structure Plan to indicate that development can only occur once various investigations have been completed, this includes investigations into flooding and ASS.
There was concern about 'sweeping statements' made as to the extent of acid sulphate soils, which should be confirmed before the report is finalised.	Information added to the Structure Plan to indicate that development can only occur once various investigations have been completed, this includes investigations into acid sulfate soils.



Summary of Comments & Suggested Changes from Submissions	Recommendation/Response
UDF has not taken into consideration the Archaeological and Aboriginal Relics Preservation Act 1972 (State) or the Aboriginal and Torres Strait Islander Heritage Protection Act 1984 (Commonwealth).	A paragraph has been included in section 5.4. relating to the impact of development on Cultural Heritage Sites.
The western township zone is over a newly formed recreation reserve extension from Crown Land that is being developed into an equestrian cross-country course.	The Structure Plan altered to show the Recreation Reserve in green.

