



# Glenelg Strategic Futures Plan

## Final Report

Glenelg Shire Council

21 August 2009

# Glenelg Strategic Futures Plan

Prepared for

**Glenelg Shire Council**

Prepared by

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## Executive Summary

The Glenelg Strategic Futures Plan (GSFP) is the culmination of several years of strategic planning by the Glenelg Shire with support from a number of State Government agencies. The GSFP brings together the findings of a number of studies into a comprehensive and integrated assessment of the opportunities for future development within the Shire.

The GSFP relates closely to the Council Plan currently in preparation. The overarching aim of the GSFP is to continue to ensure that the Shire remains a desirable place to live, work and visit.

The objectives of the GSFP are as follows:

- To prepare a detailed sustainable land use and development policy framework that provides for future industrial, residential, commercial and community development within the Shire in the longer term
- To plan for the orderly and sequential development of industry, housing, commercial, and community uses based on the need to accommodate diverse needs over the planning horizon
- To identify appropriate tools to incorporate the review of policy into the Glenelg Planning Scheme
- To implement other aspects of the plan through Council's Governance Structure and other Council policies and operations
- To document appropriate policy instruments to implement the plan.

The community has been engaged on a number of occasions during the preparation of the GSFP. Submissions have been invited on the GSFP with approximately 160 submissions received from 2006 to 2009. An analysis of the submissions reveals a number of key themes that have been identified by the community, including:

- Houses on rural zoned land
- Pressure for development on periphery of towns
- Active coastal erosion
- Future impacts of climate change
- Wildfire management
- Provision of reticulated sewer and water services to smaller towns
- Ongoing vitality of small towns
- Recognition of flood prone land
- Appropriate sites for industry

The GSFP documents the opportunities and challenges faced by the Shire and identifies recommendations aimed at ensuring community wellbeing and a vibrant economy. The GSFP stresses the need to ensure that future development respects natural and cultural heritage.

It is intended that the GSFP will form the basis for major amendments to the Glenelg Planning Scheme and other Council policies.

The legislative context and planning context in which the GSFP has been prepared has informed the outcomes of the GSFP to a considerable extent. Of particular significance to the GSFP is the Victorian Coastal Strategy which identifies settlements along the Victorian Coastline and the growth capacity of these settlements. The Victorian Coastal Strategy identifies the following:

- Portland as the only coastal settlement in the Shire with high growth capacity
- Heywood as having moderate growth capacity
- Nelson as having low growth capacity

- Cape Bridgewater is not recognised as a coastal settlement.

A key supporting document for the GSFP is the Glenelg Industrial Land Use Plan (ILUP) completed in 2007. The ILUP identifies the following key matters:

- Portland is the only urban centre currently capable of supporting a wide range of heavy industrial developments and has one of only four deep water ports in Victoria with industrial zoned areas considered to be of State significance
- A corridor of land between Heywood and Portland (as far north as the previously proposed Heywood Pulp Mill site) has significant potential for future major industry due to access to major infrastructure including major highways, rail, power and gas transmission lines / pipelines.

Another supporting document prepared as part of the GSFP project is the Glenelg Strategic Futures Plan Infrastructure Study, 2009, which found:

- the larger urban areas within the Shire have sufficient capacity in their drainage, water and sewer infrastructure to allow for further infill growth within existing defined town boundaries and for future service enhancements as towns expand
- there is a significant area of Residential 1 zoned land
- land is severely constrained by flooding, sink holes, industrial buffers and drainage problems in Portland

The GSFP identified a number of key issues were identified:

- The Shire faces challenges in managing changing agriculture and business structures:
- planning for future industrial growth
- sustainably managing the environment and dealing with climate change
- The need for a review of the rural zones to be undertaken to determine whether changes are required
- The application of the Rural Activity Zone which has not been applied in the Shire.
- A review of rural residential land to determine where rural residential development should be directed.

Key recommendations of the GSFP include:

- There is a pressing need for Council to establish a clear policy position on the assessment of planning permit applications for dwellings on rural zoned land
- There is a need to determine the future role of many of the smaller townships within the Shire so that residential growth can be directed to appropriate locations
- A housing strategy is required to be undertaken to establish the supply and demand for residential zoned land and to identify where residential growth is to be directed
- There is an urgent need to address the issue of active coastal erosion which has caused a great deal of uncertainty to landowners in the vicinity of Dutton Way
- Wildfire management is a significant issue affecting the Shire, the recommendations of the 2009 Victorian Bushfires Royal Commission should be taken into account when considering Council's role in wildfire management.
- Flood prone land should be recognised in the planning scheme through the application of zones and overlays to control land use and development.
- There is a need for policy support to be provided in the Glenelg Planning Scheme for large scale industry to occur in the Portland – Heywood corridor identified in the ILUP.



The GSFP identifies in some detail the existing planning scheme controls applying to each of the townships in the Shire, the availability of land for residential purposes, relevant opportunities and constraints to development and makes recommendations regarding each township. The body of the report should be referred to for these details for each township and for recommendations pertaining to each town.

The GSFP provides a framework for future land use and development in the Shire and identifies opportunities and constraints affecting the Shire. However it should be recognised that the GSFP also identifies where there are gaps in knowledge such as those relating to the issue of active coastal erosion and climate change.

The recommendations of the GSFP have taken into account feedback received from the local community regarding what the document should address and also advice provided by relevant stakeholders including servicing authorities.

The GSFP will provide the basis for significant amendments to the Glenelg Planning Scheme which will result in a considerably improved planning scheme that will provide the basis for sound decision making. Other Council policies will need to take into account the recommendations of the GSFP to ensure consistency is achieved.

Importantly, the GSFP is designed to provide clear direction regarding future land use and development within the Shire to provide certainty for investment. The implementation of the recommendations of the GSFP in the Glenelg Planning Scheme will take some time, however in the interim the GSFP will provide clarity regarding the direction in which Council is heading.



## 1.0 Introduction

### 1.1 Background

The Glenelg Strategic Futures Plan (GSFP) is the culmination of several years of strategic planning by the Glenelg Shire with support from a number of State Government agencies. The GSFP brings together the results from a number of studies into a comprehensive and integrated assessment of the opportunities for future development within the Shire. The GSFP was originally known as the “Master Community Settlement Plan”, but was re-titled to more accurately reflect the goals of the project.

The following studies were commissioned by Council as part of the GSFP project:

- Glenelg Strategic Futures Plan Infrastructure Strategy (2009)
- Glenelg Flood Investigations (2007)
- Glenelg Industrial Land Use Plan (2007)
- Glenelg Shire Desktop Cultural Heritage Study (2007)

### 1.1 Statement of intent

The GSFP relates closely to the Council Plan currently in preparation. The overarching aim of the GSFP is to continue to ensure that the Shire remains a desirable place to live, work and visit. The purpose of the GSFP furthers the Statement of Intent contained within the Draft Council Plan as follows:

*We will manage the opportunities and challenges faced by Glenelg Shire to provide enhanced community wellbeing and a vibrant economy. We will continue to build quality places within our Shire whilst valuing and respecting our natural and cultural heritage. We commit to providing responsible and responsive governance and decision making for the Shire and will listen to and work with the community in our decision making and exercise of our responsibility.*

The GSFP documents the opportunities and challenges faced by the Shire and identifies recommendations aimed at ensuring community wellbeing and a vibrant economy. The GSFP stresses the need to ensure that future development respects natural and cultural heritage.

### 1.2 GFSP objectives

The objectives of the GSFP are as follows:

- To prepare a detailed sustainable land use and development policy framework that provides for future industrial, residential, commercial and community development within the Shire in the longer term
- To plan for the orderly and sequential development of industry, housing, commercial, and community uses based on the need to accommodate diverse needs over the planning horizon
- To identify appropriate tools to incorporate the review of policy into the Glenelg Planning Scheme
- To implement other aspects of the plan through Council’s Governance Structure and other Council policies and operations
- To document appropriate policy instruments to implement the plan.

### 1.3 Supporting studies

The Shire has undertaken various research activities and studies prior to and during the preparation of the GSFP. The following studies and projects have informed the preparation of the GSFP:



- Aerial photography and Lidar Mapping of the Shire (to enable flood modelling to be undertaken)
- Asset Management Plan
- Community Infrastructure Report
- Physical Infrastructure Review
- Positive Ageing Strategy
- Recreation Strategy
- Township Community Plans for Portland, Casterton & District, Heywood & District, Dartmoor, Digby and Nelson
- Transport Report
- Urban Design Frameworks for Merino and Nelson
- Wastewater Management Plan
- Youth Strategy

## 1.4 Community Consultation

Community engagement during the preparation of the GSFP commenced with the convening of an information session in December 2005 and the convening of a Reference Group Meeting in February 2006. Community consultation workshops were held in Portland, Casterton, Heywood and Nelson in March 2006. A Technical Working Group was formed and first met in May 2006.

Submissions to the GSFP were invited, including to the Industrial Land Use Plan which was prepared to support the GSFP. The Industrial Land Use Plan was exhibited for public comment in December 2006 with public comment received and taken into account prior to finalisation of the Industrial Land Use Plan in April 2007.

The GSFP Community Consultation Report was released for public comment in February 2009 via Council's website, and hard copies were distributed at key community meeting points such as Council's customer service centres and general stores and post offices in smaller townships.

Community consultation workshops were held during February and March 2009 at Portland, Casterton, Nelson, Heywood, Dartmoor, Cape Bridgewater and Digby.

Submissions were invited from the general public from mid February to the end of March 2009, although late submissions were accepted up to mid May 2009.

Approximately 160 submissions were received during the preparation of the GSFP, from 2006 to 2009. Multiple submissions were received from a number of parties. The most recent round of public consultation undertaken between February and April 2009 resulted in approximately 60 submissions. An analysis of the submissions reveals a number of key themes that have been identified by the community, including:

- Houses on rural zoned land
- Pressure for development on periphery of towns
- Active coastal erosion
- Future impacts of climate change
- Wildfire management
- Provision of reticulated sewer and water services to smaller towns
- Ongoing vitality of small towns
- Recognition of flood prone land
- Appropriate sites for industry

It is noted that many of the submissions received and much of the discussion at the community forums has focused on site specific matters rather than on broader strategic issues which are the focus of the GSFP. A significant proportion of the submissions received comprise requests for site specific rezoning of land, most commonly to enable rural zoned land to be developed for residential purposes.

Unfortunately an expectation has developed during the preparation of the GSFP (over a period of three years) that the purpose of the GSFP is to consider site specific issues including the zoning of land. As identified in this report a number of significant strategic initiatives need to be undertaken by Council in order to support any planning scheme amendments for the rezoning of land.

## 1.5 How the GSFP will be used

The plan is intended to:

- Form the basis for major amendments to the Glenelg Planning Scheme and other Council policies
- Integrate with other Council policies synergistically and provide additional efficiencies and benefits
- Be easily updated in accordance with changing requirements and circumstances
- Provide a stronger basis for day to day planning decisions and a firm foundation for the planning and funding of infrastructure in the municipality
- Inform the Council in relation to critical issues such as development of resources and sustainable growth, taking into account environmental challenges
- Identify the appropriate tools to incorporate the review of policy into the Glenelg Planning Scheme
- Guide Council implementation of other aspects of the plan through Council's Governance Structure and other policies and operations
- Provide clearer direction for the future sustainable growth and development of the Shire. As a result, investors will have increased certainty, making the region a more likely location for investment
- Become an important on-line information source to inform private investors and future residents of the Shire about opportunities for development.

## 1.6 Implementation of the GSFP

Implementing the recommendations in the GSFP will be the responsibility of Council, with support from a variety of other government agencies and stakeholders. The next steps for Council will be to:

- Undertake further studies and research on issues detailed in the next sections
- Improve the relationship between the Municipal Strategic Statement (MSS), local planning policies and zonings and overlays to better reflect the strategic objectives of the Shire through a review of the MSS and local planning policies

## 2.0 Legislative and Planning Context

Government regulations, strategies and policies play an integral role in shaping our communities. Changes to the guidelines and implementation of new guidelines can greatly influence the way land is used and developed. Federal, State and local level regulations, strategies and policies all provide direction for land use within Glenelg Shire.

### 2.1 Relevant State, regional and local strategies and policies

#### 2.1.1 State Government Strategies

There is a hierarchy of regulations, policies and strategies that is relevant to and may influence the future of Glenelg Shire. These range from broad Victorian State Government strategies that relate to the entire Victorian coastal area to the Municipal Strategic Statement contained in the Glenelg Planning Scheme.

Relevant State Government policies and strategies include:

- Growing Victoria Together
- A Fairer Victoria
- Our Environment, Our Future
- Victoria: Leading the Way
- The Victorian Transport Plan
- Victorian Greenhouse Strategy
- Victoria's Pest Management Framework
- Our Forests, Our Future
- Victoria's Biodiversity Strategy
- Our Water, Our Future
- Coastal Spaces Landscape Assessment Study
- Victorian Coastal Strategy
- Victorian River Health Strategy
- Native Vegetation Management Framework
- Towards Zero Waste.
- State Planning Policy Framework
- Victoria's Heritage – Strengthening our Communities

Of particular significance to the GSFP is the Victorian Coastal Strategy which was released by the Victorian Government in late 2008. The Victorian Coastal Strategy contains a Coastal Settlement Framework which identifies settlements along the Victorian Coastline and the growth capacity of these settlements. A copy of this Coastal Settlement Framework is provided in Figure 1.

Figure 1: Victorian Coastal Strategy – Coastal Settlement Framework



Source: Victorian Coastal Strategy

A summary of the growth capacity identified in the Victorian Coastal Strategy for each of the towns identified in the GSFP is provided in Table 1.

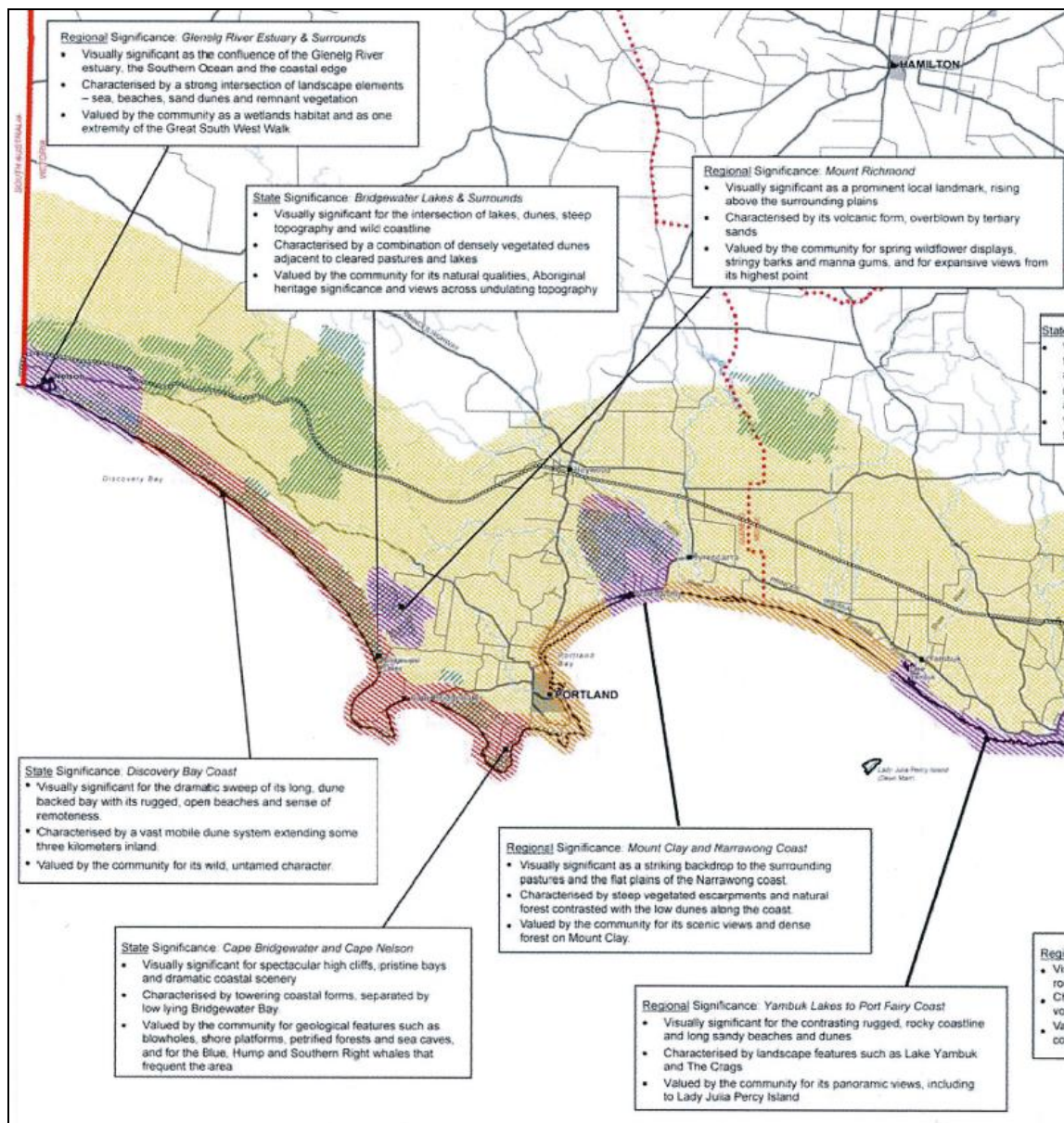
Table 1: Summary of Victorian Coastal Strategy implications for Glenelg towns

Town	Treatment in Coastal Settlement Framework
Portland	High Growth Capacity - only settlement in the Shire able to accommodate large scale residential growth both within and beyond current zoned urban limits
Casterton	N/A – not a coastal settlement
Heywood	Moderate Growth Capacity – some growth potential beyond existing urban zoned land
Narrawong	Not recognised as a settlement – no growth capacity identified
Dartmoor	N/A – not a coastal settlement
Digby	N/A – not a coastal settlement
Merino	N/A – not a coastal settlement
Cape Bridgewater	Not recognised as a settlement – no growth capacity identified
Nelson	Low Growth Capacity – growth to be contained within existing urban or appropriately zoned land primarily through infill development

The Victorian Coastal Strategy is now reflected in the State Planning Policy Framework in all Victorian planning schemes, with a requirement that decision making by local government be consistent with the strategy.

The other significant State planning document of relevance to coastal areas is the Coastal Spaces Landscape Assessment Study which was completed in 2006. This document identifies the significance of coastal landscapes in the Shire and identifies coastal areas of State, regional and local significance. The study recommends that the Significant Landscape Overlay should be applied to all non public land in landscapes identified as being of State or regional significance. These areas are identified in Figure 2.

**Figure 2: Coastal Spaces Landscape Assessment – Significant Coastal Landscapes**



Source: Coastal Spaces Landscape Assessment Study



### **2.1.2 Regional Strategies**

Regional strategies, policies and codes addressing issues ranging from coastal planning to salinity, drainage, biodiversity and various other land use issues will all influence the outcomes of the GSFP. It is important that the GSFP is informed by these strategies, and where possible, supports them.

Regional strategies, policies and codes relevant to the GSFP include:

- The following documents prepared by the Glenelg Hopkins Catchment Management Authority (GHCMA):
  - GHCMA Habitat Network Plan 2007
  - GHCMA Fitzroy Estuary Management Plan 2006
  - GHCMA Glenelg Estuary Management Plan
  - GHCMA Landcare Strategy
  - GHCMA Native Vegetation Plan - Draft 2000
  - GHCMA Nutrient Management Plan 2002
  - GHCMA Regional Catchment Strategy 2003 - 2007
  - GHCMA River Health Strategy 2004 - 2009
  - GHCMA Salinity Plan 2005 - 2008
  - GHCMA Strategy for Existing Rural Drainage Areas 2004 - 2007
  - GHCMA Weed Action Plan 2001 - 2004
- South West Estuaries Coastal Action Plan 2002
- South West Victoria Regional Coastal Action Plan 2002
- Strategy for Conserving Biodiversity in the Dundas Tablelands Bioregion, Victoria

### **2.1.3 Local Strategies**

The Glenelg Planning Scheme was gazetted on December 24<sup>th</sup>, 1998 and was one of the first 'new format' schemes prepared under the Victoria Planning Provisions (VPPs). The role of the Planning Scheme is to ensure planning decisions are made in an orderly and consistent manner to balance competing pressures, minimise negative impacts on the natural and built environment and seek to achieve the best outcomes based on the Shire's strategic direction for sustainable development and State Planning Policy

Various State and Local Policies and Particular Provisions (including one specifically relating to Timber Production) are contained within the Glenelg Planning Scheme and provide direction when considering land use and development proposals.

The Municipal Strategic Statement (MSS) is the foundation of the Glenelg Planning Scheme and spells out Council's approach to land use and development. Local policies, zones and overlays are based on the foundation provided by the MSS. The MSS was reviewed in 2005, and this review led to the current project. It was noted in the Review report that the aim of the GSFP would be to develop a vision and sustainable framework for future development of the municipality through an integrated approach to social, cultural, economic and environmental planning.





The following local policies, strategies and codes are of relevance to the GSFP:

- Glenelg Shire Coastal Action Plan January 2004
- Glenelg Shire Council Municipal Fire Prevention Plan 2003
- Glenelg Shire Council Local Road Management Plan 2005
- Glenelg Shire Council Municipal Emergency Management Plan 2005
- Glenelg Shire Council Policy - Access to Rural Properties 2004
- Glenelg Shire Council Waste and Litter Education Plan 2002 - 2003
- Glenelg Shire Council Waste Management Strategy 2004
- Wastewater Management Plan – A Review of Domestic Wastewater Management In the Shire 2009 [under preparation]
- Glenelg Shire Council Environmental Management Plan [under preparation]
- Glenelg Shire Council Municipal Health Plan [under preparation]
- Municipal Strategic Statement Three Year Review Report 2005
- Glenelg Shire Tourism Strategy 2005 – 2008
- Glenelg Shire Cultural Strategy 2005-2009
- The Sum of Us: The Economic Impact of Arts and Culture in Glenelg Shire

## 3.0 Context

### 3.1 Significant Developments in Glenelg Shire

There has been significant change in land use across the Shire in recent years, including major new developments, policy changes and social and demographic change. These include:

- The Kanawinka Global Geopark was declared by UNESCO in 2008
- The Budj Bim National Heritage Landscape at Lake Condah in Victoria's south-west was included on the National Heritage List in July 2004
- Construction of the Cape Bridgewater and Cape Nelson wind farms
- Port of Portland Land Use Study undertaken
- Portland Bay Infrastructure Plan completed
- Sport & Recreation Strategy completed
- Wastewater Management Plan commenced
- Increased demand for large scale industrial and commercial development
- Massive growth of the dairy industry in the region and subsequent high demand for dairy farms in Glenelg Shire and the region
- Harvesting phase of blue gum plantations commences
- Potential for major geothermal electric power generation in the region is recognised
- A site off the coast of Portland is being considered for a commercial wave energy facility.

### 3.2 Industrial Land Use

Portland is the only urban centre currently capable of supporting a wide range of heavy industrial developments. Portland has one of only four deep water ports in Victoria, therefore the large tracts of industrial land in Portland are considered to be of State significance. Heywood and Casterton have some land with industrial land use zoning, however existing services in these towns may not be able to support heavy industries. The *Glenelg Industrial Land Use Plan* was completed in 2007 and is a key supporting document for the GSFP.

#### 3.2.1 Glenelg Industrial Land Use Plan

The Glenelg Industrial Land Use Plan (ILUP) identifies the following economic strengths of the region, most of which are focused on Portland:

- The Port of Portland (the only deep water port between Melbourne and Adelaide)
- The Portland Aluminium Smelter
- 500kv electricity transmission line from Portland to Latrobe Valley
- Renewable energy sources including; geothermal, wind and other potential forms (e.g. sea based)
- Large quantities of appropriately zoned industrial land available for development
- A plentiful supply of quality water
- Well-established infrastructure including all major forms of transport, sea, road, rail and air
- On-shore and off-shore oil and gas exploration and development, including development of off-shore oil and gas deposits via Port of Portland
- Rural-based activities including the production of wool, prime lamb, beef cattle, dairy cattle, timber and fishing, other horticultural activities such as onions, potatoes, wine grapes etc

The ILUP found that the take up of industrial land has been relatively slow with most activity in Portland. Future industrial land take up is likely to be driven by the extent of growth in large scale processing plants in a range of sectors including timber harvesting and processing.

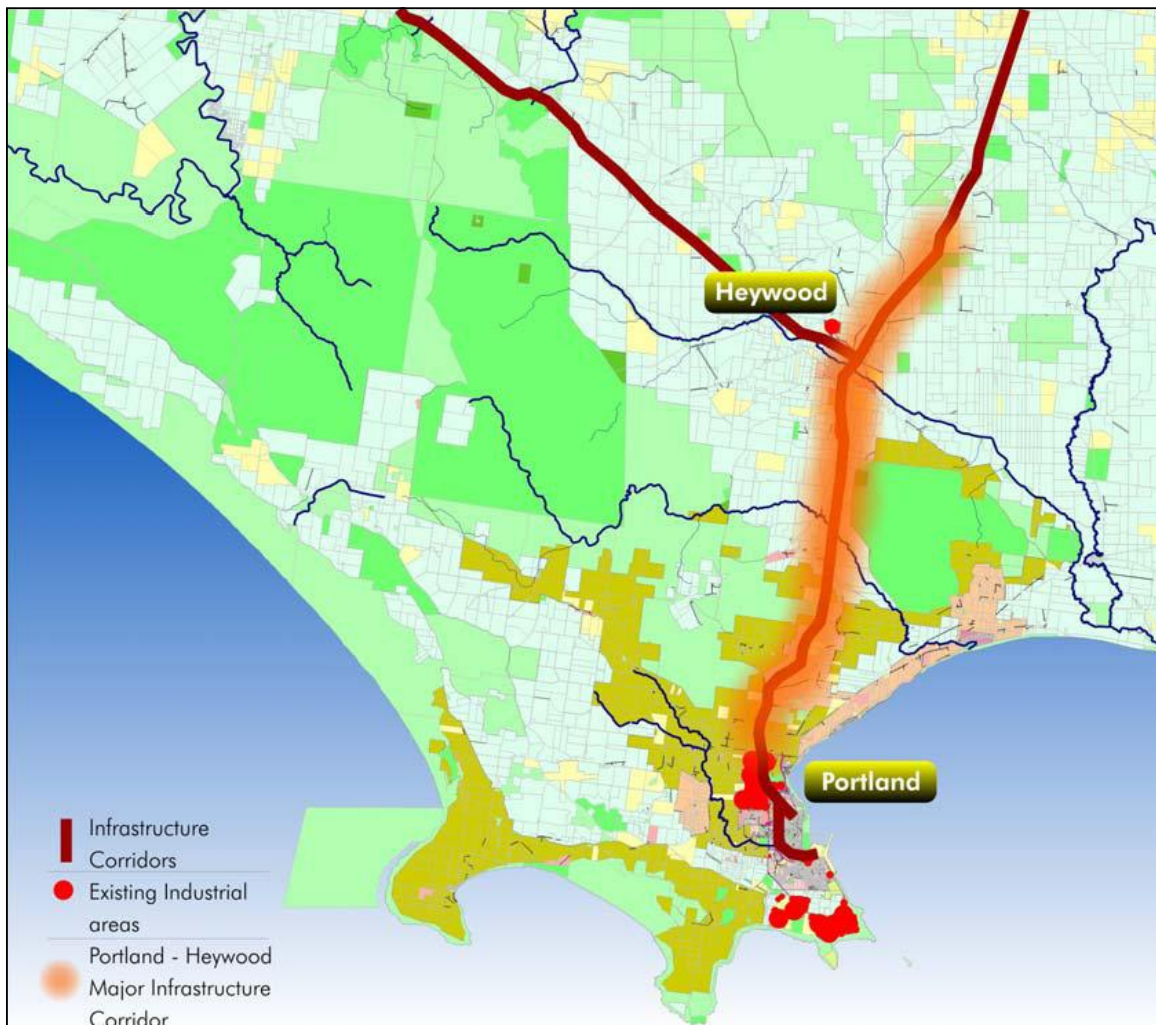
Opportunities for industrial land development in the Shire were identified in the ILUP including the following:

- Port related Heavy Industry – there is a need to protect the opportunity to establish port related industry to the north of Portland by ensuring buffer distances to sensitive uses including residential development are maintained
- Warehouse and Distribution – Opportunities exist for smaller scale distribution facilities that could be located within the North Portland Industrial Precinct
- Bulky goods retailing/ Homemaker Centres
- Manufacturing – there are existing manufacturers with growth opportunities including large scale processing for timber industry; aluminium and mineral sands; grain; and engineering
- Other Industry Opportunities - a range of other uses will require industrial land, particularly as the population continues to grow
- Marine Industry - The redevelopment of the trawler wharf may provide opportunities for expansion of the fishing industry. An opportunity exists for establishing marine industries based around the existing and potential growth in boating and related activities
- Transport - The growth in freight movement from planned investment in processing and export of mineral sands and timber give rise to the opportunity to develop freight interchange facilities
- Local Light Industrial/Trade Park - Opportunities may arise for potential growth or relocation of industry into new light industrial areas removed from residential areas
- Rural Industry – Rural industries are engaged in value-adding, farm forestry, timber value-adding and other rural industry.

The ILUP found that there is approximately 1350 hectares of industrial zoned land in the Shire, mostly concentrated around Portland and Heywood. The currently supply of industrial zoned land appears to be adequate for local needs.

The ILUP identifies a corridor of land between Heywood and Portland and as far north as the previously proposed Heywood Pulp Mill site north of Heywood as having significant potential for future major industry due to access to major infrastructure including major highways, rail, power and gas transmission lines / pipelines. The area identified in the ILUP is illustrated in Figure 3.

Figure 3: Portland – Heywood Major Infrastructure Corridor



Source: Glenelg Industrial Land Use Plan

The ILUP recommends that policy support should be introduced into the Glenelg Planning Scheme to preserve the option for locating major employment generating resource processing industries in this location. There would however be a need for any prospective industry proposal to demonstrate why it is unable to locate within existing industrial zoned areas in Heywood or Portland.

The ILUP does not propose rezoning land, it is intended that should future industry seek to locate within this corridor then site specific rezoning could occur if necessary, such as that which has occurred at the Heywood Pulp Mill site. The ILUP does however identify the need to maintain existing large lots and to prevent further fragmentation of land within this corridor for which a review of rural residential zoning will need to be undertaken.

The ILUP makes detailed recommendations regarding industrial zoned areas in Portland, Heywood and Casterton.

The ILUP also identified the following considerations as important for planning for future industrial land use:

- The need to identify further land for industrial development in Casterton and Heywood. (In each case, the opportunity to co-locate future industrial areas with major infrastructure should be taken)
- The need to protect industry and industrial transport routes from encroachment from sensitive uses
- The need to protect industrial transport routes from conflict with non-industrial traffic where possible, and to ensure conflict with pedestrian traffic is minimised
- A strong need for the development of an industrial park in the Shire to ensure the quick uptake of industries that have limited “time horizons” and little land development expertise.

### 3.3 Current Economy and Future Potential

Historically, economic activity in the region and the Shire has been natural resource based, including agriculture, forestry and fishing. The Shire’s 2003 Economic Development Strategy Vision Statement has an aspiration for the Glenelg Shire to be a natural choice for business investment and growth. The area will be internationally recognised as the renewable energy capital of Australia and will be a showcase for the renewable energy industry. Glenelg Shire Council will also be the centre for timber processing and the upgraded commercial fishing facilities at the Port of Portland will trigger further investment in the fish processing and ship building industries.

Major industries in the region today include:

- The Portland Aluminium Smelter
- Forestry – pine and blue gum plantations used for woodchip and log export
- Dairying and dairy related manufacturing
- Cropping of various grains and horticultural crops
- Beef cattle and sheep farming
- Tourism.

Development opportunities include:

- Renewable energy generation (wind, geo-thermal and wave)
- Forestry harvesting, transport and processing.
- Aquaculture
- Expansion of tourism and hospitality related to natural attractions, sport and recreational events, port activities and improved airport access
- Expansion of educational opportunities in the Shire
- Establishment of research facilities related to renewable energy.

#### 3.3.1 Agriculture

The Shire is of state-wide importance in terms of its arable land and good rainfall, most of the Shire being in the top category for agricultural productivity. The protection of high quality agricultural land is an important issue for the Shire, with competing demands for the use of land for timber production or for more traditional agricultural purposes such as food and fibre production.

Agriculture continues to play a significant role in the region despite the expansion of forestry over the last couple of decades. Beef production, sheep raising and dairying still predominate as the main agricultural pursuits whilst grain is still an important crop in the north of the Shire. Recent trends have seen high prices paid for land to be used for dairying.



### **3.3.2 Forestry**

A major economic driver for the Shire is the forthcoming Blue Gum harvesting phase. It is considered that this industry has considerable potential to mature and develop. The industry will provide economic development and employment opportunities in many of the towns around the Shire.

### **3.3.3 Tourism**

There are many opportunities to develop tourism in the Shire. These include:

- Promoting major tourism strengths through advertising and celebration of the landscape and coast
- Improve physical access and facilities at attractions within environmental guidelines
- Supporting local tourism operators undertaking eco-tourism ventures with better access to and facilities at tourism attractions
- Use and initiate local Aboriginal and European settler history and historic calendar events for heritage themed tourism incorporating the arts, built form and sites. [Port, Budj Bim, etc]
- Identify key national and international markets and quantify market potential for the Glenelg tourism industry
- Significant tourism events including the Kelpie Muster at Casterton and Heywood's Wood, Wine & Roses Festival.

Glenelg Shire has significant European heritage values with the first European settlement in Victoria located at Portland and the first inland settlement in the Henty area.

The heritage values of the Shire are a significant attractor to tourists. There is a need to update heritage studies (such as the Glenelg Heritage Study Stage 1 and 2a), particularly for Portland to ensure that heritage is properly recognised through the Glenelg Planning Scheme through such tools as the Heritage Overlay.

Tourism infrastructure must be planned to ensure that it is sensitive to the values of the location where it is proposed.

### **3.3.4 Renewable Energy Development**

The Shire has extensive renewable energy resources. In particular, there is growing interest in energy extraction from the coastal environment, including gas extraction, wind/wave energy generation.

Opportunities include:

- Wind Energy - the demand to develop coastal wind farms is high
- Wave Energy - Glenelg has become the Victorian centre for wave energy development due to the combination of the highest wave energy in Victoria and the availability of major power transmission lines
- Geothermal Energy - The south western region of Victoria contains a very large geothermal energy resource which could be developed to a level that could rival the current base load generation capacity of the La Trobe Valley
- Biomass Energy - biomass energy generation plants could use excess forestry products as feedstock.

### 3.4 Urban Infrastructure and Constraints

The Glenelg Strategic Futures Plan Infrastructure Study was completed in 2009 and provides the basis for this section of the GSFP relating to urban infrastructure and constraints. The Infrastructure Study found that larger urban areas within the Shire have sufficient capacity in their drainage, water and sewer infrastructure to allow for further infill growth within existing defined town boundaries and for future service enhancements as towns expand.

It is important to note however that significant areas of Residential 1 zoned land in Portland are severely constrained by one of the following issues:

- Flooding
- sink holes (associated with limestone)
- industrial buffers
- drainage problems

In Heywood and Casterton significant tracts of Residential 1 Zoned land are constrained by flooding.

All towns have adequate power reticulation and telephone services, however Portland is the only town with gas reticulation services.

There are no apparent limitations to gas, power or telecommunications services infrastructure upgrades. However, the provision of reticulated gas services to currently non-serviced towns is restricted by the lack of commercial viability.

The Infrastructure Study found that Portland is the only urban centre currently capable of supporting future heavy industry development.

Casterton and Heywood have industrial zoned land however the services available to these industrial areas are constrained and do not support heavy usage industries.

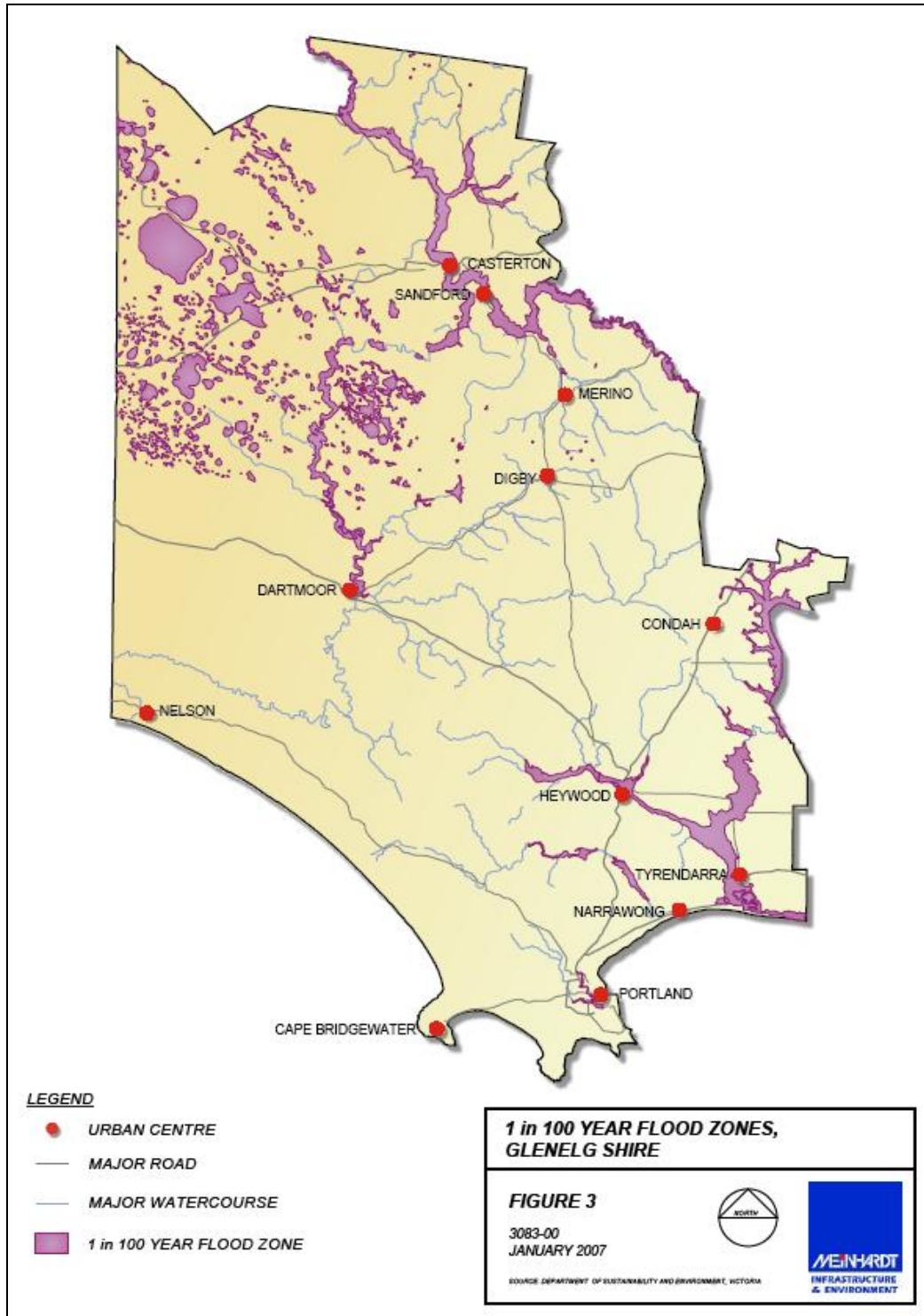
#### 3.4.1 Drainage

The provision of adequate drainage infrastructure is a major development constraint within Portland and nearby Dutton Way. Existing issues include:

- the majority of existing drainage infrastructure being at or near capacity
- fragmented and sparse development around the town presenting difficulty in implementation of drainage services
- numerous sinkholes currently receiving untreated stormwater runoff, which may contaminate the groundwater.

Flooding investigations for the Portland, Heywood and Casterton townships have recently been completed to identify the extent of land subject to inundation. Figure 4 illustrates the extent of flood prone land in the Shire.

Figure 4: 1 in 100 Year Flood Zones



Source: GSFP Infrastructure Strategy



### **3.4.2 Sewerage**

Wannon Water is the relevant authority regarding sewerage services in the Glenelg Shire. The only urban centres with reticulated sewer services are Casterton, Heywood and Portland. Septic tank systems are utilised in other areas of the Shire.

Various limitations exist on servicing areas north of Portland and Dutton Way. The main issues for servicing this location are:

- the high existing groundwater table making a conventional gravity sewer system difficult to implement
- erosion of the existing sea wall and unknown impacts of inundation due to storm surges and rising sea levels
- site being located beyond the existing northern ridgeline in Portland, which presents water supply pressure and gravity sewer feed issues.

Council has determined that any future conventional residential development will require sewer reticulation infrastructure and adequate sewerage treatment services. This may limit the extent of future urban development in some towns.

### **3.4.3 Water Supply**

The urban centres with reticulated water services are; Casterton, Sandford, Merino, Dartmoor, Heywood and Portland. Wannon Water does not plan to provide reticulated water to additional townships due to the lack of commercial viability.

Smaller council owned schemes are operated in other settlements. Ground water bores and rain water tanks are the main sources of water supply in the balance of the Shire.

The existing groundwater supply to the Shire is considered to be secure for at least the next twenty years, based on predicted rainfall trends. Development beyond the existing northern ridgeline in Portland presents water pressure issues.

### **3.4.4 Roads**

VicRoads are responsible for managing and developing the major road network throughout Glenelg Shire, comprising the highways and some other key roads. VicRoads has a strategic plan for upgrading various roads over time to cater for increased traffic and particularly forestry related heavy traffic.

Council is responsible for managing and maintaining all other roads in the Shire. The Transport Asset Management Plan was adopted by Council in 2007. This document sets out the lifecycle management plan for all transport assets in Council ownership, including roads, bridges and major culverts, footpaths, kerbs and channels, the Portland airport and car parks.

The Portland Safe Bike Path Strategy identified many gaps in the existing bicycle network, particularly the on-road network. The Active Transport Strategy addresses this issue for Casterton and Heywood.

### **3.4.5 Rail**

The increased use of rail for the transport of goods, particularly forestry and agricultural exports, to the Port of Portland could significantly reduce the number of additional heavy vehicles on the road network. Rail freight is a vital part of the transport task and the existing rail network must be maintained and improved to prevent the shift of transport onto the road network.

The Victorian Transport Plan (2008) proposes re-opening and converting the gauge of the rail line between Heywood in Victoria, and Kalangadoo (Penola) in South Australia via Mt Gambier, for the transport of woodchips and pulp to the Port of Portland. This project is subject to Commonwealth Government funding. Road upgrades to support a trial of the use of High Productivity Freight Vehicles in this area are also part of this project.



### 3.4.6 Portland Airport

The Portland Airport has been operating since 1982. The airport acts as a 'portal' to the world by serving the business and commerce, recreation, family, health and safety needs for the residents of Portland and Glenelg. The Portland Airport site is 128 hectares in area and there is sufficient land available for future expansion plans.

The business community see its development as vital to the south west region's economic growth.

The Airport performs various economic development roles including:

- Increasing economic growth in Portland and the Shire
- Providing access to services, medicine, connecting national flights, and business travel
- Providing tourism accessibility
- Presenting a modern face to potential investors and visitors to the region
- Making business recruitment easier
- Enabling specialist business service providers to come to the area as required (specialised engineers, technical specialists, legal and financial professionals and others)
- Providing local businesses with air transportation.

The Airport provides an important service to the local community, including:

- Enabling access to emergency health services and on-going medical treatment in Melbourne by air, or enabling specialists to visit the area on a regular basis
- Supporting many of the activities of fire fighting operations, police agencies, and for natural disaster response.

The Portland Airport Masterplan has recently been adopted by Council. The Master Plan considers the development of the airport in two phases:

1. Development proposed to accommodate growth between 2009 and 2012
2. Looking forward beyond 2012 and developing the indicative land use plans showing how the airport might expand to handle the passenger growth to 2020.

The vision for the future of Portland Airport is to play a leading role in the economic development of the south west region by providing an increasing range of frequent scheduled services to destinations required by business.

### 3.4.7 Port of Portland

The Port of Portland provides an international gateway for export and import of bulk commodity products specialising in forestry, grain, mineral sands, smelter and fertiliser freight. In 2006 trade totalled 3.51 million tonnes, and trade volume through the Port is projected to more than double from 2006 figures as the forestry industry increases output.

The commercial port is augmented by the fishing fleet which includes squid boats, crayfish trawlers and fishing trawlers which contribute approximately 40% of Victoria's fishing catch.

The Port generates substantial economic benefits to the Glenelg Shire, the Greater Green Triangle Region, State of Victoria and Australia. The value of product moving via Portland is estimated between \$1.3 and \$1.5 billion annually.

The operation of the Port in 2004/05 generated an estimated total economic impact across of:

- \$70.7 million in Glenelg Shire

- \$112.6 million in the Greater Green Triangle Region
- \$121 million for the Victorian economy as a whole
- \$172 million nationwide.

The Port has a considerable impact on employment both locally and nationally. In 2004 /2005, the Port supported a total of 321 direct and indirect jobs within the Glenelg Shire and 806 direct and indirect jobs nationally.

The Port of Portland Land Use Strategy (PLUS) is being prepared to guide land use and development at and around the port. The potential magnitude of the impacts associated with identified trade growth provides the foundation for the recommendations of the PLUS.

The five key strategic directions identified in the PLUS are:

- To ensure that sufficient, strategically located and appropriately designated land exists to meet forecast demand for port related storage
- To ensure adequate integration of the Port to the rest of the Victorian and South Australian freight and logistics network
- To ensure the implementation of a land use planning framework that recognises the economic importance of the Port to the region
- To ensure the implementation of environmental management practices which contribute to the long term sustainability of the Port's environs
- To ensure the implementation of effective land use buffers to protect the future of the Port.

### **3.4.8 Issues for Infrastructure Development**

Infrastructure issues include:

- The capacity of the electricity transmission lines to accommodate the proliferation of energy generation facilities in the region
- The need for a modal interchange facility to efficiently transfer timber product from road to rail to ship as a means of combating a potential shortage of truck drivers and the potential for very high fuel prices to undermine profitability
- The re-opening as standard gauge of the Heywood to Mount Gambier line as a means of combating a potential shortage of truck drivers and the potential for very high fuel prices to undermine profitability
- The significant increase in heavy vehicle traffic expected on the Shire's roads associated with the harvesting of blue gum plantations and the desirability of moving timber product on rail rather than roads to the Port of Portland
- The potential offered by high pressure gas pipelines traversing the Shire
- The need to protect and preserve options for major industry along the major infrastructure corridor from Portland to north of Heywood
- The need to protect industry and key transport routes from the encroachment of sensitive uses
- The need to ensure that road networks are capable of providing a safe and efficient transport option for large vehicles.

In order to ensure the orderly development of infrastructure for future land uses, Council will consider:

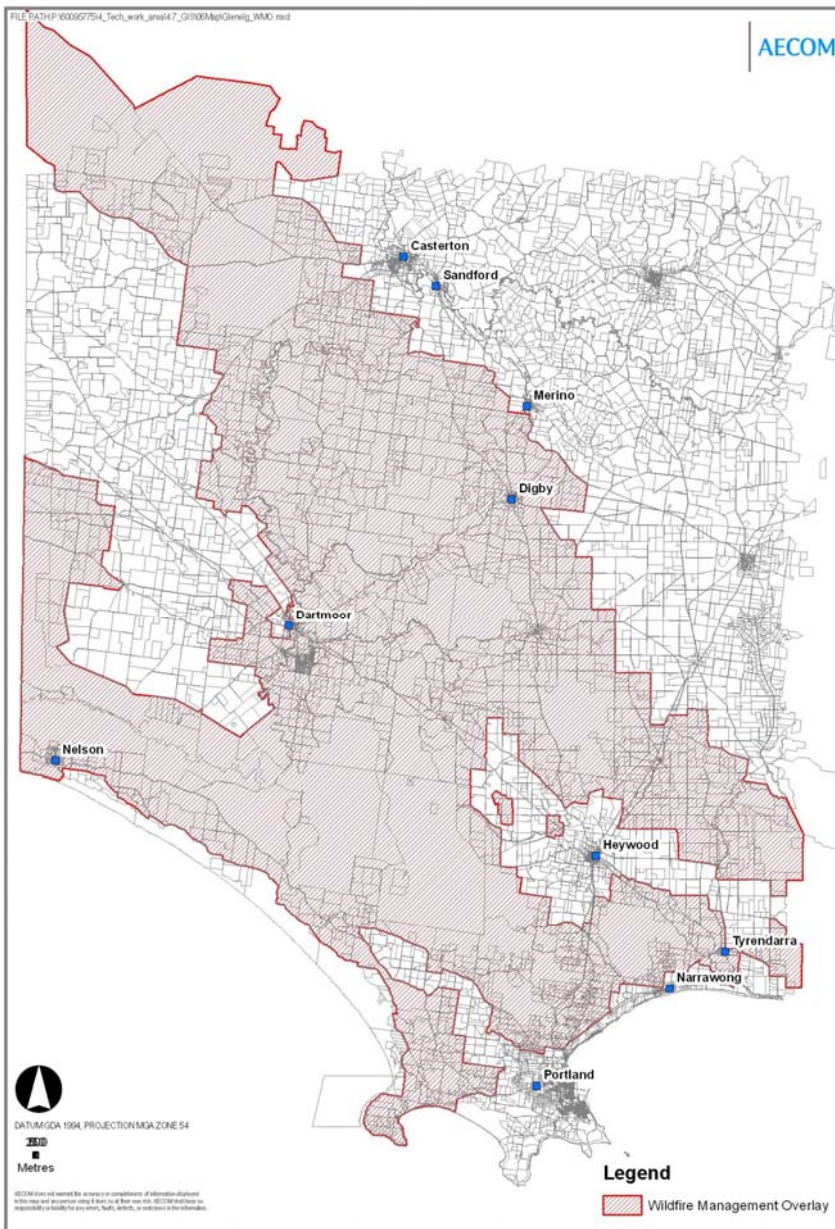
- Developing a physical infrastructure policy covering each settlement to provide for reticulated water supply, reticulated sewerage, drainage, high quality telecommunications, and where appropriate, geothermal heating.
- Initiating, where appropriate, development contributions schemes and/or drainage schemes to assist in the timely, equitable and efficient delivery of drainage and other infrastructure.

### 3.5 Environmental Management and Climate Change

#### 3.5.1 Wildfire Management

Wildfire management is a significant issue of relevance to the Shire. Many houses and farms are located within areas that are subject to considerable wildfire risk during the hotter months of the year. The 2009 Victorian Bushfires Royal Commission is currently underway and will examine in considerable detail wildfire management issues. The Terms of Reference for the Royal Commission include that the Commission makes recommendations on land use planning matters. The findings of this Royal Commission should be taken into account in future planning for wildfire management. The need to apply the Wildfire Management Overlay more broadly across the Shire is recognised. This overlay has only been applied in the far north of the Shire to date. Mapping has been prepared which identifies land where the Wildfire Management Overlay is proposed to be applied, this is illustrated in Figure 5.

Figure 5: Areas where Wildfire Management Overlay is proposed to be applied



Source: Country Fire Authority

### 3.5.2 Landscapes

The natural coastal environment is one of the major tourist attractions to the Glenelg Shire with numerous activities including; fishing, boating, the Great South West Walk, whale and seal watching and other recreational pursuits.

The coastal environment of the Glenelg Shire is one of great splendour and beauty. It is characterised by a high energy wind environment, which constantly alters the conditions. The coastal environment varies from low coastal plains, mobile coastal dunes and brackish wetlands to cliffs, escarpments and rock platforms.

Strong winds and salt spray have created a harsh environment in some sections of the coastline where vegetation is sparse. Coastal vegetation varies from cleared agricultural land to remnant coastal heath and low Stringybark woodlands. Coastal erosion is evident on the beaches and foreshores in the Glenelg Shire. Sections of limestone cliffs near Nelson Bay have collapsed due to marine undercutting.

In the Victorian Coastal Strategy, areas of the Glenelg coastline were assessed to be of high significance, and in the case of the three capes (Cape Nelson, Cape Bridgewater and Cape Sir William Grant) of State Significance. It is proposed that the Planning Scheme be amended to protect the significant landscapes identified in the Victorian Coastal Strategy and Council recently received a grant for the implementation of such an amendment.

There is a varied landscape throughout the inland part of the Shire, including extensive blue gum plantations between Casterton and Dartmoor and the red gum country to the north of the Shire.

The historic landscape character consists of both remnant forests, which are indicative of the original landscape, and pastures/grazing lands characteristic of European settlement. The recent establishment of large timber plantations has caused significant change to the rural landscape.

The urban landscapes of most settlements in Glenelg are marked by a strong heritage significance. Casterton and Portland are two of Victoria's premier heritage towns dating to the earliest days of European settlement in Victoria.

The main township of Portland has typically wide streets with minimal street tree planting and the inclusion of some significant Norfolk Island Pines. The juxtaposition of this heritage landscape with the coastal location overlooking a major working deep sea port results in an exceptional ambience. The smaller township of Casterton is characterised by a main street that has a spectacular range of historic buildings lining both sides of the main street, all within a red gum riparian setting of exceptional quality.

### 3.5.3 Environmentally Significant Areas

The Glenelg Shire contains some of Victoria's most environmentally significant wetlands. There are four major wetlands in the Glenelg Region. These are:

- Glenelg Estuary (one kilometre south of Nelson)
- Long Swamp (six kilometres south-east of Nelson)
- Lindsay-Werrikoo Wetlands (fourteen kilometres north north-west of Dartmoor)
- Mundi-Selkerk Wetlands (ten kilometres south-west of Casterton).

These wetlands contain a variety of threatened flora and fauna species, such as The Great Egret, Australasian Bittern, Brolga and Blue-billed ducks.

There is a wide range of places of geological and scientific interest within Glenelg. These include the following:

- Cape Bridgewater petrified forest and lava flows including the blow holes



- Bridgewater Lakes, and the limestone carved caves above them
- Budj Bim National Heritage Landscape (Tyrendarra Lava Flow)
- The Glenelg River Gorge and estuary
- Lawrence Rocks and “The Three Capes” (Cape Bridgewater, Cape Nelson and Cape Sir William Grant).

The United Nations has also recently declared part of south-west Victoria and south eastern South Australia as a globally significant geological area. The area known as the Kanawinka Geopark is the first Geopark in Australia, and the 57<sup>th</sup> in the world to be recognised by UNESCO. Glenelg Shire forms a central part of the Geopark.

### **3.5.4 Opportunities for Environmental Protection and Enhancement**

Strategic Issues for Glenelg Shire include:

- The need to protect the Shire’s environment assets
- The need to promote the assets for tourism, research and education.

As part of the review of the Glenelg Shire planning scheme, Council will consider:

- Incorporating strategies developed as part of the Glenelg Environmental Management Strategy
- Implementing Planning Scheme Policies to support retention/establishment of habitat vegetation wherever possible. (e.g. wildlife corridors)
- Implementing Planning Scheme Policies to protect water quality adjacent to urban areas and adopting Water Sensitive Urban Design (WSUD) practices
- Encouraging provision of reticulated sewerage in the larger unsewered settlements
- Incorporating upgraded biodiversity mapping and controls into the Planning Scheme
- Reviewing and strengthening the overlays (ESO and VPO) covering areas abutting habitats of endangered and vulnerable species.

### **3.5.5 Land-based impacts of Climate Change**

Climate change projections for the Glenelg-Hopkins region have been developed by the Victorian Government. The projections indicate a variety of changes to the climate of the region.

Depending on the emission scenario used, by 2070 the region can expect to be:

- 1.2°C warmer with 7% less rain under a lower greenhouse gas emission growth scenario
- 2.4°C warmer with 13% less rain under a higher greenhouse gas emission growth scenario

The effect of this will be that:

- The region will be hotter – greater increases in temperature are expected in summer
- The region will be drier – greatest decreases in rainfall are expected in spring
- There will be fewer rainy days but increasing rainfall intensity
- By 2070, runoff into the Hopkins and Glenelg Rivers is expected to decrease by between 10% and more than 50%.

These changes to the region’s climate will have consequential impacts on agriculture and other land uses. Farming activities may need to adapt, including changes to different types of crops and investment in new equipment. The risks of droughts, bushfires, heatwaves and other climatic extremes will be increased.

### 3.5.6 Sea Level Rise

The Victorian Coastal Strategy (2008) sets out the key issues for managing the impacts of climate change on the Victorian Coastline including:

- Marine environment – includes the near shore marine environment, the seabed and waters out to the state limit or 5.5 kilometres.
- Foreshore – or coastal Crown land 200 metres from the high water mark
- Coastal hinterland – on private and Crown land directly influenced by the sea or directly influencing the coastline and land within critical views of the foreshore and near-shore environment
- Catchments – feeding rivers and drainage systems and including estuaries.

The State Government has indicated that a policy of planning for sea level rise of not less than 0.8 metres by 2100 should be implemented by relevant agencies. This policy should be generally applied for planning and risk management purposes. As new scientific data becomes available, the policy will be refined.

The combined effects of sea level rise, the impact of tides, storm surges, wave processes and local conditions such as topography, elevation and geology will produce climate change impacts and risks in coastal areas. Sea level rise will create a spectrum of risk along the coastline of Glenelg, with the highest likelihood of impacts in the lowest lying areas and in population centres. Managing and adapting to these impacts and risks will pose challenges in the short, medium and long-term, depending on the events that arise and the number of buildings, infrastructure and other assets potentially affected.

There are three adaptation options; *protect*, *accommodate* or *retreat*, and all of these may need to be considered in future planning in Glenelg. The Victorian Coastal Strategy recommends that adaptation strategies should be precautionary, that is, planning for likely future circumstances even if full scientific certainty is not possible.

### 3.5.7 Options for Glenelg Shire to respond to Climate Change

- Protect:
  - Research: Land at risk of inundation needs to be properly identified and risks quantified as much as possible to minimise potential damage
  - Direct action: - Plan protective works to delay the impacts of sea level rise
  - Emergency services: Ensure that owners, occupiers and users of existing dwellings at risk are made aware of the risks and that emergency response plans are prepared
- Accommodate:
  - Planning: Coastal risk needs to be considered in the framing of planning controls for coastal areas, including rezoning vulnerable land to prevent inappropriate development
- Retreat:
  - Council should develop a position on assistance to be provided to landowners whose only option is to retreat.

The Victorian Government is currently undertaking a major research project to assess the physical vulnerability of Victoria's coast to climate change, and develop strategies to help communities and industry respond and adapt, which is known as *Future Coasts*. This program will produce detailed mapping of the coastline that will be used as a tool for assessing the physical vulnerability of coastal areas to climate change. The preliminary vulnerability assessments are expected to be available in early 2010.

Council has received funding to undertake the Portland to Narrawong Coastal Engineering and Planning Study to utilise the data provided by Future Coasts and apply the options outlined above in determining the future of the area.

### 3.6 Current Population and Future Growth

Approximately half of the population of the Shire is resident in Portland. The towns of Heywood and Casterton are the only other towns of over 1,000 in population. There are a number of small towns, three of which are coastal (Nelson, Cape Bridgewater and Narrawong) and the balance of which are inland. Narrawong, Dartmoor and Merino are the only small townships for which census data is available.

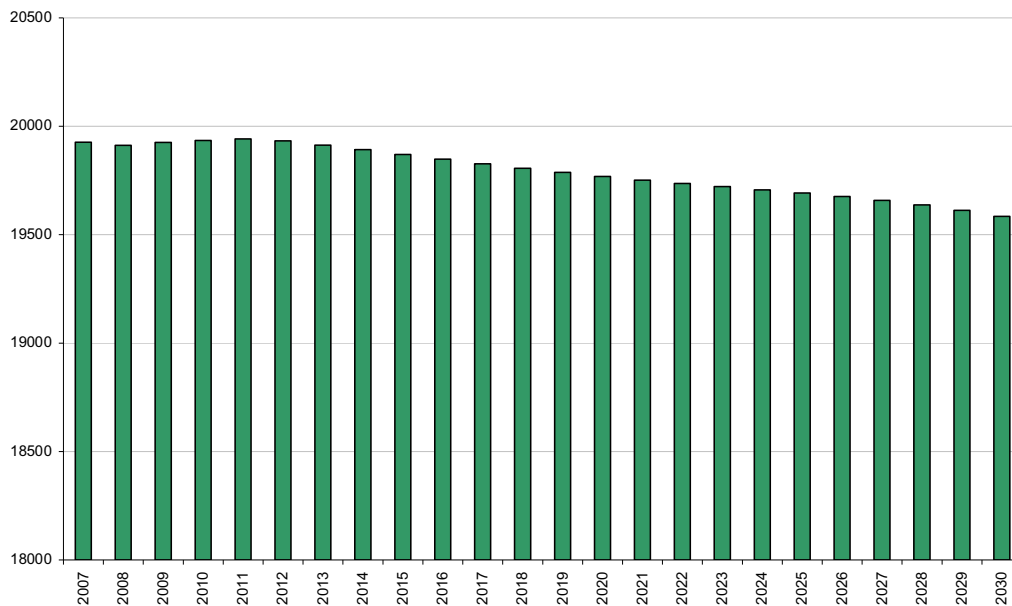
**Table 2: Summary of Glenelg Population**

Location	Population (@ 2006 census)
Portland	9,716
Casterton	1,618
Heywood	1,229
Narrawong	179
Dartmoor	264
Merino	183
Rural areas	6180
<b>Total Shire Population</b>	<b>19,759</b>

A significant population also inhabits a large number of rural living lots surrounding Portland at places such as Gorae West and the coastal strip to the north east of Portland.

Figure 6 illustrates population forecasts for the Shire to the year 2030. This graph is based on a preliminary model using data for the Western District prepared by the Victorian Government Department of Planning and Community Development. The model on which the graph is based has apportioned a share of the data to Glenelg based on past trends in population across the region. More detailed projections, including for areas within the Shire are expected to be completed during 2009.

**Figure 6: Population Forecast for the Shire**



Source: Glenelg Shire Community Profile, id consulting 2008





While Figure 6 indicates that the population of the Shire is forecast to stabilise with a small scale population decline expected over the coming two decades, it should be recognised that this forecast is largely based on the continuation of past trends. Opportunities for economic expansion, such as those identified in this report, and the resulting population increases are not factored into such forecasts.

Significant opportunities exist for employment generation in the fields of timber production, power generation, marine and other industries and tourism. These opportunities will need to be realised in order to significantly alter the population trends identified in Figure 6.

The population structure is expected to continue to age. The ageing of the population is consistent with trends expected to be experienced throughout regional Victoria as a result of the following three trends:

- Continued inward migration from older people resulting from 'baby boomers' reaching retirement age and seeking coastal and 'tree change' retirement destinations
- Young adults are likely to leave locations where employment and education opportunities are not easily accessible
- The concentration of population into larger centres (and locations within commuting distance of these) is likely to continue.

Trends in ageing have a range of implications for future land use decisions, particularly in relation to housing supply. At present housing in Glenelg is almost exclusively detached houses; and older population may seek alternative forms of housing. Importantly, an ageing population structure means that in many places new household formation will continue (albeit of smaller households) even as populations stabilise or decline.

Other notable features of the population data that has been collected for the Shire include:

- The Shire has a relative low average household size and high proportion of lone person households, largely reflecting the older population structure
- The Shire has experienced modest population decline over past decades, and while at a regional level population growth is forecast over coming decades, the Shire's share of this growth is anticipated to be small, given past trends within the Western District of Victoria.
- The Shire is relatively disadvantaged on an income and wealth basis relative to the state average
- The Shire has a higher than average industrial workforce relative to regional Victoria, metropolitan Melbourne and Victoria as a whole
- The Shire has a higher proportion of children and older people than Victoria overall. Young adults are particularly underrepresented in the population structure.
- The housing stock in the Shire comprises almost entirely detached dwellings (93%) with few other housing forms, despite a household structure with high levels of lone persons and couples.
- High share of people who are born in Australia (93%), much higher than Victoria as a whole (74%).

## 4.0 Key Issues

There are many issues that need to be considered in future planning for the Shire. The Shire faces challenges in managing changing agriculture and business structures, planning for future industrial growth and sustainably managing the environment and dealing with climate change. In this section we discuss the key Shire-wide issues identified during the preparation of the GSFP.

### 4.1 Houses on rural zoned land

A significant planning issue of relevance to rural Councils, including the Glenelg Shire Council relates to applications for residential or rural residential land uses within rural areas that have been zoned for agricultural and conservation purposes under such zones as the Farming and Rural Conservation zones.

A review of the rural zones needs to be undertaken to determine whether changes are required, including the application of the Rural Activity Zone which has not been applied in the Shire. This should include a review of rural residential land to determine where rural residential development should be directed. A rural zones review will take some time to complete however due to the size of the task and the need to implement it through an amendment to the Glenelg Planning Scheme.

As an interim measure there is a need for Council to establish a clear policy position on the assessment of planning permit applications for dwellings on rural zoned land. Council's policy position needs to be cognisant of the fact that the circumstances of rural zoned land varies markedly, from highly isolated locations great distances from townships to small rural lots located immediately adjacent to residential zoned land on the periphery of a township.

The policy position that Council needs to adopt must give due regard to the different characteristics of rural land and identify the circumstances where dwellings on rural land will or will not be supported and the reasons for this policy position. Council has discretion in its assessment of dwellings in rural zones as all of the rural zones allow Council to consider an application for a single dwelling.

### 4.2 Pressure for development on periphery of towns

Despite the low growth rate or population declines recently experienced in many of the smaller townships of the Shire there remains pressure for Council to rezone land to provide for residential growth. There is a need to determine the future role of many of the smaller townships within the Shire so that residential growth can be directed to appropriate locations.

A housing strategy is required to be undertaken to establish the supply and demand for residential zoned land and to identify where residential growth is to be directed. The rural zones review that has previously been identified will also contribute to providing direction regarding the future use of rural land on the periphery of towns.

The need to ensure that areas remain available for long term conventional residential growth and are not fragmented through low density or rural residential development should be recognised, particularly for Portland where large areas are zoned for industry and opportunities for residential growth are therefore limited.

Planning for future growth will also be of considerable benefit to servicing authorities who have long term planning strategies in place to forecast funding requirements for infrastructure.

### 4.3 Active coastal erosion

There is an urgent need to address the issue of active coastal erosion which has caused a great deal of uncertainty to landowners in the vicinity of Dutton Way. A Special Use Zone has been applied to land in this location with the effect of precluding further residential development. There is a need to undertake a study into the coastal erosion processes in this location and for such a study to provide the basis for a review of planning controls in this location. Certainty must be provided to existing and prospective future landowners in this location as well as servicing authorities.



### 4.4 Future impacts of climate change

As identified in the context section of this report, the future impacts of climate change are a significant issue for the future of the Shire. Almost all sectors of society and the economy are likely to be impacted by climate change. In the short term, impacts in the form of water shortages, bushfires, flash floods and rising temperatures are unavoidable.

Adaptation is the principal means by which to build resilience and reduce vulnerability to climate change. It involves a combination of risk management, adjustment of economic activity, changes to urban infrastructure and a review of social services and changing community needs.

Climate change impacts are all-encompassing, interconnected, and somewhat uncertain and have no bias for cultural, economic or organisational boundaries. An effective adaptation response at the local government level needs to therefore be flexible, cross-disciplinary and integrated across Council service units, other service agencies and even the community in general. It should utilise and build upon the current knowledge base and organisational strategies and structures of the organisation and reflect its relevance in a local, regional, state, national and international context. Ideally it should also be able to serve as an ongoing strategic tool that evolves with time, action and understanding.

A successful climate change adaptation plan for Glenelg Shire Council must:

- reflects the predictions of impacts in South West Victoria
- take into account the full range of economic, social and environmental risks from climate change impacts within the municipality
- provide actions and recommendations for adaptation that is relevant to the role of local government
- set out progressive advice for establishing, financing, partnering and operating adaptation projects
- set out a way forward from an organisational perspective
- communicate ideas and messages in plain English that can be provided to the local community for feedback.

#### **4.5 Wildfire management**

Wildfire management is a significant issue affecting the Shire. A review of the way in which land use planning addresses the issue of wildfire management is currently underway as part of the 2009 Victorian Bushfires Royal Commission. The findings of this Commission should be taken into account when considering Council's role in wildfire management.

In the short term there is a clear need for Council to recognise areas susceptible to wildfire risk through the application of the Wildfire Management Overlay.

#### **4.6 Provision of reticulated sewer and water services to smaller towns**

The lack of reticulated sewer or water services to a number of smaller townships within the Shire has been identified as a significant issue in terms of health issues and presenting a constraint to growth.

The Wastewater Management Strategy currently being prepared by Council should provide a better understanding of the issues as they relate to each township. Concerns have been raised regarding potential economic costs associated with any retrofitting of reticulated sewerage systems into existing small townships.

This issue highlights the need that exists for a housing strategy to determine supply and demand for residential land and to direct future growth to appropriate locations. The finalisation of a housing strategy and its implementation through the Glenelg Planning Scheme will provide much needed direction to servicing authorities which need clear direction regarding future infrastructure requirements.

#### **4.7 Ongoing vitality of small towns**

The ongoing vitality of some of the smaller townships within the Shire is an issue that needs to be acknowledged given the significant population decline that some of the townships have experienced over recent years. The community planning exercise that Council has undertaken has identified numerous initiatives that Council should consider to ensure the ongoing vitality of some of these smaller townships.

There appears to be a view in some sections of the community that population decline can be halted and reversed through the rezoning of land to provide for residential development. The rezoning of land is unlikely to provide the stimulus required to ensure the ongoing vitality of some townships.

The resourcing implications of providing services to numerous small townships across a large area is a significant issue for Council and servicing authorities.

#### **4.8 Recognition of flood prone land**

There are significant areas of flood prone land within the Shire, including urban areas within the settlements of Casterton, Portland and to a lesser extent Heywood. Flood modelling has either not been undertaken for these areas or has been undertaken with poor spatial information which has resulted in mapping which lacks accuracy.

Flood prone land should be recognised in the planning scheme through the application of zones and overlays to control land use and development and ensure that land use and development has due regard to flooding. Flood modelling recently commissioned by Council will provide the basis for a significant amendment to the planning scheme to rectify this situation in Casterton, Portland and Heywood.

#### **4.9 Appropriate sites for industry**

The Industrial Land Use Plan makes numerous recommendations regarding the appropriate locations for future industrial development in the Shire. This document identifies the need for policy support to be provided in the Glenelg Planning Scheme for large scale industry to occur in a corridor extending from Portland north to the site designated for the Heywood Pulp Mill to the north of Heywood.

The potential impacts of industrial development on sensitive land uses including residential land use is a significant issue, particularly for Portland where industrial areas are interspersed with residential areas. Many of these industrial areas are either undeveloped or underdeveloped and have considerable potential given close proximity to the Port of Portland. Sensitive uses are located or in close proximity to some of industrial zoned land in Portland which has significant issues for the provision of buffers.