



BARWON HEADS STRUCTURE PLAN

Adopted August 2017



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PART A STRUCTURE PLAN

1.0 Introduction

1.1 Purpose of the Structure Plan

This Structure Plan is a strategic framework for the future planning and development of the Barwon Heads township. The purpose of the Structure Plan is to:

- identify the key strategic planning issues facing the township, including community aspirations and needs;
- articulate the preferred future directions including the location of a settlement boundary; and
- identification of appropriate planning controls, which will protect and enhance the distinctive elements of the township, biodiversity and landscape features.

An Urban Design Framework (UDF) was prepared for the township in 2003. The UDF includes directions and objectives relating to the urban form and character of the town. It also provides specific direction regarding the development of public spaces, including improvement to streetscapes, open space areas and linkages. The key elements of the UDF are referenced in this Structure Plan.

This Structure Plan is a result of an update undertaken to the 2010 Barwon Heads Structure Plan.

1.2 How will this plan be used?

The Structure Plan is to be used by the City of Greater Geelong to determine the application of local planning policies, planning zones and overlays. It will guide Council's consideration of proposed rezonings and applications for planning permits. Council will also use the Structure Plan to inform the future provision of infrastructure and services in the township.

Implementation of the Structure Plan for Barwon Heads will provide certainty for residents and landowners regarding the future planning of the township until 2032. A full review of the Structure Plan should only be undertaken if there is an update to State or local policy that would result in the need for additional residential or commercial land in Barwon Heads.

1.3 Plan Components

The Barwon Heads Structure Plan contains three parts:

Part A - "Structure Plan"

Part A is the "Structure Plan" which includes principles and directions in response to the key influences identified in the background report, for each of the following key themes:

- Urban Growth
- Infrastructure
- Settlement and Housing
- Natural Environment
- Town Centre and Economy
- Rural Areas

Part B - “Implementation & Review”

Part B contains an implementation program for the Structure Plan. It establishes development principles and recommendations for the application of overlay controls, identifies the need for any further strategic work or actions, and nominates the circumstances for the review of the Structure Plan.

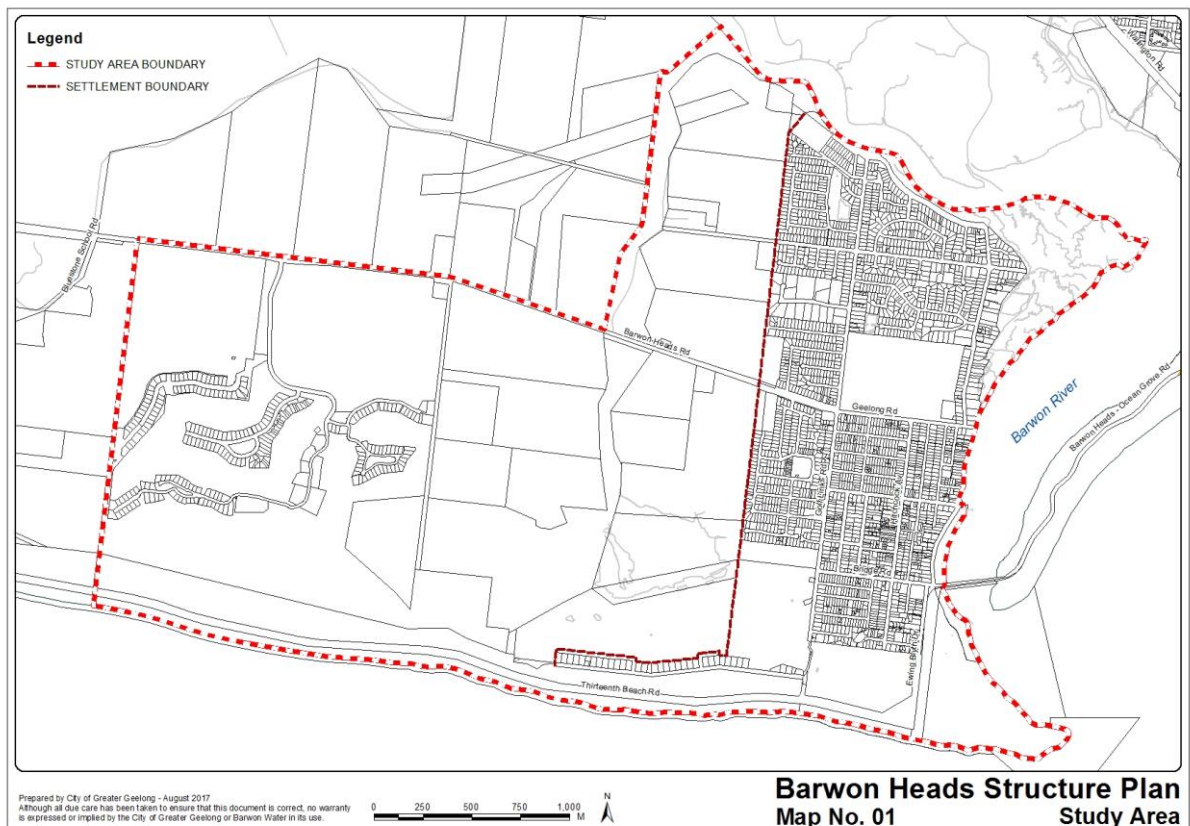
Part C - “Background Report”

Part C sets out the background and contextual information for the Structure Plan. It identifies and analyses the issues, opportunities and constraints facing the township for the following themes:

- Policy Context
- Natural and Urban Environment
- Demographics & Social Profile
- Township Facilities and Services
- Physical Infrastructure and Transport
- Township Growth and Residential Lot Supply

1.4 The Study Area

For the purposes of the Structure Plan Map 1 identifies the boundaries of the study area. The study area extends beyond the existing urban area of Barwon Heads to consider the role and future use of land to the west of the existing urban zones and the rural interface. The study area also extends up to the western edge of the Thirteenth Beach Residential Estate & Golf Course.



2.0 Key Influences

The Background Report (Part C) identifies and analyses the key issues, opportunities and constraints which assisted in determining the key directions developed within the Structure Plan. The key influences from each section are set out below.

2.1 Policy Context

- Barwon Heads is not a designated growth location for residential growth under the Council's Municipal Strategic Statement or the G21 Regional Growth Plan 2013, with modest growth to be limited to identified structure plan settlement boundaries;
- Barwon Heads has a 'Town Centre' classification under the retail hierarchy. Retail growth should be consistent with the established retail hierarchy and provide incremental growth as appropriate;
- Barwon Heads is not a designated location for intense commercial or industrial development;
- There is strong State and Local Planning Policy direction for the protection, enhancement and/or management of:
 - Coastal environments, coastal hazards and the coastal impacts of climate change;
 - Sensitive environments, biodiversity and landscape features;
 - Barwon Heads and its surrounding area hold significant values for Indigenous cultural heritage;
 - Rural environments and agricultural activities;
 - Non-urban break between settlements;
 - Building design and built form of the township including the opportunity for application of a range of policy and statutory planning controls;
- A need to provide direction relating to traffic and parking issues within the township;
- Opportunities exist for enhancement of open space, recreational facilities, cycling and pedestrian infrastructure and linkages;
- Appropriate provision of community facilities to meet community needs in line with the size and function of the town.

2.2 Natural and Urban Environment

- A need to recognise the significant landscape setting and key views of the coast and rural hinterland that surround the Barwon Heads 'island';
- There are significant biodiversity and sensitive environment features that require protection, including Ramsar wetlands;
- Indigenous cultural heritage values require protection;
- Protection and management of significant landscape and environmental features requires on-going coordination with public landowners and agencies;
- Significant new residential infill in Barwon Heads has been occurring over recent years however this is predominantly existing smaller dwellings being replaced by a larger dwelling and footprint.
 - The intent of the Increased Housing Diversity Area (IHDA) to provide smaller and more diverse housing forms is not being met.
- Residential character for Barwon Heads is unique overall as a coastal township, although within the township the residential and landscape character is mixed.
 - There is a need for planning controls and appropriate residential zones to be applied to define a preferred residential character to recognise outcomes of the Residential and Landscape Character Assessment as well as community feedback.
- A need to protect and enhance the significant Coastal Moonah Woodland Community of the Warrenbeen Court area and rural land north of Taits Road;
- A need to ensure that the unique landscape character and large lot composition of Warrenbeen Court Area is recognised through the appropriate residential zone.

2.3 Demographics and Social Profile

- Age structure has changed over recent decades with an increase of 'Parents and Homebuilders' aged between 35 to 49 as well as 'Primary schooled' children;
- There has been a reduction in the number of retirees over recent decades; although the number of people near or within retirement age is forecast to again grow significantly to 2031;
- The town has a significant influx of people in the peak summer holiday season with moderate dwelling vacancy rates during the off season;
- A relatively wealthy and advantaged population with low unemployment;
- A private car reliant population;
- Slowing population growth as housing supply decreases.

2.4 Township Facilities and Services

- Barwon Heads provides for basic community needs and essential retail services with major social, health and community services provided in larger Bellarine Peninsula townships and Geelong;
- No forecast need to provide additional education facilities in town;
- The amount of open space within the town is sufficient to support the projected population;
- Opportunity to enhance existing passive open space and recreation areas, particularly in northern areas of the town and improve linkages between recreational facilities;
- Opportunity for the continued improvement of facilities and amenities of the Village Park;
- Opportunity to establish and improve recreational paths and trails, including the Round the Heads Trail and 13th Beach Link;
- Tourism is important to the local economy and opportunities exist to support and improve tourist accommodation options and tourism facilities;
- A need for affordable residential aged care, including adaptable home design.

2.5 Transport and Physical Infrastructure

- Adequate water and sewer infrastructure provision serve the existing township;
- Identified urban stormwater runoff poses a substantial threat to wetlands and sensitive coastal environments;
- There are potential impacts associated with flooding, climate change and sea level rise and storm events on future settlement and development;
- Infill development has the potential to impact on flood and stormwater risk to people and property;
- The two month holiday season peak causes problems for managing traffic flow and parking provision during this time;
- Barwon Heads has a very limited public transport service;
- Opportunity to improve the operation and management of the community bus.
- There is a lack of formal footpaths and cycle lanes within the township with primary linkages to key destinations and services;
- A need to continue to monitor traffic and parking in the town and identify opportunities for improvements;
- Opportunity to follow best practice for stormwater management when planning for future development;

2.6 Village Centre Growth, Residential Lot Supply and Further Development

- The size of Barwon Heads Town Centre is appropriate to cater for growth to 2031;
- Pressure to expand western edge of township to convert rural land to residential use;
- No policy support for a expansion to the western end of the township, which includes:
 - More than significant land supply is available at both the Municipal and Bellarine Peninsula regions within Greater Geelong.
 - House prices are an issue in Barwon Heads, however, there is significant housing growth occurring in the surrounding growth area locations of Armstrong Creek and Ocean Grove.
 - There are significant constraints for a western expansion, including impacts on environmental and coastal areas, flooding/climate change and issues around stormwater discharge.
- Potential for some community benefit by way of expanded community services through the rezoning of land on the western edge;
- Opportunity for Stage C of 13th Beach Golf Resort to be redeveloped with a net environmental benefit to the broader community, with no further residential development.

3.0 The Plan

3.1 Vision

A vision for Barwon Heads was derived from the Bellarine Peninsula Strategic Plan 2006 – 2016 (BPSP):

“In the year 2016 Barwon Heads will be a unique, sustainable, residential and environmental hub; a landlocked community surrounded by pristine river, coast and wetlands. An intimate community which supports all age groups and provides a place of belonging for residents and visitors alike; where human impact is managed to support the fragile natural surroundings by:

- Clearly defined limitations on urban development
- Protecting and nurturing natural surroundings by managing human footprint
- Supporting walking, cycling, fishing, sailing, surfing, swimming and generally enjoying what our coastal village has to offer in an environmentally sensitive way”.

The Structure Plan establishes planning principles and directions consistent with achieving this vision. It is noted that an audit of the BPSP was undertaken in 2012 and this, as well as community feedback received as a result of engagement undertaken during October and November 2016, means that the vision will continue to be relevant post 2016. This vision is also supported by the vision that was included in the Barwon Heads Urban Design Framework 2003 shown below.

“A place that is defined by the natural landscape features that surround it – the Bellarine Peninsula’s ‘island’ community.

A town of diverse character where development is largely nestled into the coastal vegetation, or if development is not tucked away, it is honestly expressed and well designed.

A place where the informal qualities are retained, because it is these elements that give the town its special character, and where the interface of the town with the ocean, wetlands, river and rural land demonstrates an environmental sensitivity.

A township where people can walk safely, and experience a strong sense of nearness to the water through buildings and vegetation that highlight the coastal environment and unique landforms.

A place where a diverse and environmentally aware community want to live and visit”.

3.2 Role of the Township

The role of Barwon Heads has changed over the last three decades from a quiet retiree and holiday township to being primarily a commuter residential area for Geelong and a popular holiday destination.

Barwon Heads is not identified as a growth location in the G21 Regional Growth Plan 2013 and the Local Planning Policy Framework for residential development; nor as a location for extensive commercial or industrial activity.

The sensitive coastal, environmental and rural setting of the township, and associated State and Local Planning Policies, preclude extensive township growth, while local services and facilities are generally limited to those which provide for daily needs and requirements, with a limited range of tourist and visitor related amenities.

3.3 Principles and Directions

The structure plan identifies principles (objectives) and directions (strategies) relating to the key planning themes:

- Urban Growth
- Infrastructure
- Settlement and Housing
- Natural Environment
- Town Centre and Economy
- Rural Area

3.3.1 Urban Growth

The nominated settlement boundary for Barwon Heads has changed little since being set under the 1996 Barwon Heads Structure Plan.

Barwon Heads is a desirable place to live and this places pressure for extending the settlement boundary to the west of the township as well as for an increase of infill development within the existing township. In terms of housing supply there is limited supply for Barwon Heads and in 2015 it was estimated there was between four and five years of residential land supply within the township based on annual dwelling construction figures. However, this is likely to be less now given the two years that have passed since the housing land supply data was updated. Note that this figure also includes 13th Beach, which is outside of the Settlement Boundary, but is considered to be part of the residential supply for Barwon Heads. If 13th Beach Resort is not considered there is around 3 years supply of land. The current land supply is characterised by the following:

- Virtually all of the major Broad Hectare areas of land identified in previous Structure Plans for residential development have been either subdivided and developed, or are in the process of being developed. Since 2010 there have been two significant subdivisions: the Former Rondor Caravan Park; and Eddystone Court. Both subdivisions have supplied around 115 residential lots. Most of the Former Rondor Caravan Park has been developed and more than half of the lots in Eddystone Court have a dwelling either completed or in construction.
- There are no new Broad Hectare sites expected to be created over the next five years. The only Broad Hectare Supply is estimated for an 11+ years timeframe for a small block of land to the north west of the Seabanks Estate.
- There are 183 vacant lots in Barwon Heads; although this figure includes 64 vacant lots for 13th Beach Resort. It is noted that at the time of assessment (end of 2016) 35 out of the overall lots were under construction, which includes 7 for 13th Beach Resort.

The supply of residential land must be considered in the context of the State and Local Planning Policy Frameworks. *Clause 11.02-1 Supply of Urban Land* in the Greater Geelong Planning Scheme seeks to plan for population growth over a 15 year period. Residential land supply is required to be considered on a municipal basis, rather than a town-by-town basis. An analysis of residential supply has shown that there is a significant supply of land that goes well beyond the 15 year period for the Greater Geelong Municipal area, as well as the Bellarine Peninsula Region.

Three proposals have been put forward seeking that the Settlement Boundary be expanded on the western edge of the township. This would extend the Settlement Boundary to include most of the land westwards to the Murtnaghurt Lagoon wetland 'channel' (See Map 16; Section 7.3.1).

The westward expansion to the settlement boundary is not supported for Barwon Heads. There is a lack of policy support 'in principle' to extend the settlement boundary. To support this position Council has received significant community opposition to development through two community engagement processes. Due to the lack of 'in-principle' support for development, Council has not undertaken a detailed feasibility assessment of individual sites, but has received high level advice from internal and external experts.

Policy Basis

Contrary to State planning policies, including the VCS. The justification to not support the extension of the settlement boundary are again similar to those put forward by the Council during the last review of the Barwon Heads Structure Plan and Planning Scheme Amendment C159. In accordance with PPN36 a settlement boundary can be reviewed and must have regard to changed circumstances and other relevant matters. It is considered that since the last Structure Plan review the arguments against the extension to the settlement boundary have in fact been strengthened through State policy:

- Planning Practice Note 36 – Implementing a Coastal Settlement Boundary (PPN36) sets out that a coastal settlement boundary can be reviewed and must have regard to changed circumstances and other relevant matters. A key consideration is the Victorian Coastal Strategy (VCS).
- The VCS notes that development should occur in areas identified for growth. Development will only be considered where located within existing, modified and resilient environments, where the demand for development is evident and any impacts can be managed sustainably. In the first instance significant environmental and cultural values should be protected.
- G21 The Regional Growth Plan and Clause 21.06 of the Greater Geelong Planning Scheme (PS) do not identify Barwon Heads as a town for growth.
- The State Planning Policy Framework (SPPF) for the Bellarine Peninsula has been strengthened by the adoption of the Bellarine Peninsula Localised Planning Statement in 2014. This further enhances the importance of the ecology of the Bellarine Peninsula and the need to protect it from inappropriate urban encroachment. The Local Planning Policy Statement (LPPF) of the PS further enhances this position.
- Clause 12 of the SPPF requires Council to adopt the 'precautionary principle'.

Demand for housing. In the context of considering the land supply at the municipal level this does not automatically result in no growth whatsoever for a town not identified for growth. On the contrary, the G21 plan notes that modest growth can occur, but this must be considered in the context of other policies, such as 21.06 which primarily directs growth to the growth area locations and at the same time promotes urban consolidation in line with the Housing Diversity Strategy 2008. Ultimately modest growth does not necessarily mean outward expansion and Barwon Heads should be considered in terms of its locational context. For Barwon Heads there are substantial amounts of growth occurring in the nearby growth area locations of Armstrong Creek and to the north of Ocean Grove. Clearly Barwon Heads cannot be looked at in isolation and Ocean Grove, which is located only 5km from Barwon Heads, is directly linked as a housing market. A housing market can consider key functional linkages between places where people live and work and is not necessarily defined by one township only. This is relevant for Barwon Heads in that as a standalone suburb the town does not have the range of services available to make it self-sufficient.

It is also considered unlikely that extending the settlement boundary will have a marked impact on affordability. As noted above the market for properties is larger than just Barwon Heads. Plus it is debateable that for a small town, new land is going to be priced at a lower point than what is the current market price for Barwon Heads. Across Victoria land in new development areas is often released in a limited or phased manner to keep prices higher at market levels or above.

The town centre and the surrounding 400 metre walkable catchment is currently located within an Increased Housing Diversity Area (IHDA), which is supported by the Housing Diversity Strategy 2008 and is part of Council's broader settlement strategy policy. There remains an expectation that there will be a level of development that is facilitated in Barwon Heads in the IHDA as well as through incremental change in surrounding residential areas.

This should be undertaken in the context of maintaining the existing character of Barwon Heads (See also Section 3.2.2).

Potential land use conflicts. The State Game Reserve of which Murtnaghurt Lagoon makes up a part of, is a permitted duck hunting area and there is potential for conflict between increasing development and hunting. Further the Jirrahlinga Koala and Wildlife Sanctuary also provides pet boarding for a range of pets and Environmental Protection Agency guidelines recommend that kennels should be located at least 500m from residential areas.

Undesirable precedent. An argument may be put forward that certain portions of land should be considered for development. There is clear policy and community support to retain the current settlement boundary as well as significant constraints. Any development that was to go west of the settlement boundary would seriously affect the ability to hold this policy position for the entire area west of the settlement boundary.

It is acknowledged that any development of land on the western edge could be designed to be “hidden” from view, thus minimising visual intrusion on the landscape. However, attempts to minimise the visual intrusion of urban form, with the provision of setbacks and minimal access points, would lead to the development of isolated urban areas which lack connections to the broader township given limited connection points. There is also the prospect of further substantial urban growth to the extent that the village atmosphere of the township would be threatened and its centralised services and facilities over-stretched.

Community opposition.

In the Panel Report for C159 for the 2010 Barwon Heads Structure Plan, while not recommending a change to the settlement boundary, the Panel did encourage the Council (and the Barwon Heads community) to reconsider its opposition to the development of this land in the context of environmental benefits that could be accrued. The panel was clear that this is to be determined by the Council and the Barwon Heads Community and the opposition by the community was not something that the Panel considered it was able to dismiss. The current Structure Plan update process has shown through two community engagement processes and over 1,000 submissions that the significant opposition by the community remains. There was in fact only limited support for development.

Detailed land development and constraints

As noted earlier there is no policy support for the development of land outside of the Settlement Boundary therefore a detailed assessment of land development feasibility has not been undertaken. The proponents for 1900 Barwon Heads Road have submitted reports that they consider support the development of land outside of the Settlement Boundary. The reports provided are not detailed assessments and largely refer to advice provided in relation to the preparation of the 2010 Structure Plan review. Advice to Council from internal and external experts for this Structure Plan does not support the western expansion of development outside of the settlement boundary.

Environmental Constraints and stormwater. Council’s Environmental Planning Unit and Engineering Services do not support the proposal to extend the settlement boundary and the Department of Environment Land Water and Planning (DELWP) have also raised concerns. Of the greatest concern is the impact to the internationally recognised Ramsar Wetlands at Murtnaghurt Lagoon and overflow channel that connects the lagoon to Lake Connewarre via the Barwon River. The ecological, biodiversity and ecological importance of the area are well established through numerous studies. The impacts are not restricted to the wetlands themselves, but also from off site impacts of development such as through the development process and subsequent stormwater drainage or indirect impacts of domestic animals and the like. A need to provide buffers to the wetlands is also identified. There are also Coastal Moonah Woodland Community remnant areas identified within the area north of Taits Road that are listed as threatened under the Flora and Fauna Guarantee Act 1988.

Experience from other developments in the City highlights that Council needs to adopt the ‘precautionary principle’. DELWP have advised that experience from Armstrong Creek has identified that increasing freshwater inflows into a saline wetland system can lead to degradation of the wetland by changing the vegetation community and not allowing the system to dry out as it would occur in the natural system. Further, Council’s Engineering Services have noted that there are already stormwater drainage problems in Barwon Heads township and an extension to the settlement would likely exacerbate these impacts. Council also does not accept the use of

pumped main drainage systems in this type of broad hectare location due to the ongoing maintenance costs resulting from the low lying nature of the land and salinity levels from ground water.

Flooding and climate change constraints. Barwon Heads is subject to low lying and potentially flood prone land. Detailed flood modelling would be required to assess these implications as well as the need for an Environmental Management Plan and a Cultural Heritage Management Plan (CHMP).

Infrastructure. The current water supply and sewerage provision for Barwon Heads is insufficient to cater for an extension to the settlement. This is not a constraint to development, but sets out that infrastructure works would be required by Barwon Water to service growth.

Consideration for Rural Living Zone (RLZ) or Low Density Residential Zone (LDRZ). The Rural Land Use Strategy 2007 and Local Planning Policy Framework of the Planning Scheme do not support new RLZ areas.

The LDRZ is a residential zone and even though the lots being created are larger these would still change the character of the area from being rural to residential. This type of zone is also an inefficient way to create allotments and if residential development was seen as an appropriate zone change for the area, Council would promote normal housing development at 15 dwellings per hectare to ensure the sustainable use of land.

Overall it is considered that the settlement boundary should continue to be defined at its current location. There is no strategic policy support to justify the moving of the boundary, there are significant constraints to development and applying the precautionary principle, a significant risk to internationally significant biodiversity and environments, as well as significant lack of support from the local community. It is considered that urban development outside of the existing boundary would irrevocably erode the “village” atmosphere of the town and undermine the vision of the town, which aspires to be a place ‘where human impact is managed to support the fragile natural surroundings’.

It is acknowledged that some community benefit by way of open space or recreational trails could be achieved through the rezoning of land to residential these benefits do not outweigh the broader policy objectives. Advice from service authorities has stated that, at this time, there is no need to provide additional or expanded services within Barwon Heads, including education facilities or open space provision.

13th Beach Resort.

During the preparation of the 2010 Structure Plan Council sought to rezone Stage C of the land as Rural Conservation Land. The Panel’s report on the subsequent Planning Scheme Amendment C159 supported the retention of the Comprehensive Development Zone given its ability to provide the greatest level of control over future site outcomes and the potential to deliver net environmental benefits to Murtnaghurt Lagoon. The panel noted however that the zoning of the land would not necessarily be retained in perpetuity if not acted on. If a suitable development proposal is not advanced in the short term (perhaps 2 years) it would be reasonable for Council to revisit the zoning of the land and potentially remove the CDZ. The panel supported the Farming Zone as the potential zone, rather than the Rural Conservation Zone.

The site should remain in the CDZ for the following reasons:

- The development provides an opportunity to deliver net environmental benefits for the community;
- Economic conditions that would have allowed for development in a short timeframe have changed;
- This is an nationally recognised golf course that is identified in the Tourism Greater Geelong and the Bellarine Tourism Development Strategy as a key tourism facility for the City;
- The Farming Zone has changed since 2010 and allows for a wider range of land uses;
- A golf course of this nature can provide a high level of amenity; and
- There was limited support for the change by the community through engagement.
- It is imperative that the conditions for development that were imposed as a part of the 2010 Structure Plan are retained. A key requirement is that no residential development should occur on the site.

44 River Parade and 14 Eddystone Court

44 River Parade and 14 Eddystone Court are located within the settlement boundary, however, are included in the Farming Zone. Further investigations have indicated that this is an anomaly. The two parcels of land were originally linked to the area of land associated by a historical Section 173 agreement. Each parcel is associated with a larger parcel of farming land to the west that is outside of the settlement boundary. The site is also a triangle of land wedged between the Moonah Park at the edge of the settlement boundary. 44 River Parade is also identified as Flood Prone Land. Overall the land is likely to be constrained and it is recommended that the settlement boundary be changed to exclude the land from the settlement area (see Map 2).

Principles

- To protect the unique character of Barwon Heads as a small coastal village located within a sensitive environmental and significant landscape setting.
- To maintain a compact urban form and avoid outward sprawl of the township.

Directions

- Ensure that urban development does not occur outside the defined Settlement Boundary shown on Barwon Heads Structure Plan Map 2;
- Ensure any future development of Stage C of the Thirteenth Beach Golf Resort:
 - Is principally focused on an 18 hole golf course (or similar);
 - Has a strong link with the existing resort;
 - Provides a demonstrable net environmental benefit for the Murtnaghurt Lagoon and channel;
 - Excludes residential development;
 - Maintains the non urban appearance along the frontage to Barwon Heads Road.
- Make a minor change to the Settlement Boundary to exclude land at 44 River Parade and 14 Eddystone Court from being located within the Settlement Boundary, as shown on Barwon Heads Structure Plan Map 2.

3.3.2 Infrastructure

Water and Sewerage

Barwon Water have advised that there is currently sufficient potable water to cater for the existing township as well as infill growth within the current settlement boundary. In regards to sewer provision there has been a significant amount of sewerage works within Barwon Heads over the past five years to cater for growth in the southern Bellarine Peninsula. These works have largely been completed and can accommodate identified growth on the southern Bellarine Peninsula for the foreseeable future, including infill growth.

Flooding and stormwater

Barwon Heads is susceptible to flooding due to the low lying nature of the town and since it originally made up part of the floodplain for the Barwon River. The majority of the Barwon Heads township is well protected from riverine flooding under the 1% AEP by high ground to the east and the levee located to the north west. The Flood Management Plan 2005 (FMP) noted that the town experiences relatively serious and frequent drainage related or "stormwater" flooding resulting from the flat nature of the town and the ability to adequately drain water flows. To attempt to address the existing stormwater flooding issues, Council has put in place a Special Building Overlay in areas designated flood prone land. Council has also installed a pumping station in Clifford Parade and upgraded stormwater pipes. The pumping station has been designed to cater for more frequent, lower intensity rain events, but will not eliminate flooding.

The issue of stormwater has the potential to be exacerbated through the pressures from infill development in the town centre, particularly in the context of a Residential Growth Zone currently being in place in an Increased Housing Diversity Area (IHDA) within 400m of the Town Centre. Future development has the potential to increase flood risk to people and property. It would be impossible to eliminate all flooding by increasing capacity of the underground drain network. Outcomes from this structure plan seek to address the extent of the impacts of stormwater flooding impacts by putting in place the following measures:

1. Zone and IHDA changes. A recommended zone change from Residential Growth Zone to General Residential Zone, Schedule 1 (GRZ1) for the IHDA area. Also removing the IHDA from the land south of Bridge Road.

The change of zone from General Residential Zone 2 (GRZ2) to Neighbourhood Residential Zone (NRZ) – Barwon Heads Incremental Change Area for most of the remaining residential areas of the township.

(See also Section 3.3.3).
2. New Design and Development Overlay - Schedules. Changes to zone schedules to decrease site coverage to 40% in the NRZ. Also to provide larger front setbacks of 6 metres and a side setback requirement of 2 metres on one boundary for both the NRZ and IHDA area. This will help to lessen restrictions of stormwater flows, as well as creating space around buildings to provide for landscaping and the planting of vegetation. The State Government has also recently required that minimum garden areas are provided in the NRZ and GRZ zones, which increases the need for pervious surfaces.
3. All new development will be required to include measures to restrict stormwater discharge to acceptable levels; including on-site detention, stormwater re-use and/ or off-site augmentation works. Major development to be informed by a detailed stormwater management plan and flood assessment to demonstrate surrounding properties will not be adversely affected.
4. If indicated through a future updated FMP study there may be a need for planning controls to be put in place to address localised stormwater flooding.

Climate change

The low lying nature of Barwon Heads in a coastal area makes the town susceptible to climate change. Council's Climate Adaptation Strategy 2011 has led to the preparation of a 3rd Pass Local Coastal Hazard Assessment (LCHA). This project builds on the State Government's Coastal Inundation Dataset (2nd Pass Assessment). The project has a purpose to provide data sets and spatial mapping of Geelong's coastline and potential future inundation as a result of sea level rise, storm surge and estuarine flooding.

Map 13 (See Part C: Section 3.1.4) shows the flood risk (% AEP) and climate change risk to 2070 and 2100. Risks shown on the map are for events that occur under a 1% (1 in 100 year) storm tide on top of sea level rise scenarios. So this does not constitute constant inundation. The map can help policy makers plan for future climate change scenarios and implications. The impact of coastal inundation by the year 2100 will require careful coastal planning in the future. While some of these areas have established land uses, where new development is proposed it will need to be planned and assessed with regard to the State Planning Policy Framework, Local Planning Policy Framework including State Government advice on coastal planning matters and importantly, the findings and recommendations of the 3rd Pass LCHA and Council's Climate Change Adaptation Strategy. Council is currently working with the Borough of Queenscliffe to determine appropriate planning mechanisms to include in the Planning Scheme resulting from the LCHA.

State datasets (2nd pass assessment) show that there are issues with potential future sea level rise for the Murnaghurt swamp area. The local coastal assessment (3rd pass assessment) did not assess this area west of the township boundary as only the coastal environment was assessed.

Education

The Department of Education and Training (DET) plans for the future development of schools over a twenty-year timeframe. Given the projected numbers of school aged children in 2016, it is not necessary for this Structure Plan to designate future areas for educational purposes, nor consider availability of land for additional educational facilities. DET has informed Council that there is sufficient land to expand the school at its existing site, if required and five classrooms are currently being constructed to cater for demand from 2017. An additional Catholic primary school in Barwon Heads is also not required.

Community facilities

Bop Bop Karrong opened in 2015 and provides a modern and fully integrated early childhood and family services centre including Maternal Child and Health and kindergarten facilities. The provision of long day child care is consistently identified as a gap in local service provision within Barwon Heads through consultations with parents and young families. However, the population of Barwon Heads remains too small to be able to sustain a financially viable child care centre.

The old kindergarten building in Clifford Avenue is owned by Council and is currently vacant. Council is yet to resolve a way forward for how the site can be used. Reuse of the building would require remedial/ capital works to be undertaken.

Sport and recreation

The emerging draft Greater Geelong Open Space Strategy does not identify a need for additional open space land or land acquisitions to meet the needs of the community. A draft action of the strategy is to explore opportunities to improve access to and enhance existing open space in the area north of Tait's Road. Most of the town's passive open space provision hinges on the Village Park, the coast and river estuary. Passive open space has not been well provided for in recent developments within the town, with most consisting of encumbered land/ drainage basins which provide limited passive use opportunities. In addition, the Geelong Play Strategy (2012-2021) notes that there is a gap in play space provision in the north western area of the town. Any future subdivisions within Barwon Heads will need to recognise this in terms of location, quality and type of passive open space provided through development contributions.

In the future there will be a need for an 8ha active open space to serve both the Barwon Heads and Ocean Grove towns within the settlement boundary depending on development patterns and timing. The consideration for this

facility to be located in Barwon Heads would be driven by population growth resulting from a boundary extension, which is not supported by Council.

There are a number of potential major trail projects for Barwon Heads, although these are subject to both Council and other agency budgets and funding priorities. These include the Round the Heads Trail, the Barwon River Parklands, the Queenscliff to Barwon Heads link and the 13th Beach Trail.

Barwon Coast Committee of Management (BCCoM) has responsibility for the management of the coastal areas of Barwon Heads through their Coastal Management Plan (CMP) 2012/13 to 2014/15. A draft 2017-2020 CMP is currently being prepared and is due for adoption in August 2017. The construction of a shared pathway along 13th Beach Road (13th Beach Trail) from the caravan park is a priority project for BCCoM and a Council working group is in place to consider the feasibility to implement the project. BCCoM plays an important role in the provision of active sport in Barwon Heads due to the management of the Howard Harmer Reserve that is located within their caravan park and caters for football and netball and other community facilities.

Traffic and parking

The transport network within Barwon Heads is focused on road based movements. There is a lack of a formal path network in the majority of residential streets with linkages between open space areas and to and from the Town Centre being poor in some parts of the town. Public transport in and around Barwon Heads is very limited.

The scale of traffic flows through the town and the amount of car parking supply is continuously raised as an issue requiring attention by residents and traders. To address this Council Commissioned GTA to undertake traffic and parking studies to support the Structure Plans in 2003 and an update in 2010. A series of actions have been implemented through these studies. It is clear that issues around traffic and parking are worsened by the significant increases in visitor traffic during the peak holiday periods of December and January. Outside of these peak times volumes on the arterial and collector roads are generally within the capacity of these roads and consistent with their function under the road system. Likewise, for parking outside of the key peak periods there is generally sufficient capacity within the commercial areas to cater for parking demands.

The main 'Arterial Road' through the township Barwon Heads Road, Golf Links Road, Bridge Road and across the Barwon Heads Bridge is managed by VicRoads. Decisions relating to load and speed limits, pedestrian crossings and traffic devices are ultimately determined by VicRoads and Council can only play an advocating role. Council must work within the limitations which this road alignment, and its management, presents in relation to traffic movements and associated issues for the wider township.

Council continues to monitor the impact of traffic flows on surrounding Council managed streets and the potential impacts of rat running away from the arterial main road. It is noted that a change in traffic conditions on one road, ultimately has a flow on effect to other roads. This has been evident from changes on Bridge Road and speed reductions down to 40 kilometres per hour, at the request of community groups, that has resulted in traffic increasing on surrounding streets. Further changes to traffic conditions on a specific road (such as from decreasing speeds etc) will inevitably transfer those problems to other roads and no changes are supported at this time. Further, a blanket reducing of speeds across Barwon Heads would likely have a detrimental impact on the overall traffic flows in the town and there would likely be considerable objection to this from the community. Improvement works and mitigation are consulted with the community, however, there are often significant differences of opinion throughout the community and community groups as to the best way forward and Council (and VicRoads) must balance these differing views.

The State Government have committed to funding in the 2016/ 17 budget for the planning of Barwon Heads Road duplication as well as the continuation of the Geelong Ring Road (Baanip Boulevard) from Surf Coast Highway to the Bellarine Highway (Bellarine Link).

In the summer peak period parking problems are pronounced around the town centre and Hitchcock Avenue as well as along Flinders Parade and beach parking areas. Demand at beach parking areas is of particular concern to the BCCoM, including illegal parking in dune areas. This is a complex issue however, as the significant problems in the holiday peak of around two months skews the impacts and makes it difficult to plan for and to justify budgets for Council. Similar to traffic flows there are different views across the community as to who parking should be addressed in Barwon Heads.

During recent community engagement, feedback from many residents indicated that they accepted the parking situation and realise there is a need for people to consider walking or cycling more often. Often there is an expectation for people being able to park directly outside a shop or service. This is not realistic year round, which is comparable to many areas across Geelong. It does reiterate the need to improve the pedestrian and cycling network to key destinations. This would include potential education programs.

Based on the peak/ off-peak context, Council's Engineering Team do not at this stage recommend any significant changes to the parking regime and infrastructure that is available to Barwon Heads. This is continually monitored by the Traffic Management and who responds to customer requests or complaints where necessary. The following options could be considered in the future by Council should it be considered expedient or if budgets allow:

- Residents permit parking and/or paid meters in the Town Centre;
- Park and ride or community bus. The provision of parking and road is complex due to the costs for acquiring land and the appropriate location to situate. A community bus is currently run by BCCoM during the summer peak and is part funded by Council. It is currently not feasible to expand the service, however, this could be a possibility if more funding was available from Council or ultimately that Council takes responsibility for managing and implementing the service. It could potentially be linked to a park and ride service;
- Council purchase and development of off-street car parks. This option is less realistic due to the costs of land purchase and acquisition in Barwon Heads as well as construction costs;
- Special Rates and Charges Scheme to fund car parking, parking infrastructure or pedestrian and cycling connections (see also below).

In promoting an improved pedestrian and cycling network the G21 Principal Bicycle Network, Greater Geelong Cycling Strategy and the Barwon Heads Walks Project will assist the prioritisation of paths infrastructure where appropriate. The retention of these 'informal' unsealed roadways and grassy verges within the township are often a source of debate for the community. Many people support the retention of these features as they define the character of the town. On the other hand they can reduce traffic flows (particularly unsealed roads), reduce pedestrian connectivity, reduce safety or usability in poor weather conditions or for older people. The informal streets provide an important character element for the town and should generally be protected as recommended by the Residential and Landscape Character Assessment 2017. There will sometimes be a need to provide footpaths to improve pedestrian connections and active travel around the town; although these should be prioritised in high movement areas and/or the most direct route or where identified in a Council plan.

In a small township, such as Barwon Heads where the small population only contributes a very small percentage (1.4%) of the total population for the Greater Geelong Municipality, it is difficult and unrealistic to retrospectively fund a high level of services at a level provided in more densely populated city areas. Council's Comprehensive Infrastructure Funding Policy sets out mechanisms for funding infrastructure within the municipality. Where new infrastructure generally benefits only the immediate locality, rather than a broader regional benefit, the policy indicates funding should be derived, possibly in part, from abutting residents. This may be achieved by a Special Rate and Charges scheme under provisions of the Local Government Act 1989 (SRCS), or by upfront agreement. These schemes are applied in existing developed or subdivided areas which lack necessary urban infrastructure, such as sealed roads, footpaths, kerb and channel, and drainage. Finance under a SRCS is raised by Council via a levy on ratepayers in order to fund works.

Principles

- To provide an adequate level of sewerage, water and stormwater infrastructure in infill development areas;
- To provide community services, open space and recreation commensurate with the size and role of the township;
- To deliver an improved and sustainable transport network;
- To plan for flood risk and the anticipated impacts of climate change, including coastal inundation and erosion.

Directions

- Support improvements to road, footpath, cycle paths and stormwater drainage infrastructure where improvements are funded by Special Rates and Charges Schemes and are prioritised in a Council strategy or plan and supported by the community;
- New development to include measures to restrict stormwater discharge to acceptable levels; including on-site detention, stormwater re-use and/ or off-site augmentation works and considers Integrated Water Cycle Management principles;
- To liaise with the Department of Environment, Water, Land and Planning to agree on the level of assessment that should be undertaken for the discharge or limits of discharge of stormwater runoff to sensitive coastal environments;
- Support the ongoing upgrading of open space, leisure and recreation areas undertaken for and on behalf of public land managers, including provision of pedestrian/bicycle linkages;
- Encourage the improvement of the transport, parking and pedestrian and cycling network where prioritised in a Council strategy or plan;
- Ensure the continual monitoring and assessment of the traffic and parking network and recommend improvement works where necessary;
- Ensure that any improvements to the pedestrian and cycling network takes into consideration the streetscape values of the area;
- Investigate the construction of a roundabout at the intersection of Hitchcock Avenue and Geelong Road;
- Advocate for any future traffic works undertaken by VicRoads along Bridge Road or Golf Links Road to adequately consider and improve the pedestrian environment;
- Improve parking opportunities by:
 - Formalising the parking area on the corner of Ozone Road and Seaview Avenue, through the use of materials sympathetic to the coastal environment (E.g. Informal topping (no asphalt), informal markers and directional signage)
 - Informal sealing and line-marking the parking area at the rear of the community hall and the parking area adjacent to the senior citizens centre;
- Advocate for increased bus services between Barwon Heads and Geelong;
- Support the summer community bus run by Barwon Coast Committee of Management and Council consider improving the funding and/or potentially take responsibility for managing the service;
- Encourage the development of a coastal path along 13th Beach Road.

3.3.3 Settlement and Housing

The principles for the future urban growth of the township are outlined in Section 3.3.1. Council does not support the western expansion of the township and this therefore has an implication on where growth will occur in the township in line with the G21 Regional Growth Plan 2013. As a result there has been significant residential infill in Barwon Heads over recent years. The existing policy for Barwon Heads (Clause 21.14 of the Planning Scheme) seeks to:

“Protect the unique character of Barwon Heads as a coastal village located in a sensitive environment and landscape setting; and

Ensure new housing development complements the character of Barwon Heads and provides for a variety of housing sizes and types.”

To inform future infill development in Barwon Heads a Residential and Landscape Character Assessment 2017 (Character Assessment) was undertaken by Hansen Consultants to inform the Structure Plan. This builds on the work that was undertaken in 2003 with the community in preparing the Urban Development Framework (UDF), which has informed the directions of previous Structure Plans and guided improvements with the Town Centre.

The Character Assessment notes that Barwon Heads has a unique coastal character that is recognised by its setting and function as a coastal Victorian ‘village’. The Character Assessment confirms that there has been significant infill occurring in Barwon Heads over recent years, however, contrary to the perceived community impression, most dwellings (75%) that are being constructed are not increasing densities, but the replacement of a smaller single dwelling with a larger footprint dwelling. This has an implication on character and how infill development can be managed.

The residential and landscape character of Barwon Heads is mixed. There are a number of areas that have discernibly similar character traits that generally relate to the time when they were subdivided and the era of dwellings constructed. There is little consistency in building design, which suggests that controls over design are less relevant. One of the more notable trends apparent is the mix of development that occurs in older areas closer to the town centre. This is particularly the case in the older area south of Geelong Road, east of Golf Links Road and north of Bridge Road. They have a consistent, semi-formal street typology based on a regular street pattern, with strong landscaping in the streets and a wide mix of housing. The area south of Bridge Road is a bit different. This area is generally characterised by large lots, narrower informal roads and a mix of buildings from all eras. Vegetation across both the public and private realms is notable and a variable topography.

Despite the mixed character noted above, Barwon Heads has seen incremental erosion of its ‘coastal character’ over the last few decades and this trend will continue without the application of controls to manage built form. As part of the preparation of the Character Assessment Council undertook engagement with the community in October and November 2017. Most community members support or understand the need for a diversity of dwellings within Barwon Heads, consistent with Council existing policies, but are concerned that the scale / form of development allowable under the current controls is out of character. The broad sentiment expressed was that some control was needed, but that this needed to be reasonable and not too onerous.

Fundamental to the concept of residential character is the distinction between the *existing* character of an area and the *future* character of an area. Unless there is clear policy that outlines an existing or preferred future character for an area, then an assessment will occur on a site-by-site basis and only the adjoining area / nearby properties will be looked at in assessing the ‘fit’ of new development into the existing character of an area.

Key elements of character identified as defining Barwon Heads which reflect the community aspirations and broader ‘vision’ for the township in terms of coastal character include:

- A modest site coverage and retention of side setbacks;
- Separation between buildings;
- A mix of dwelling types, single and double storey dwellings with modest medium density development that presents to the street as single dwellings rather than apartment forms;
- Dwellings that do not dominate the streetscape and which do not have a balanced landscape outcome, due to dominant built form viewed from the street;

- Larger front setbacks for double storey forms to avoid dominance;
- Garages set behind building frontages and not dominate the public interface;
- Simple material palettes, with a strong focus on timber / weatherboard;
- Low or no fencing. If fencing is provided it should be visually permeable and reflect recent fencing (e.g. permeable vertical timber fences);
- Sufficient front setbacks to provide meaningful landscape with a strong preference for native and indigenous plantings in an informal setting;
- Accessways to remain unsealed and streets to retain an 'informal' character (noting that there may be other policy imperatives that influence this (for example, providing formal sealed footpaths along key routes); and
- Limit formalisation of streetscapes through increased curb, channel and footpaths, and driveway crossings as well as the loss of informal tree plantings.

The development of sites with more than one dwelling is not, in itself a threat to the neighbourhood character of Barwon Heads, provided that the design of the development is appropriate. All multi-dwelling developments require a planning permit. This enables all issues regarding the site layout, design, buildings materials and colours and landscaping to be assessed.

It is also noted that a benchmarking of controls that currently apply to Barwon Heads with comparable townships indicates that almost every comparable township has detailed design controls applied through the planning scheme, making Barwon Heads an anomaly in the current lack of built form controls. It is considered that there is strong strategic justification for the application of design controls to the township.

To address the implications of the study the following changes are to be implemented (See implementation Section 2.0 for the detail of the zones and overlay controls):

1. **Incremental Change Residential Areas.**

- a) Change zone from General Residential Zone – Schedule 2 (GRZ2) to Neighbourhood Residential Zone (NRZ) – Barwon Heads Incremental Change Area.

The intent of this zone reflects changes to residential zones that have been made by the State Government in March 2017. The NRZ is now not as restrictive a zone as it was previously and allows for a level of incremental change in housing stock. The new purpose of the zone is also supported by the recommendations of the Character Assessment noted earlier.

- b) Apply a Design and Development Overlay (DDO) – Barwon Heads Incremental Change Residential Area.

The DDO recognises the preferred future character noted above and other issues addressed in the DDOs include:

- Permit needed for a single dwelling where certain provisions are not met and a permit needed for the construction of more than one dwelling on a lot;
- Amends the base level for site coverage (40%), front (6m) and site setbacks (2m on one side), the dominance of garages, fencing height and landscaping requirements;
- Height is to be set at 9m maximum as per the mandatory zone requirement;
- Provides for a higher permeability that recognises a need for unsealed accessways and areas for landscaping; along with flood issues that occur in the town;
- A landscape plan is required when a permit is required;
- Planning permit applications for single dwellings to be exempt from advertising and third party appeal rights;

- For materials and specific design requirements this will be considered through Decision Guidelines for when a permit is required. This will recognise appropriate building design of simple coastal palettes, with lightweight and timber materials and to avoid typical suburban and box style designs; and
- The DDO will not be applied to recent developed estates that are inconsistent with the design characteristics, or have their own design requirements (i.e. Seabank Estate).

2. Increased Housing Diversity Area (IHDA).

The application of the RGZ in Barwon Heads focusses more on the *intensification* of the built form in these areas, rather than the *diversification* of housing stock. Therefore the area is accommodating single dwellings with large footprints and smaller more diverse forms are not being constructed to meet the intent of increasing diversity. Often dwellings are being constructed without generous back yards. This is also a likely result on the relatively small, individually owned lots in the area. This results in a need to:

a) change the zone from Residential Growth Zone – Schedule 3 to General Residential Zone – Schedule 1.

For Barwon Heads there are inconsistencies between the fundamental purpose of the zone and the desire to achieve character outcomes. The recent changes by the State Government have exacerbated this impact given that there is now a 13.5m height requirement, which is not consistent with the preferred character of Barwon Heads. A consequence of the new RGZ zone is that the height limit is set at 11m, which is a mandatory requirement and cannot be altered. The proposed DDO (see below) provides design requirements to ensure that dwellings are designed, sited and screened in a manner to reduce the dominance that a two or three storey building would have on the streetscape and surrounding properties.

b) retaining the IHDA designation, although removing this from the area south of Bridge Road. The area south of Bridge Road should also be rezoned to NRZ4.

There is a need to encourage increased diversity of housing of the right type, which would include one and two bed units along with older persons housing to recognise the ageing population of the community. It recognises Council's broad policy to promote density and change near town centres. But also that the scale is reflective of the range of facilities and services (including limited public transport) not being the same extent as other areas or Ocean Grove. The need for some increase in diversity has been part of the policy for 10 years. It also recognises the strategic policy in the G21 Growth Plan for Barwon Heads to receive a "moderate" degree of new residential development, which respects the existing character of the town.

As noted above the area south of Bridge road is unique and is not consistent in terms of streetscapes, landscaping, topography and lot sizes. The remainder of the IHDA should remain and not be extended to the north to Geelong Road parallel with the Village Park.

c) applying a new DDO to the IHDA area.

To achieve the balance between modest housing growth and managing the impacts of character a DDO is to be applied. The DDO recognises the preferred future character noted above and other issues addressed in the DDOs include:

- Permit needed for a single dwelling where certain provisions are not met and a permit needed for the construction of more than one dwelling on a lot;
- Amends the base level for front (6m) and site setbacks (2m on one side), the dominance of garages, fencing height and landscaping requirements;
- Site coverage is retained at 60%, which has been reduced from 70% under the RGZ3;
- Height is to be set at a 11m maximum as per the mandatory zone requirement;
- A higher permeability is not required, however, the garden area requirements that have been brought about by the State's recent changes to residential areas (and noted for NRZ above) will now apply;

- A landscape plan is required when a permit is required;
- Planning permit applications for single dwellings to be exempt from advertising and third party appeal rights; and
- For materials and specific design requirements this will be considered through Decision Guidelines for when a permit is required. This will recognise appropriate building design of simple coastal palettes, with lightweight and timber materials and to avoid typical suburban and box style designs.

The DDO triggers a permit if design requirements are not met. If genuine housing diversity is being delivered there would be scope to provide flexibility in the design response. However, it will be important that the design will not be an overly dominant apartment form and is designed to have outstanding architectural merit consistent with the coastal character of Barwon Heads. The appropriate design of upper levels of a building will be important and will need to be designed to not dominant streetscapes or adjoining buildings through the use of appropriate setbacks, vegetation softening, landscaping, recessive elements and articulation.

3. Incremental upgrades of streetscapes for one-off projects could unintentionally undermine the character of the township. Works undertaken by Council or other Authorities throughout Barwon Heads should be guided by a focus on:
 - The protection of existing street trees and the introduction of additional street trees;
 - The introduction of additional informal landscaping in streets, including support for appropriate 'soft edges' between the public and private realms;
 - Water sensitive urban design treatments in streets;
 - Avoiding hard curb and channel treatments in favour of 'soft edges'; and
 - The gradual removal of overhead powerlines, wherever and whenever possible.

Coastal Moonah Woodland community areas

The residential areas of Warrenbeen Court and part of Saratoga Avenue (See Map 4; Section 2.0) are located within a unique vegetation and landscape setting. It is characterised by very large residential properties that are almost entirely covered by indigenous Coastal Moonah Woodland vegetation communities - indigenous vegetation of State significance, listed as threatened under the FFG Act, and Endangered within the Otway Plain bioregion. There are also fragmented communities of Coastal Moonah Woodland located in the rural area to the north of Taits Road in land located within the farming zone outside the settlement boundary.

There is strong justification to support the need for planning controls within the Warrenbeen Court area and the area north of Taits Road, which is supported by significant tree assessments that have been prepared by Ecology Heritage Partners. Vegetation in the area is at risk due to degradation and poor management (or a lack of education from relevant authorities) of the understorey of the Moonah Woodland 'community'. Protection of vegetation has long been established in the area through covenants that have been placed on the titles of each property in the Warrenbeen Court Area and the need for planning protections identified in the previous Barwon Heads Structure Plan 2010. Two covenants are in place: a covenant that restricts development within identified building envelopes (PS412071E of 20/09/1999 - no expiry date); and a covenant that restricts development to one dwelling on a single lot and allows no further subdivision (X290849N of 01/02/2001 - expires on 31 December 2020).

The Supreme Court of Victoria decision (VSC 677) in November 2016 has further highlighted the need to prepare planning controls to protect vegetation in the area. The decision involves a dispute between two neighbours in Warrenbeen Court over construction of buildings outside of the building envelopes. The Supreme Court has ruled that there is no longer any legal protection of vegetation in the area excepting in cases where building is proposed outside of the permitted envelope. Whilst the Court recognises the purpose of the covenant as being protection of the vegetation, absent of a breach of the covenant there are no vegetation controls (other than for sites over 0.4 hectares). The decision also confirms that there are two covenants in place and a covenant that restricts development within identified building envelopes remains in perpetuity. Therefore a restriction on the development of land after December 2020 remains. The whole uniqueness of the area is dependent on the

retention of large allotments and retention of vegetation is the primary component of the character. The ability to subdivide or undertake further development would seriously risk this.

The Warrenbeen Court Area is currently zoned General Residential Zone - Schedule 2. The purpose of this zone is to provide for a diversity of housing types and moderate housing growth. The Warrenbeen Court Area provides around 6ha of land. Using the State policy requirement of 15 dwellings per hectare in greenfield areas as a guide, the Warrenbeen Court Area could provide 90 dwellings. The General Residential Zone is the incorrect zone for the area in the context of the zone purpose, the significance of the vegetation community and the unique character of the area. Therefore the Warrenbeen Court Area should be rezoned to Neighbourhood Residential Zone. A schedule should be added to the zone that restricts the size of allotments in the area to 4,000m² and limits development to one dwelling per lot.

Town Centre Design outcomes

The design response for the Town Centre is directed by Design and Development Overlay: Schedule 25 Barwon Heads Town Centre (DDO25). The Town Centre is also located within the IHDA. DDO25 has a design response that generally restricts buildings to a maximum height of two storeys. This is now inconsistent with the remainder of the IHDA, which under the GRZ1 is set at a mandatory maximum of 11m across Victoria. As such DDO25 should be changed to three storeys. For DDO25 the height is a 'general' restriction in the context of respecting the predominant building height of the street and adjacent properties and the DDO also requires that the form of buildings and elevations should be articulated. The design objectives for the town centre should also be amended to include consideration of the scale of a building in the context of the low scale coastal design character of Barwon Heads for consistency with the proposed residential DDOs.

Principles

- To ensure that future housing development complements the coastal design character and river setting of Barwon Heads.
- To ensure that future housing development provides for a variety of housing sizes and types, including the provision of adaptable housing designs to support lifetime home living for older people.

Directions

- Implement Development and Design Overlays for the Barwon Heads residential areas as shown on the Barwon Heads Structure Plan Map 3:
 - a) Design and Development Overlay – Schedule: Barwon Heads Incremental Change Residential Area.
Rezone the General Residential Zone – Schedule 2 to Neighbourhood Residential Zone Schedule: Barwon Heads Incremental Change Area. The purpose of the Incremental Change Area is to:
 - Protect the unique low scale coastal design character of Barwon Heads to ensure that adequate land is available on a site to promote coastal building materials and design.
 - b) Design and Development Overlay – Schedule: Barwon Heads Increased Housing Diversity Area Development Area (IHDA).
Rezone the Residential Growth Zone in Barwon Heads to General Residential Schedule 1 (GRZ1). The purpose of the IHDA area is:
 - To provide for increased housing diversity by encouraging small unit housing types that are not designed as a traditional dominant apartment form.

- To ensure that all development within the Increased Housing Diversity Areas of Barwon Heads occurs at an appropriate scale to reflect the unique low scale coastal design character of Barwon Heads and adequate land and space between buildings is available on a site to promote coastal vegetation and the use of coastal building materials and design.

Make consequential amendments to Design and Development Overlay – Schedule 25: Barwon Heads Town Centre.

- Ensure that medium density housing that is provided around the town centre and in the IHDA has consideration to addressing servicing and drainage issues;
- Encourage development which provides for the reasonable sharing of views to the coast, river and foreshore;
- Remove the Increased Housing Diversity Area south of Bridge Road;
- Implement a Environmental Significance Overlay – Schedule: Warrenbeen Court Area and land north of Tait's Road identified on Map 4;
- Rezone the area located in Warrenbeen Court identified in Map 4 from General Residential Zone to Neighbourhood Residential Zone – Warrenbeen Court Area;
- Encourage development which provides for the planting or protection of significant vegetation around buildings and minimises impacts on roadside vegetation;

Protect existing street trees and the informal landscaping in streets.

3.3.4 Natural Environment

The natural environment of Barwon Heads plays an important role for the township. It provides intrinsic habitat and biodiversity values that are environmentally significant; not just to the State, but also nationally and internationally. This includes the internationally recognised RAMSAR wetland area of the Murtnaghurt Lagoon. The natural environment also establishes a unique identity for the township that is highly valued by the local community. The designation of a Settlement Boundary to exclude the key environmental features will assist in the protection of these areas, which in the main part are currently unaffected by urban encroachment.

Areas of environmental and landscape value often have Aboriginal cultural heritage significance, particularly within the river and coastal environs. It is essential to appropriately protect and manage these values in a manner that is respectful to the indigenous community.

The majority of the key landscape features are managed by public land managers, such as the Barwon Coast Committee of Management, Parks Victoria and the City of Greater Geelong. A variety of community based groups, such as the Barwon Heads Association and the Friends of the Bluff are also involved to a significant degree in the protection and improvement of the Barwon Heads environs. The on-going maintenance and involvement by these agencies and groups will ensure that these areas are protected in the long-term. The Community Arts Garden which has been established at the west entrance to the town also has a significant role to play in environmental awareness and protection of the environment.

Council's Environment Team are currently undertaking work to assess vegetation in public areas (parks and roadsides) across the Bellarine Peninsula as well as within Barwon Heads. A future project will be undertaken to incorporate appropriate planning controls where budgets and resources allow.

Principles

- To protect the surrounding natural environment of Barwon Heads and avoid development that impacts on significant biodiversity values and ecologically sensitive areas;
- To protect Aboriginal cultural heritage values.

Directions

- Support public land managers and community groups in the on-going management and protection of Murtnaghurt Lagoon, the Bluff, the coastal and river environs and the estuary ;
- Ensure that development adjacent to Areas of Significant Landscape, Environment & Recreation as shown on Structure Plan Map 2 is undertaken in a manner which complements and does not adversely impact upon these features;
- Encourage retention and enhancement of existing vegetation on roadsides and reserves using locally indigenous plantings that respects the informal, coastal qualities of the town;
- Protect key view lines to the coast and environmental features as identified on Structure Plan Map 2.

3.3.5 Town Centre and Economy

Barwon Heads 'Village' Town Centre is categorised as a 'Town Centre' under the Geelong retail hierarchy. The town centre is predominantly located along Hitchcock Road between Bridge Road and Ozone Road and is zoned Commercial 1 and Mixed Use Zone. The draft Retail Strategy defines a 'Town Centre' as major community shopping locations providing weekly grocery shopping for the local township in combination with specialty store shopping that also services visitors to the region. In 2014 the Barwon Heads Town Centre had 9,800m² of available floorspace.

A floorspace audit for the draft Retail Strategy indicates that in 2014 1,100m² of the available floorspace was vacant. The largest retail outlet in the town is the small 430m² IGA supermarket on Bridge Road. A planning permit issued in early 2017 allows an increase to the retail floor area to around 1,000m². The draft Retail Strategy suggests that to support Barwon Heads there is a floorspace need of 7,200m², which means there is currently an excess of land required. Taking account of population projections to 2031 it is projected that there is adequate land in Barwon Heads to support the township requirement of 9,300m² floorspace. A minor excess of 500m² in 2031 is considered to be insignificant and will cater for any variations in the projections. The draft Retail Strategy assumes modest growth for Barwon Heads with no extension to the settlement boundary.

It is important that Hitchcock Avenue remains the sole focus for commercial development within Barwon Heads, to foster vitality and avoid fragmentation of uses and activities. In all retail centres, the provision of accommodation uses above ground floor level is promoted, subject to appropriate provision of parking and access requirements.

The site located on the south east corner of Bridge Road and Hitchcock Avenue occupies an important gateway entry to the Town Centre and is considered of strategic importance. Redevelopment of this site to provide for a development with high quality design that is integrated with the urban streetscape form and the proposed adjacent supermarket upgrade could significantly improve the character of the town entry.

The policies of the G21 Regional Growth Plan and the Greater Geelong Planning Scheme do not encourage the provision of land for industry or warehouse use within Barwon Heads. The township will continue to rely on the supply of industrial and warehouse zoned land within Geelong, Drysdale and of particular relevance the nearby Ocean Grove. While the application of the Mixed Use zone, applied in Hitchcock Avenue does allow for industry or warehousing providing a planning permit is approved, these types of uses would not be supported in Hitchcock Avenue given the detrimental impact such uses would have on the street's vitality and coastal character.

Tourism is an essential part of the vitality and economic future of Barwon Heads. The popularity of the town is a direct consequence of the natural features, beaches, parklands and recreation the town offers. The Geelong & Bellarine Tourism Development Strategy notes that tourism visitation is anticipated to increase both from overnight trips and daytrippers. Daytripper numbers will be influenced by growth in areas such as Armstrong Creek.

The continued sustainable growth of tourism is to be supported, provided that this respects the coastal character of the town. To support its growth further areas of expansion for tourist related facilities can be accommodated within the Town Centre, such as a visitor centre/booth and amenities. Key opportunities identified in the tourism strategy include a gap of nature-based cabins and hotel accommodation. Nature based accommodation could occur in appropriate locations along the Barwon River, Lake Connewarre or overlooking the coast. There is also a need for reinvestment of existing commercial accommodation and caravan parks, including additional self-contained cabin development and improved facilities in caravan parks.

Barwon Coast Committee of Management (BCCoM) has responsibility for the management of Barwon Heads coastal areas through their Coastal Management Plan, including the Barwon Heads Caravan Park. the Coastal Management Plan is currently in the process of being updated. It is likely that there will be future master plans prepared for the specific management of specific issues or areas of coastal land, including for the caravan park and the need for future upgrades or redevelopment and management of car parking.

Principles

- To provide a diverse mix of uses and activities in the Town Centre to create a thriving and vibrant centre;
- To ensure that the scale of new individual commercial and tourism uses is commensurate with the role and function of the town centre and enhances its coastal setting;
- To encourage the sustainable growth of tourist accommodation and related services.

Directions

- Encourage the development of a mix of commercial, community, visitor related and residential uses on individual sites in the Town Centre, including development that incorporates accommodation uses above ground floor level in the Town Centre;
- Encourage development in the Town Centre that retains the traditionally scaled and proportioned lot sizes in the street;
- Support a variety of tourism based developments that complement the natural features, beaches, parklands and recreation that the town offers;
- Support appropriate additional tourist accommodation development and further reinvestment of existing commercial accommodation, including the improvement of accommodation diversity;
- Liaise with Barwon Coast Committee of Management regarding their strategic planning of the foreshore and coastal reserves and the Barwon Heads Caravan Park;
- Discourage the use of land on Hitchcock Avenue for industry or warehousing and make no provision for land to be rezoned for industry or warehouse uses within Barwon Heads;
- Direct industry and warehouse uses to the designated locations identified in the Local Planning Policy Framework;
- Support the integration of the town centre and the wider township through the development of improved pedestrian linkages.

3.3.6 Rural Areas

A key policy of the Bellarine Peninsula Localised Planning Statement 2014, Council's Rural Land Strategy 2007 and the Municipal Strategic Statement requires the protection and enhancement of the rural and coastal environment of the Bellarine Peninsula in terms of the productive agricultural capacity, rural landscape character and environmental condition. These documents also require a need to maintain non-urban breaks between settlements. A clearly defined settlement boundary will ensure this occurs and that there will be no fragmentation of rural land. The settlement boundary has been delineated to provide a distinct interface between the rural landscape and the urban area.

In accordance with State and Local Planning Polices, no provision is made for rural residential development.

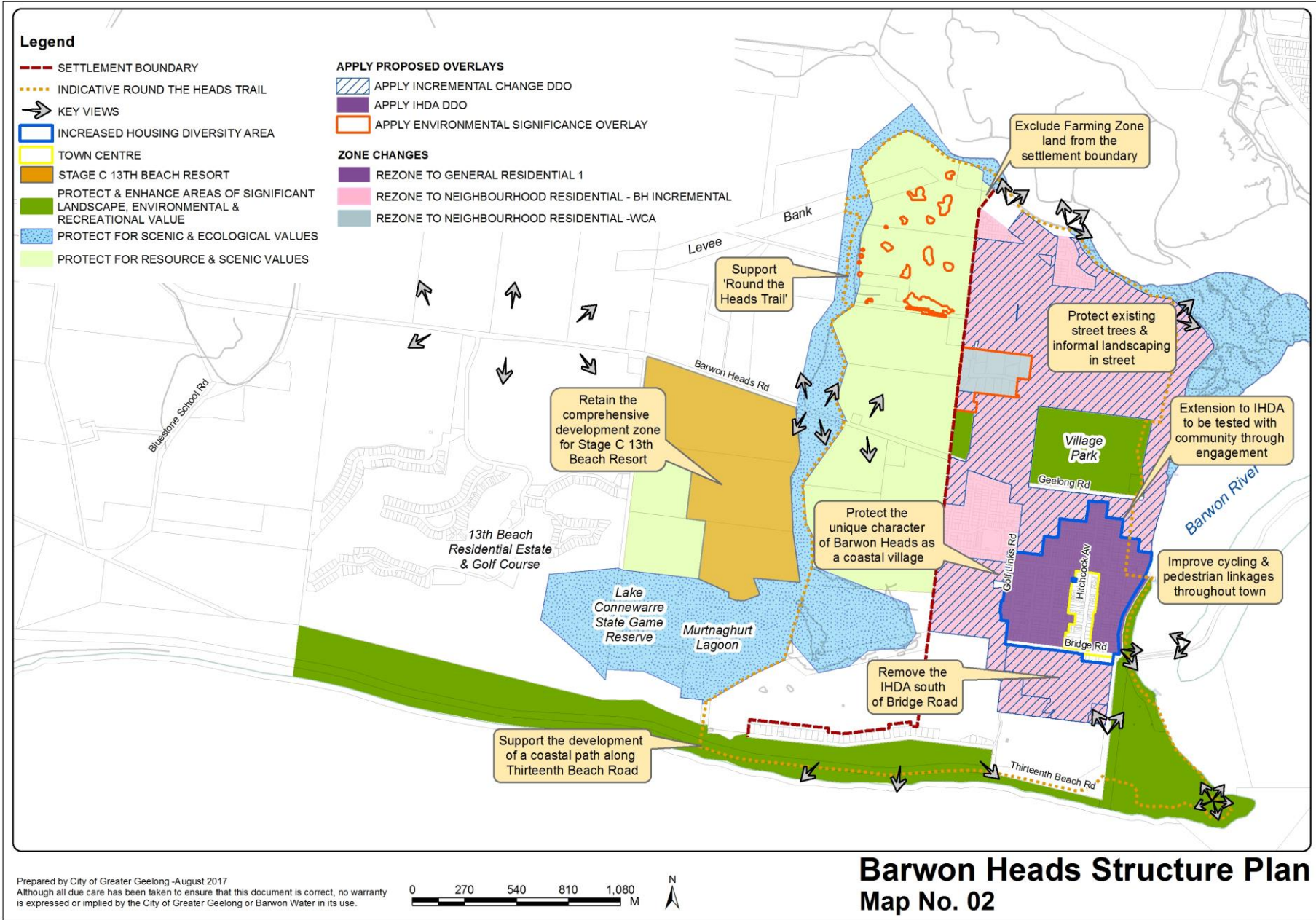
Principles

- To preserve the rural landscape character setting of Barwon Heads;
- To protect the non-urban break between settlements.

Directions

- Retain the existing Rural Zones outside the Settlement Boundary;
- Ensure any land use activities within Rural Zones retain an agricultural focus and preserve the rural, environmental and landscape qualities;
- Make no provision for Rural Living Zoned land.

The above principles and directions for each of the key themes are summarised on the Structure Plan Map 2.



Prepared by City of Greater Geelong -August 2017
 Although all due care has been taken to ensure that this document is correct, no warranty is expressed or implied by the City of Greater Geelong or Barwon Water in its use.

PART B IMPLEMENTATION AND REVIEW

The Structure Plan provides a framework for land use planning and development in Barwon Heads over the next 15 years. The Implementation and Review Section identifies Review provisions and key Planning Scheme alterations, or supporting strategic work, necessary to attain the principles and directions identified in the Structure Plan including:

- Introduction of Planning Policy;
- Application of Zones and Overlays;
- Further strategic work required to support additional planning controls;
- Other Actions critical to attaining key principles directions.

1.0 Implementation of the Barwon Heads Structure Plan

Implementation Plan	
Using policy and the exercise of discretion	Apply a Planning Policy reflecting the directions and principles of Part A of the Barwon Heads Structure Plan, incorporating the Structure Plan as a reference document in the Greater Geelong Planning Scheme.
Applying Zones and Overlays (See Maps 3 and 4)	<ol style="list-style-type: none"> 1. Incremental Change Residential Areas. <ol style="list-style-type: none"> a) Change zone from General Residential Zone – Schedule 2 to Neighbourhood Residential Zone – Schedule: Barwon Heads Incremental Change Residential Area; b) Apply a Design and Development Overlay (DDO) – Schedule: Barwon Heads Incremental Change Residential Area. c) Undertake consequential amendments to Significant Landscape Overlay – Schedule 9 and Clause 22.63 – Increase Housing Diversity Areas. 2. Increased Housing Diversity Area (IHDA) <ol style="list-style-type: none"> a) Change the zone from Residential Growth Zone Schedule 3 to General Residential Zone Schedule 1; b) Apply a Design and Development Overlay – Schedule: Barwon Heads Increased Housing Diversity Area; c) Retain the IHDA designation for most areas within close proximity to the town centre and remove the designation south of Bridge Road; d) The area south of Bridge Road to be rezoned from Residential Growth Zone Schedule 3 to Neighbourhood Residential Zone – Schedule: Barwon Heads Incremental Change Residential Area. e) Undertake consequential amendments to Significant Landscape Overlay – Schedule 9 and Clause 22.63 – Increase Housing Diversity Areas and Design and Development Overlay – Schedule 25: Barwon Heads Town Centre.

	<p>3. Environmental Areas</p> <p>a) Apply Environmental Significance Overlay to the Warrenbeen Court Area and the land north of Tait's Road;</p> <p>b) Change the zone from General Residential Schedule 2 to Neighbourhood Residential Schedule: Warrenbeen Court Area.</p> <p>4. Retain the Comprehensive Development Zone over Stage C of 13th Beach Resort.</p>
Recommended further strategic work	Undertake further work to identify significant vegetation or biodiversity within public areas and roadsides within Barwon Heads and townships on the Bellarine Peninsula and where appropriate apply overlay controls for the Bellarine Peninsula.
Other City of Greater Geelong Actions & Key Agency Relationships	<p>A number of directions require Council support in the work of key agencies and/or the support of key agencies to Council including:</p> <ul style="list-style-type: none"> • Barwon Coast Committee of Management – ongoing improvements to foreshore areas, coastal paths and implementation support; • Parks Victoria – ongoing improvements to key park and wetland areas and implementation support; • Bellarine Community Health – ongoing support of social and community health and support infrastructure; • Tourism Greater Geelong and the Bellarine – support for tourism initiatives; • Work with VicRoads to ensure appropriate treatment and installation of safety and traffic improvements.

2.0 Rezoning Recommendations and Development of Overlay Controls

2.1 Barwon Heads Incremental Change Area (See Map 3)

Neighbourhood Residential Zone – Schedule: Barwon Heads Incremental change Residential Area. The purpose of the zone is to:

Protect the unique low scale coastal design character of Barwon Heads to ensure that adequate land is available on a site to promote coastal building materials and design.

It is also recommended that the schedule carries over the Clause 54 and 55 requirements for open space from the General Residential 2 Zone (A17 and B28; which require 60m² of secluded private open space at the side of the rear of the dwelling with a minimum area of 40m², a minimum dimension of 5 metres and convenient access from a living room). All other planning controls are managed through the application of the Design and Development Overlay planning controls.

Design and Development Overlay – Schedule: Barwon Heads Incremental Change Residential Area.

Design objectives

To protect the unique low scale coastal design character of Barwon Heads by requiring development that results in:

- Buildings located within a spacious and vegetated garden setting that integrates with the vegetation of the public realm.
- Buildings and driveways are designed and sited to avoid being visually obtrusive to the streetscape and adjoining properties.
- New building that reflects the dominant scale and form of surrounding properties.

- Garages that are designed or integrated into buildings to form a visually unobtrusive part of the building.
- The appropriate use of setbacks and a low site cover to ensure that adequate land is available for the retention and establishment of indigenous vegetation.
- The provision of adequate space between buildings to avoid boundary to boundary development and allow sight lines to rear gardens.
- Building design to be simple coastal material palettes, with lightweight, natural and timber materials.
- A high quality, sustainable building design is encouraged that avoids typical suburban and box design styles.
- Retention of the openness of the streetscape by avoiding the use of front fences or by providing low permeable front fences.

Buildings and works

A permit is not required to construct or extend one dwelling on a lot that meets the design requirements of Table 1.

A permit is required to construct more than one dwelling on a lot.

Buildings and works should comply with the design objectives and design requirements specified in Table 1 to this Schedule.

Exemption from notice and review

An application for a single dwelling or buildings and works associated with a single dwelling is exempt from the notice requirements of Section 52(1)(a), (b) and (d), the decision requirements of Section 64(1), (2) and (3) and the review rights of Section 82(1) of the Act.

Application Guidelines

An application to construct a building or to construct or carry out works must be accompanied by the following information:

A landscaping plan has been prepared for the site by a qualified landscape architect that shows:

- Retention of existing trees within the front setback.
- If there are no existing trees, the planting of at least one new tree.
- The planting of additional vegetation, including a minimum of two local indigenous species.
- Details of the type and colour of all external building materials.

Decision guidelines

Before deciding on an application, the responsible authority must consider, as appropriate:

- The design objectives for low scale coastal design character in Barwon Heads and responses of this schedule.
- Whether adequate space is available on site for the creation of space around buildings, avoids boundary to boundary development, the retention and planting of indigenous vegetation and landscaping.
- Proposed landscaping, vegetation planting and boundary treatments create a strong integration between the public and private realms and soften the appearance of the building.
- Whether indigenous vegetation plantings reflect existing species in the surrounding area.
- Whether new buildings and garages dominate the streetscape or adjoining properties.
- The upper level of a building is recessed and articulated to reduce the dominant scale of the upper level.
- Whether new buildings recognise the scale and form of surrounding properties.

- Whether timber or natural materials and a simple palette are used as the dominant material of the façade of the building to complement the local coastal environment.
- Whether there is limited use of brickwork and where brick is used this is for a unique design that does not have a dominance of face brickwork.
- The proposal achieves a high quality design outcome that does not represent typical suburban design styles.
- Driveways, garages or parking areas are designed to be visually unobtrusive by achieving the following:
 - Garages are set behind the main building
 - Garages are inconspicuous and integrated into the dwelling design.
 - Shared driveways are encouraged.
 - Vegetation and landscaping is used to soften driveways and parking areas.
 - Vehicle crossovers are limited.
- Variations to the Table 1 requirements may be considered where:
 - There are physical constraints to the site, or the site is of an irregular lot configuration.
 - The outcome will be an improved overall design response and meets the objectives of low scale coastal design character.
 - The design or variation would represent a predominating character of nearby buildings or sites.

Table 1 to Schedule Barwon Heads Incremental Change Residential Area

Design Requirement	Design Response	
Site coverage	A maximum site coverage of 40%.	
Building siting and setbacks	Front setbacks	A front setback of 6 metres. Or 4 metres if located on an identified road as a Road Zone (RDZ1)
	Side setbacks	A 2 metre side setback on at least one side boundary.
Canopy tree	At least two existing and/or new canopy trees to be provided per site, with at least one canopy tree provided in the front yard and the use of local indigenous species.	
Soft landscaping	At least 30% of the site is available (free from hard surfaces) for soft landscaping (e.g. vegetation).	
Garages and access	The maximum width of a garage door is to be 5.6m or a maximum of 35% of the lot frontage if the lot is greater than 16m.	
	A garage is set 1 metre behind the main building line.	
Fencing	For properties fronting a main road included in the Road Zone (RDZ1) a fence forward of the front wall of a dwelling must be less than 1.5 metres in height and be more than 50% permeable.	
	For any other property a fence forward of the front wall of a dwelling must be less than one metre in height and more than 50% permeable.	

2.2 Barwon Heads Increased Housing Diversity Area (See Map3)

General Residential Zone - Schedule 1.

No changes to the zone schedule are recommended as this is managed through the application of the Design and Development Overlay planning controls.

Design and Development Overlay – Schedule: Barwon Heads Increased Housing Diversity Area.

Design objectives

To provide for increased housing diversity by encouraging small unit housing types that are not designed as a traditional dominant apartment form.

To ensure that increased housing diversity housing forms result in outstanding and sustainable architectural design and can positively contribute to the broader coastal design objectives for the town.

To ensure that all development within the Increased Housing Diversity Area of Barwon Heads occurs at an appropriate scale to reflect the unique low scale coastal design character of Barwon Heads and results in:

- Buildings are located within a vegetated garden setting that integrates with the vegetation of the public realm;
- Buildings and driveways are designed and sited to avoid being visually obtrusive to the streetscape and adjoining properties;
- Garages that are designed or integrated into buildings to form a visually unobtrusive part of the building;
- The appropriate use of front set backs to ensure that adequate land is available for the retention and establishment of indigenous vegetation;
- Provision of adequate space between buildings to avoid boundary to boundary development;
- Building design to be simple coastal material palettes, with lightweight, natural and timber materials;
- A high quality sustainable building design is encouraged that avoids typical suburban design styles;
- Retention of the openness of the streetscape by avoiding the use of front fences or by providing low permeable front fences.

Buildings and works (See above for DDO Barwon Heads Incremental Change Residential Area)

Exemption from notice and review (See above for Barwon Heads Incremental Change Residential Area)

Application Guidelines (See above for Barwon Heads Incremental Change Residential Area)

Decision guidelines

Before deciding on an application, the responsible authority must consider, as appropriate:

- The design objectives for unique coastal design character in Barwon Heads and responses of this schedule;
- Proposed landscaping, vegetation planting and boundary treatments create a strong integration between the public and private realms and soften the appearance of the building;
- Whether adequate space is available within a front garden to allow for the retention and planting of indigenous vegetation and landscaping;
- Whether adequate space is available between buildings to avoid boundary to boundary development and allow the retention and planting of indigenous vegetation and landscaping;
- Whether indigenous vegetation plantings reflect existing species in the surrounding area;
- Whether new buildings and garages dominate the streetscape or adjoining properties;

- The upper levels of a building are recessed and articulated to reduce the dominant scale of the upper level.
- Whether timber or natural materials and a simple palette are used as the dominant material of the façade of the building to complement the local coastal environment;
- Whether there is limited use of brickwork and where brick is used this is for a unique design that does not have a dominance of face brickwork;
- A fence greater than one metre in height is necessary to take advantage of a northern location to maximise the ability to provide secluded open space within the front setback and uses natural building materials;
- For a single dwelling the proposal achieves a high quality design outcome that does not represent typical suburban design styles;
- Driveways, garages or parking areas are designed to be visually unobtrusive by achieving the following:
 - Garages are set behind the main building;
 - Garages are inconspicuous and integrated into the dwelling design;
 - Shared driveways are encouraged;
 - Vegetation and landscaping is used to soften driveways and parking areas;
 - Vehicle crossovers are limited;
- Variations to Table 1 requirements may be considered for a development that provides an appropriate increased housing diversity building where the following is met:
 - a variety of housing types and styles, with a preference for smaller one and two bed housing types;
 - an appropriate design that does not result in a traditional dominant apartment form;
 - Multi-unit building forms do not dominate the streetscape or adjoining properties through the use of appropriate setbacks, vegetation softening, landscaping, recessive elements, articulation;
 - A design that has outstanding architectural merit.

Table 1 to Schedule Barwon Heads Increased Housing Diversity Area

Design Requirement	Design Response	
Building siting and setbacks	Front setbacks	A front setback of 6 metres. Or 4 metres if located on an identified road as a Road Zone (RDZ1)
	Side setbacks	A 2 metre side setback on at least one side boundary.
Canopy tree	At least one existing and/or new canopy tree per site to be provided in the front yard and the use of local indigenous species.	
Soft landscaping	At least 20% of the site is available (free from hard surfaces) for soft landscaping (e.g. vegetation.)	
Garages and access	The maximum width of a garage door is to be 5.6m or a maximum of 35% of the lot frontage if the lot is greater than 16m.	
	A garage is set 1 metre behind the main building line.	
Fencing	For properties fronting a main road included in the Road Zone (RDZ1) a fence forward of the front wall of a dwelling must be less than 1.5 metres in height and be more than 50% permeable.	
	For any other property a fence forward of the front wall of a dwelling must be less than one metre in height and more than 50% permeable.	

2.3 Proposed Environmental Significance Overlay Rezoning of land as Neighbourhood Residential Zone – Warrenbeen Court Area. (See Map 4)

Neighbourhood Residential Zone – Schedule: Warrenbeen Court Residential Area. The purpose of the zone is to:

Protect the very low density residential character of the Warrenbeen Court area to ensure that development has minimal impact on the vegetation and landscape character of the area that is dominated by coastal Moonah woodland community.

The zone schedule should be amended to limit subdivision to a minimum of 4,000m² and limit development to one dwelling per lot to recognise the existing requirements of the Covenant.

Environmental Significance Overlay – Schedule: Warrenbeen Court Area and land north of Tait's Road.

Statement of environmental significance

This area contains indigenous vegetation of the Ecological Vegetation Class - Coastal Alkaline Scrub (EVC 858) identified as Coastal Moonah Woodland (*Melaleuca lanceolata subsp. lanceolata*). Coastal Moonah Woodland is listed as threatened under the Flora and Fauna Guarantee Act 1988 and is the subject of Action Statement No.141 under that Act. The Coastal Moonah Woodland in this area ranges from poor condition to good condition and needs to be protected and enhanced to prevent further incremental decrease in the extent and condition of the community. The presence of poor condition, or relatively poor condition Coastal Moonah Woodland is the result of poor management of the understorey which presents as a Moonah or indigenous canopy over a modified understorey.

Threats to ecological values within this area include the removal of vegetation particularly understorey species, thick mulching preventing the recruitment of indigenous plants and the general residential use of the sites resulting in trampling by humans and/or dogs, weed invasion, mowing etc.

Species found in the Coastal Moonah Woodland in this area include Overstorey: Moonah, with occasional Drooping Sheoak *Allocasuarina verticillata*; Shrub layer: Seaberry Saltbush *Rhagodia candolleana subsp. candolleana*, with occasional Hedge Wattle *Acacia paradoxa*, Ruby Salt-bush *Enchylaena tomentosa subsp. tomentosa*, Boobialla *Myoporum insulare* and Thyme Rice-flower *Pimelea serpyllifolia subsp. serpyllifolia*; Scramblers/climbers: Small-leaved Clematis *microphylla var. microphylla* and Bower Spinach *Tetragonia tetragonioides*; Ground cover: Slender Wallaby-grass *Rytidosperma racemosum subsp. racemosum*, Spear-grass *Austrostipa spp.* and Black-anther Flax lily *Dianella admixta*. Kidney-weed *Dichondra repens* was also occasionally present in the ground layer.

Environmental objectives to be achieved

- To protect and ensure the long term future of the Coastal Moonah Woodland community.
- To minimise the impact of land use and development on the Coastal Moonah Woodland community.
- To encourage the re-establishment, natural regeneration and diversity of indigenous vegetation within the Coastal Moonah Woodlands, including improving the condition of understorey vegetation and derived grassland areas.
- To encourage the re-establishment and natural regeneration of Coastal Moonah Woodland community.

Permit Requirement – Vegetation

A permit is not required to remove, destroy or lop vegetation that is:

- Not indigenous to Victoria.
- Listed within the incorporated document Environmental Weeds, City of Greater Geelong, September 2008.

- Pruned to remove any branch that overhangs an existing dwelling or is within 2 metres of an existing dwelling.
- Pruned to improve its health, provided the normal growth habit of the plant is not retarded.
- An immediate risk of personal injury or damage to property, if only that part of vegetation which presents the immediate risk is removed, destroyed or lopped.
- Dead to the satisfaction of the responsible authority.
- Maintaining public utility services for the transmission of water, sewage, gas, electricity, electronic communications or the like to the minimum extent necessary by the relevant authority.

Buildings and Works

A permit is not required to construct a building or construct or carry out works provided all of the following requirements are met:

- Works are not being carried out within 2 metres of the drip line (outer edge of tree canopy) of vegetation which forms part of Coastal Moonah Woodland community, including the derived grassland at 42-46 and 48-50 Warrenbeen Court.

Application requirements

An application for buildings and works or the removal of vegetation must:

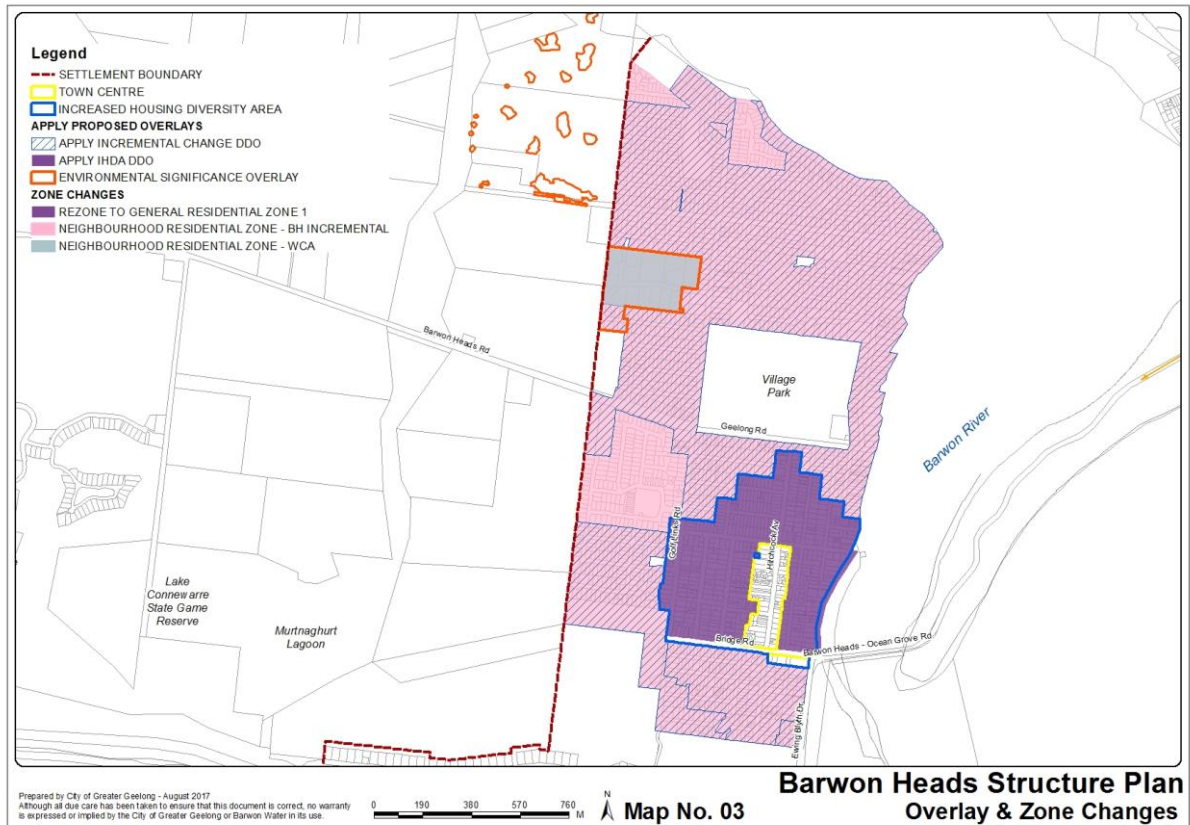
- Indicate:
 - The location of existing and proposed building(s) on the site and on surrounding properties;
 - The total extent of indigenous vegetation on the subject land;
 - The total extent of proposed removal, destruction or lopping and/or proposed buildings and works;
- Outline the reason for removing any Coastal Moonah Woodland and the alternative options considered which do not require removal of Coastal Moonah Woodland.
- Demonstrate that the extent of removal, destruction or lopping of Coastal Moonah Woodland has been reduced as much as is reasonable and practicable, and detail means of protecting vegetation during construction of buildings and works.
- Specify the ongoing management requirements of vegetation post construction, including species from the Coastal Moonah Woodland community proposed for revegetation following disturbance.
- Include a landscaping plan prepared by a suitably qualified person which incorporates species from the Coastal Moonah Woodland community and restricts the use of mulching within areas of remnant vegetation.

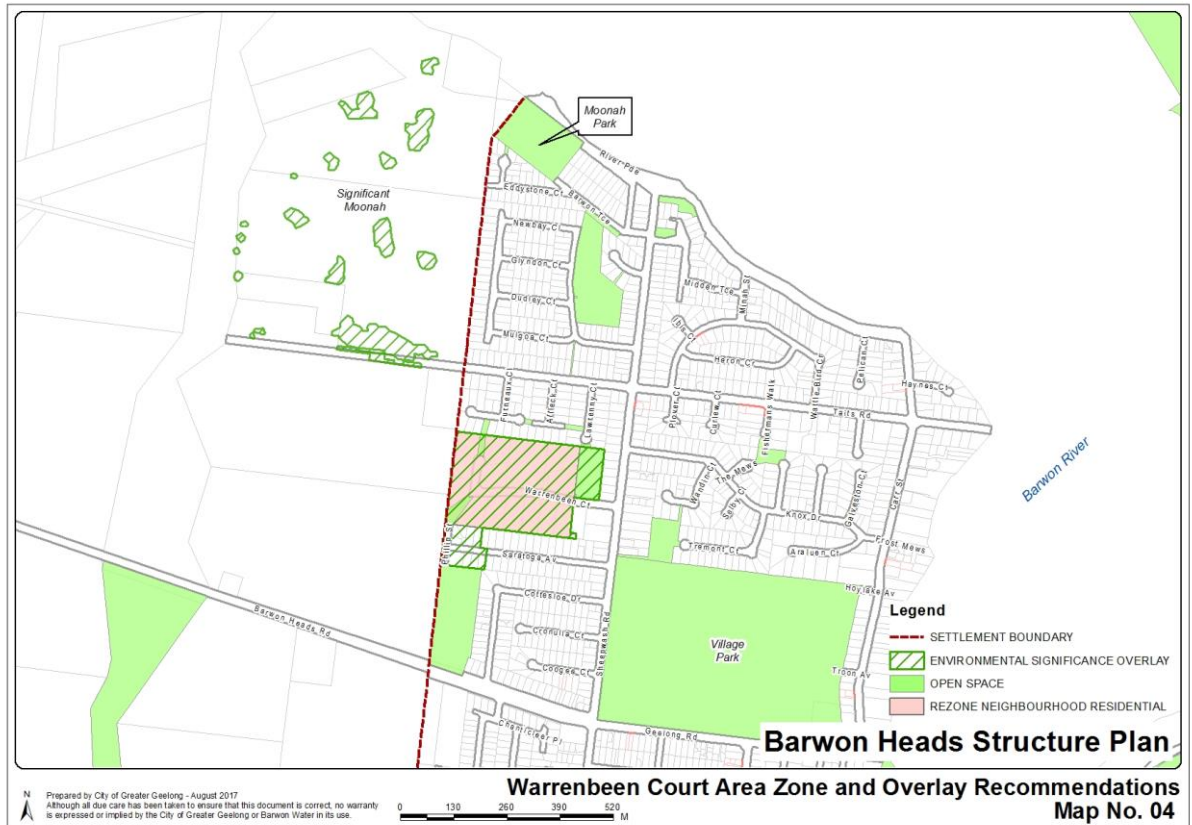
Decision guidelines

Before deciding on an application, the responsible authority must consider, as appropriate:

- The location of Coastal Moonah Woodland as identified in the *Significant Residential Tree Assessment: Warrenbeen Court, Barwon Heads, Victoria*. Prepared by Ecology and Heritage Partners Pty Ltd 2016.
- *Flora and Fauna Guarantee Action Statement No. 141* for the 'Coastal Moonah Woodland' vegetation community.
- The need to avoid removal, lopping and/or destruction of Coastal Moonah Woodland community.
- Whether there is a valid reason for removing the vegetation and alternative options to removal have been fully explored such as changing the building footprint.

- The need to minimise human disturbance on the root system, canopy and overall health and appearance of the Coastal Moonah Woodland community from constructing a building or constructing or carrying out works. This may include mulching, trampling, introduction of pest plants and cut and/or fill.
- The need to limit buildings and hard surfaces such as dwellings, outbuildings, driveways and hard landscaping to parts of sites that does not contain the Coastal Moonah Woodland community.
- The need to improve the condition and diversity of understory vegetation in the Coastal Moonah Woodland community through natural regeneration and re-establishment of Coastal Moonah Woodland community.





3.0 Review of Structure Plan

It is acknowledged in this report that Barwon Heads does not have a significant amount of greenfield land supply and most of the development of the town will be through infill supply. However, this recognises that Barwon Heads is not a designated growth area within the City of Greater Geelong and there will be a significant supply of new housing in the nearby growth area locations of Armstrong Creek and Ocean Grove. Therefore the timing to review the Structure Plan should reflect this. It is recommended that a full review of the Structure Plan would only occur if there is significant change to State or Local Policy.

PART C BACKGROUND REPORT

1.0 Introduction

1.1 Background

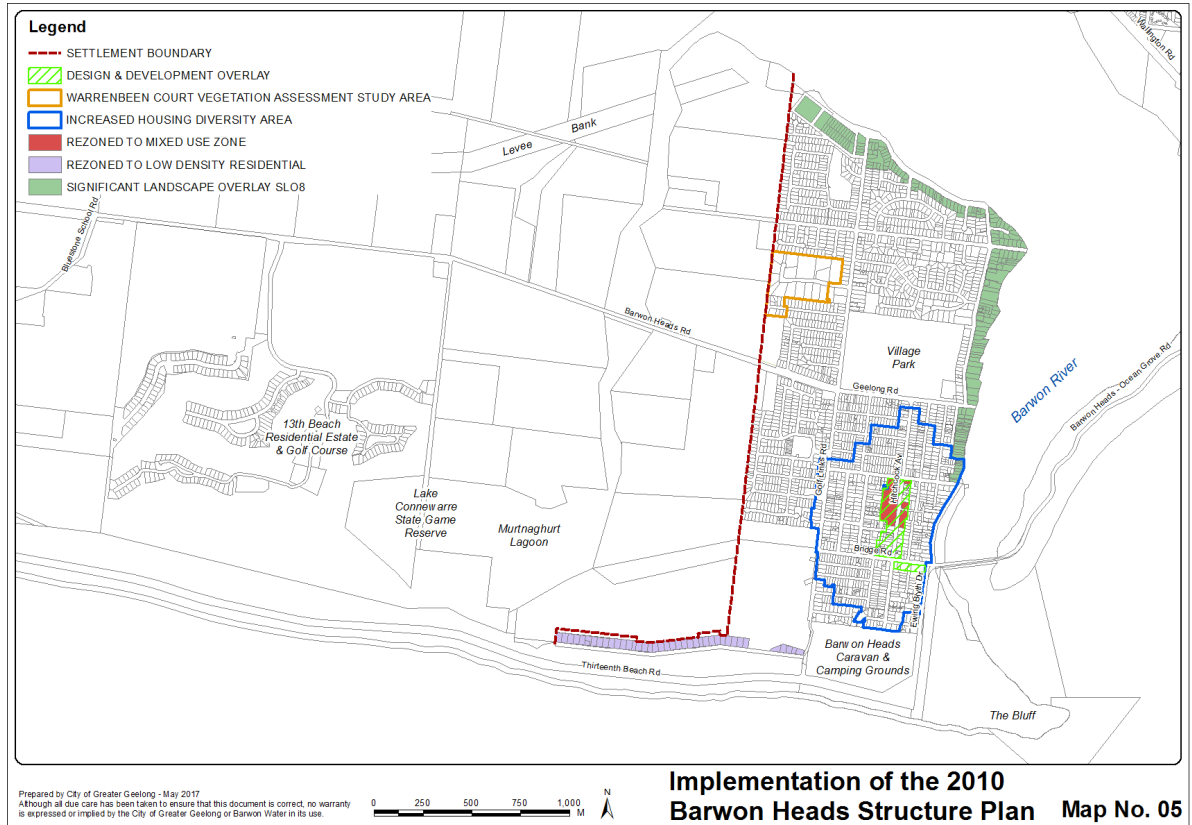
The purpose of the structure plan is to identify the key strategic planning issues and opportunities facing Barwon Heads and articulate the preferred future directions including the identification of a settlement boundary, future residential and commercial growth, future community service provision; as well as identifying appropriate planning controls.

Land use and development has been guided by the Structure Plan adopted by the City of Greater Geelong in 2007 and incorporated into the Greater Geelong Planning Scheme in 2010. The inaugural Barwon Heads Structure Plan was prepared in 1996.

Significant events have influenced the town since the 1996 Structure Plan, one of those being the popularity of the ABC “SeaChange” television series and the related “sea change phenomena”, the other being the development of the 13th Beach Golf Links Resort. Another significant influence for the town relates to the decision by the Minister for Planning in 2007 for the ‘heritage’ replacement of the heritage designed listed Barwon Heads Bridge and construction of a new pedestrian bridge 10m downstream. The 1996 Structure Plan set the western boundary of the town at the present western urban edge of the township, which was retained as a settlement boundary in the 2010 Structure Plan.

A number of actions have been implemented into the Greater Geelong Planning Scheme following the adoption of the 2010 Structure Plan. There are also a number of other directions that have been implemented since 2010. These are set out below (See Map 5):

- Properties along Hitchcock Avenue between Ozone Road and Bridge Road were rezoned from Residential 1 to Mixed Use Zone and is now included as part of the Barwon Heads town centre;
- A Design and Development Overlay – Schedule 25 for Town Centre design standards was applied to the Barwon Heads Town Centre;
- Properties along Stephens Parade were rezoned from Residential 1 to Low Density Residential Zone;
- A Significant Landscape Overlay – Schedule 8 (SLO8) was applied to areas fronting onto the Barwon River;
- An updated Barwon Heads Parking and Transport Study was adopted by Council in 2010;
- A Significant Residential Tree Assessment (2010) has been undertaken for Warrenbeen Court, to inform this Structure Plan update;
- A Barwon Heads Residential and Landscape Character Assessment (2017) has been prepared to inform the Structure Plan update;
- A Bellarine Peninsula – Corio Bay Local Coastal Hazard Assessment Inundation Report (2015) has been prepared to assist with the impacts of sea level rise from climate change;
- Changes made by the State Government to residential zones under VC116 have meant that the Increased Housing Diversity Area within 400m of the town centre was rezoned as Residential Growth Zone 3 under Council Planning Scheme Amendment C300. Other changes made under VC116 resulted in residential zones across Geelong being rezoned as either General Residential and Neighbourhood Residential.

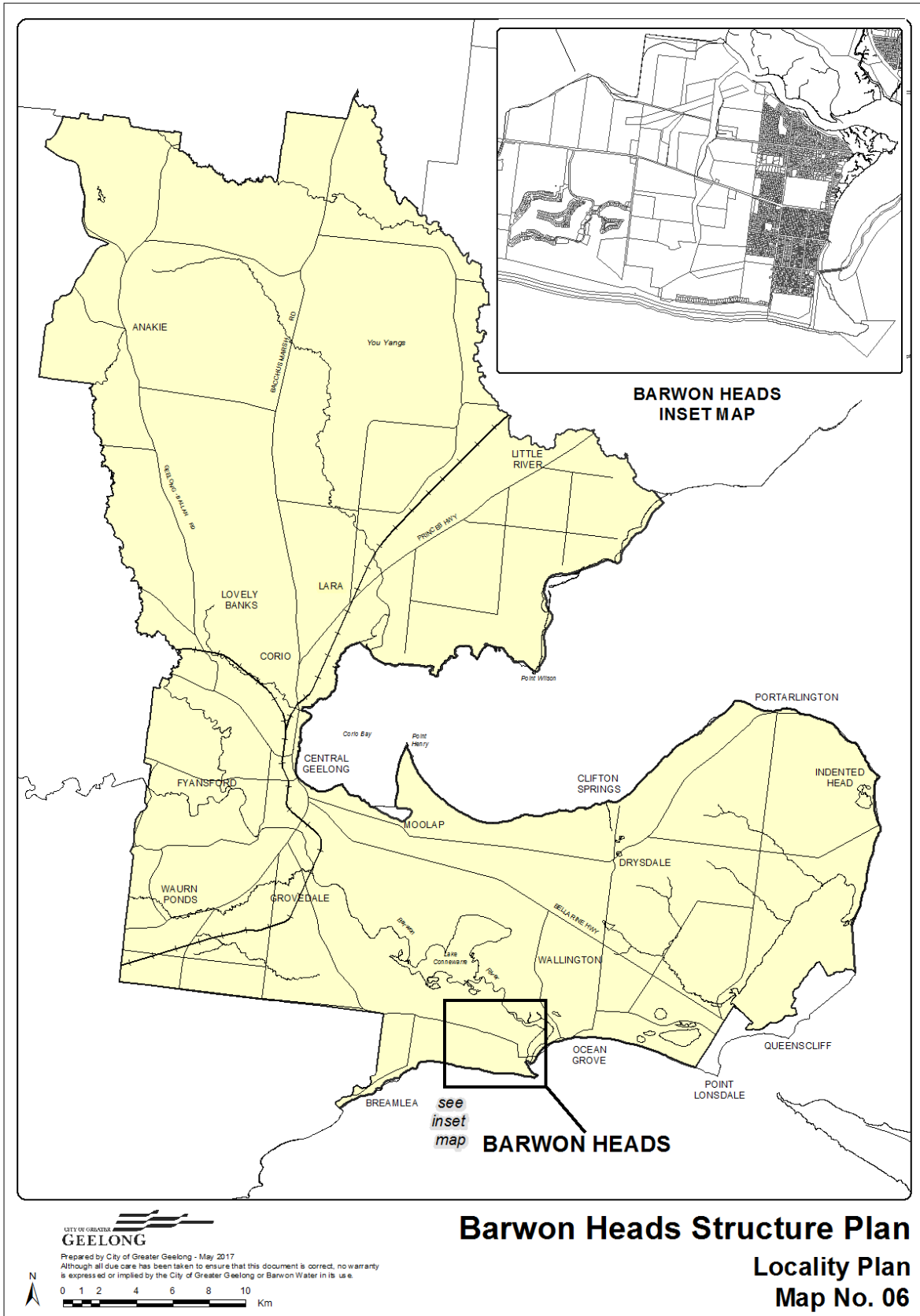


1.2 Location

Barwon Heads is a seaside town located at the mouth of the Barwon River, 18km south-east of Geelong city. The location of the town in relation to the rest of the municipality and within the Bellarine Peninsula is indicated on Map 6.

To the north of the town lies the Barwon River and the Lake Connewarre system and to the east and south, the town is bordered by coastline to the river and Bass Strait. To the west of Barwon Heads is the Lake Connewarre State Game Reserve, Murnaghurt Lagoon and the 13th Beach Golf Links and residential resort.

Barwon Heads Road is the main entrance to the town from Geelong, with an indirect route to the southern part of the town along Thirteenth Beach Road and Ewing Blyth Drive. The only connection beyond the town to the east is across the Barwon Heads Bridge, which connects Barwon Heads to the rest of the Bellarine Peninsula via Ocean Grove.



1.3 Aboriginal Cultural Heritage

The environment of Barwon Heads holds significant values and associations with Aboriginal history.

The Wathaurong tribe, whose territory stretched between the Werribee River and the Otway Ranges, occupied the land before European colonisation. The Barwon River marked the south-west boundary of the lands of the Bengalat Clan of the Wathaurong people, which included most of the Bellarine Peninsula east of Moolap. The other side of the Barwon River and west to Point Danger was owned by the Mon Mart Clan.

The identified places of particular significance in the area are the Lake Connewarre system, with its resource richness, and the Barwon Bluff area. In relation to the Bluff, Parks Victoria states that:

“Barwon Bluff was a particularly significant place for local Wauthaurong (sic) people that made their home from Ballarat to the coast. Taking advantage of the combinations of sea, rock platforms, and river and to the north extensive wetlands, the area was an important summer camping area for many thousands of years” (www.parkweb.vic.gov.au).

Aboriginal Affairs Victoria (AAV) note there are two places in the area which are listed on their historic places register and they also hold records for numerous Aboriginal cultural heritage places within the Study Area.

Marshall and Collins¹ undertook an Archaeological Assessment in 2004 and found:

“A search of the AAV Register showed that there are approximately 67 registered Aboriginal archaeological sites between Black Rocks and Barwon Heads. Most of the sites are shell middens located near or within the Barwon Heads Caravan Park, or occur within a narrow coastal dune system along Thirteenth Beach and inland at the mouth of the Barwon River... there is small concentration of stone artefact scatters along Thirteenth Beach south and west of the Barwon Heads Golf Course”

The regulations of the Aboriginal Heritage Act 2007 specify the circumstances in which a Cultural Heritage Management Plan (CHMP) is required for an activity or class of activity, which is specified as ‘high impact’ in areas of Aboriginal cultural sensitivity and also prescribes standards for the preparation of such plans. Advice from AAV will be essential to ascertain when and if a CHMP is required for different activities and for different areas. According to the Municipal Association of Victoria:

“in essence, if an activity is both in an area of cultural heritage sensitivity and is a high impact activity on land not previously significantly disturbed, it will require a CHMP before any planning permit can be determined”.

Cultural Heritage Sensitive Areas under the regulations include, but are not limited to, the following:

- Registered cultural heritage place or land within 50 metres of a registered place;
- Waterways (& within 200m) unless subject to significant ground disturbance;
- Prior waterways (& within 200m);
- Ancient lakes (& within 200m); and
- Greenstone outcrops unless subject to significant ground disturbance.

Karreenga Action Plan 2013-2017

The Karreenga Aboriginal Action Plan articulates the steps towards developing partnerships between Aboriginal and non Aboriginal Australians in the City of Greater Geelong. The Plan addresses:

- Cultural recognition and respect;

¹ Barwon Heads Golf Club: An Archaeological Assessment, Terraculture 2004 p. 19

- Aboriginal cultural heritage awareness;
- Development in arts and culture;
- Family and community support; and
- Employment opportunities.

Council will continue to maintain a relationship with the Wathaurung Aboriginal Corporation who are the Registered Aboriginal Party (RAP) for this area in regard to proposed developments that may impact on Aboriginal cultural heritage, in accordance with both the established protocol and State and Commonwealth legislation.

1.4 Post-Contact History

The first survey of the township of Barwon Heads occurred around 1870, but the largely open, treed land was not to be transformed into a seaside township until the turn of the century. Barwon Heads was first known as Point Flinders, Connewarre East and Mt. Colite following the first survey. Further development of the town did not occur until the 1890s. The original survey land formed a large subdivision that had a frontage along the Barwon River and also stretched as far west as Hitchcock Avenue.

Barwon Heads began as a boating, fishing and waterfowl hunting destination and by the early 1920's the township had a hotel, boarding houses and a golf links. Prior to the river being bridged in 1927, row boats and then motor ferries carried people to and from Ocean Grove and the highway. The Barwon Heads Bridge was one of the most significant examples of post-contact heritage on the Bellarine Peninsula and was the longest all-timber bridge built by the County Roads Board. A replacement road bridge completed in 2010 was designed to replicate the essential form of the previous traditional timber bridge. The new bridge retains the heritage listing status of the old bridge.

Other examples of post-contact heritage are located throughout the township, formed by streetscapes, residences and shops. The significance of these buildings and streetscapes has been recognised through application of individual listings and precinct based heritage overlays within the Greater Geelong Planning Scheme (See Table 5).

1.5 Role of the Township

Traditionally a quiet retiree and holiday township, the role of Barwon Heads has changed over the last three decades. The township retains a proportion of retirees and elderly people, however its function as a permanent home for families has increased in recent years and is expected to continue to increase. Today Barwon Heads is a commuter residential area for Geelong and a popular holiday destination. The attraction of Barwon Heads as a seaside retreat continues to grow and the town is popular for holiday home owners, tourism accommodation and daytrippers and recreation seekers.

Barwon Heads is located between the two growth area locations of Armstrong Creek to the north west and Ocean Grove located only a few kilometres away across the Barwon River to the East. Armstrong Creek will eventually provide for around 22,000 homes, resulting in a population of around 65,000 people over the next 20 years. This, along with the ongoing expansion of the Geelong Ring Road, will continue to result in more people wishing to visit Barwon Heads placing more pressure on infrastructure.

The recently adopted Ocean Grove Structure Plan (2016) estimates that the population of the town will grow by about 6,000 people between 2015 and 2031; resulting in a total population of around 20,000 people. Growth of the town will result in an extensive expansion of community, retail and industrial related activities. Barwon Heads is ideally located to take advantage of the future improved services provided in Ocean Grove.

2.0 Policy Context

Barwon Heads is located within the municipality of the City of Greater Geelong and is affected by various policies and strategies formulated by the State Government, Council and other relevant organisations. The following policies have specific relevance to Barwon Heads and have guided the development of this Structure Plan.

2.1 Key Strategies and Local Strategic Studies

2.1.1 Coastal

Victorian Coastal Strategy 2014 (Victorian Coastal Council)

The Victorian Coastal Strategy (VCS) is prepared under the *Coastal Management Act 1995*, which requires the strategy to provide for the long-term planning of the Victorian Coast over the next 100 years, in order to:

- Ensure the protection of significant environmental features;
- Provide clear direction for the future use of the coast, including the marine environment;
- Identify suitable development areas and development opportunities; and
- Ensure the sustainable use of natural coastal resources.

The strategy provides 'guidance' for agencies and statutory decision making along the coast and in marine and estuarine environments. It also provides a 'framework' for related Regional Coastal Plans, Regional Growth Plans, Regional Catchment Strategies, Local Planning Schemes, and Management Plans for coastal Crown land.

A hierarchy of principles provides the basis for a series of policies and actions to guide planning, management and decision-making on coastal private and Crown land, as well as in coastal catchments, estuarine and marine waters. The Hierarchy of principles are:

1. Ensure protection of significant environmental and cultural values.
2. Undertake integrated planning and provide clear direction for the future.
3. Ensure the sustainable use of natural coastal resources.
4. Ensure development on the coast is located within existing, modified and resilient environments where the demand for development is evident and any impacts can be managed sustainably..

In regards to wetlands and estuaries Principle 1.3 sets out the following Desired Outcomes:

1. Coastal waters, estuaries, wetlands and onshore environments are planned and managed to promote healthy, rich and diverse wetland and estuarine ecosystems that support connectivity and can adapt to a changing climate.
2. The environmental condition of coastal wetlands and estuaries, including Ramsar sites, is maintained or improved.
3. Access and use in wetlands and estuaries are well managed, with appropriate tools such as disturbance buffers, to ensure protection of threatened plants and animals.

In planning for coastal settlements Principle 2.3 sets out the following Desired Outcomes:

1. Coastal settlements support the protection and enhancement of environmental, social and cultural and economic values of the coast.
2. Non-urban breaks are maintained between coastal settlements to preserve the character of the coastline and coastal settlements.
3. Settlement planning directs growth to areas suitable for accommodating sustainable growth.

Other desired outcomes specifically relevant to the Structure Plan include Valuing the Coast (1.1); Onshore Environments (1.4); Catchments and Water Quality (1.5); Coastal Buildings, Infrastructure and Management (3.1); Visitation and Tourism (3.2); and Access to the Coast (3.3).

Climate change and climate change adaptation is also a key issue of the strategy. Benchmarks for sea level rise to 2100 are set out, with a commencement date of 2010. The benchmarks provide a rise of 0.8m by 2100, with 0.9 being a more conservative estimate.

Proposed Marine and Coastal Management Act (MCMA)

The Department for Environment Land Water and Planning (DELWP) is currently reviewing the Coastal Management Act, 1995. A replacement MCMA is proposed to be introduced as a Bill to Parliament sometime during 2017. Submissions on the MCMA consultation paper closed on 23 October 2016.

Seven drivers for change are identified in the paper:

- Clearer governance and institutional arrangements
- Strengthening marine management
- Integrating planning systems
- Adapting to climate change
- Sustainable resources
- Improving knowledge
- Involving the community

In regards to integrating planning systems. This seeks to:

- Require coastal management plans to be prepared.
- Maintain the ministerial veto on use and development on coastal Crown land but streamline to focus on high risk activities.
- Reduce duplication between the consent process and Planning and Environment Act 1987 processes.

Central Regional Coastal Plan 2015 - 2020

The plan is prepared by the Central Coast Board² for the Central Region that stretches from Breamlea to Inverloch. The plan interprets the desired outcomes, policies and actions of the VCS at a regional scale.

Eight key areas of focus have been identified in this, the first RCP prepared, and are identified in Table 1 below along with the key actions and outcomes that are relevant to the Structure Plan.

² The MCMA consultation paper is proposing that Regional Coastal Boards will be phased out in June 2018. The functions will be performed by strengthened Catchment Management Authorities, the Marine and Coastal Council and the Regional and Strategic Partnerships.

Table 1. Central Regional Coastal Plan Key Areas of Focus

Key areas of focus.	Actions/ Outcomes
1. Population growth – balancing access and valuing the natural environment.	
2. Adapting to a changing climate and increased coastal hazards. <u>Action.</u> Implement identified adaptation responses through local decisions, for example updating local planning schemes, coastal management plans and emergency plans, and prioritising future works	
3. Integrating coastal planning and management.	
4. Sustainable and equitable funding mechanisms for coastal infrastructure and management.	
5. Overseeing the implementation of the Recreational Boating Facilities Framework for the central coastal region.	
6. Sustainable visitation and tourism infrastructure service level hierarchy. <u>Action 6.3.</u> Identify priority areas for visitation and tourism, in particular identify: <ol style="list-style-type: none"> resilient parts of the coast where visitation can be encouraged; vulnerable parts of the coast where demand might be reduced by encouraging visitors towards alternative sites; and vulnerable parts of the coast that provide unique visitor experiences where there is limited scope to reduce demand. 	
7. Protecting significant coastal ecosystems and habitats.	
8. Promoting leadership, co-ordination and capacity building.	

Landscape Setting Types for the Victorian Coast May 1998 and Siting and Design Guidelines for Structures on the Victorian Coast, May 1998

The Landscape Setting Types for the Victorian Coast aims to provide an understanding of the coastal landscape by identifying significant features and characteristics of various sections of the coast. The Barwon Heads area is within the “Lower Coastal Plains with features” setting type (between Anglesea and the heads). This setting type is characterised by lower coastal cliffs and dunes interspersed with inlets and limestone bluffs with low vegetation at the ocean interface grading to taller trees inland. Special considerations identified for the setting type include:

- Forward planning to ensure that future development does not adversely affect coastal values.
- The need to control access to beaches.
- The revegetation of dunes to maintain stability.

Both documents are included as reference documents in the Greater Geelong Planning Scheme; specifically the Environmental Significance and Significant Landscape overlays.

Barwon Bluff Marine Sanctuary Management Plan 2007 (Parks Victoria)

The Management Plan, prepared under the National Parks Act 1975, proposes the basis and directions for the future management of Barwon Bluff Marine Sanctuary.

The 17 hectare sanctuary is located at Barwon Heads, where the Barwon River enters Bass Strait. It incorporates the rocky shores around the base of the headland at the mouth of the Barwon River, including a small section of riverbank beach, basalt and sandstone reefs at the base of The Bluff, 400 metres of beach fronting Bass Strait and the waters extending 400 metres to the east and south.

The Plan recognises that the sanctuary is significant in the statewide system for its valuable contribution to marine education and identifies a number of strategies for natural and heritage values conservation, visitors, adjacent uses and community awareness and involvement.

Ramsar Convention of Wetlands 1971

The RAMSAR Convention on Wetlands is an intergovernmental treaty which provides the framework for national action and international cooperation for the conservation and wise use of wetlands and their resources.

Lake Connewarre, Reedy Lake, Murtnaghurt Lagoon and the Barwon River estuary are included on the RAMSAR list, within the Port Phillip Bay and Bellarine Peninsula Site Listing.

The Ramsar convention is referenced in Clause 12.01 (Biodiversity) of the Greater Geelong Planning Scheme, where strategic planning must consider impacts of any change in land-use or development that may affect the biodiversity value of adjoining Ramsar sites.

Port Phillip Bay (Western Shoreline) & Bellarine Peninsula Ramsar Site Strategic Management Plan (SMP) (Parks Victoria)

The purpose of the SMP for the site is to facilitate the conservation, maintenance and restoration of the area.

The SMP identifies Lake Connewarre and Murtnaghurt as being directly affected by hydrological and water quality changes given their location at the bottom of the Barwon River catchment. The SMP further notes that this catchment contains some of the most intensively farmed land in Victoria with land uses that directly affect the quality and quantity of water entering the river and associated wetlands. The harvesting of timber within the catchment area is also identified as an issue for the catchment and therefore the Ramsar site, given the levels of sediment discharged into the river as a result of this activity.

Key risks identified in the SMP affecting the wetlands and estuary adjacent to Barwon Heads includes, altered water regimes, dredging, pest plants and animals, pollution and salinity.

Barwon Coast Coastal Management Plan (2012 - 2015) (CMP) (Barwon Coast Committee of Management (BCCoM))

The *Victorian Coastal Management Act (1995)* and the Victorian Coastal Strategy requires committees of management for Crown land coastal reserves to develop coastal management plans for land under their control. The Barwon Coast Committee of Management (BCCoM) has responsibility of the coastal reserves between Collendina and the west end of Thirteenth Beach – Blue Rocks. The Barwon Coast combines a broad estuary system, fragile dunes and long beaches, producing a landscape that includes Coastal Moonah Woodlands and wetlands with high environmental biodiversity and conservation values. These unique qualities lead to a range of pressures upon the environment, which must be addressed in the management of the coastal reserve. These pressures are particularly evident in the urban centre of Barwon Heads where the popular beaches and caravan park experience high and increasing demand in the holiday months.

The CMP has set out three Strategic Directions relating to planning:

2.1 Climate Change. The plan recognises that climate change, particularly sea level rise, will present major planning and management issues.

2.2. Influx to the coast. This recognises that growth around Armstrong Creek and Ocean Grove will bring increased visitor numbers to Barwon Coast beaches. To address this the plan seeks to:

- Provide an increased level of amenities and visitor infrastructure in key zones.
- Identifying and providing improved traffic engineering management for safe crossing points along 13th Beach Road.
- Continuing to plan for improved cycle access to beach areas to reduce reliance on vehicles.
- Continuing investigations into the provision of an integrated and expanded free shuttle bus service between Barwon Heads/ Ocean Grove and urban Foreshore/ Spit Zones. Over 16,000 people over a 3 year period have used the shuttle bus during the six week peak summer period. The service is dependant on funding.

2.3 Vehicle parking within the coastal reserves. Substantial car parking has been provided at the major beach access points and other smaller parking areas. However, these spaces are often fully utilised during summer. In implementing alternative methods of getting to the beach safely this will require liaison with CoGG to investigate potential to reduce the demand for car parking that could include off site (town entrance) car parking. Other options could include time limits or metering.

BCCoM is currently updating the 2012-2015 CMP. The Draft 2017-2020 CMP is due for adoption in August 2017.

Corangamite Regional Catchment Strategy 2003-2008 (Corangamite Catchment and Land Protection Board)

Key documents prepared by the CCMA include:

- Corangamite Regional Catchment Strategy 2013-2019
- Corangamite Waterway Strategy 2014 – 2022
- Corangamite Regional Floodplain Management Strategy – update 2013

The Corangamite Regional Catchment Strategy 2013–2019 (RCS) provides a vision for the integrated management of natural resources in the Corangamite region. It is a blueprint for catchment health in the future and builds on the achievements and lessons from the past. The RCS has been prepared under the provisions of the *Catchment and Land Protection Act 1994* (Vic.).

The Plan recognises the Barwon River as a high value waterway that is crucial to its role as a key recreational area for Geelong.

Decision making by the planning authority must have regard to this strategy as required by the State and Local Planning Policy Framework of the Greater Geelong Planning Scheme in Clauses 15.01 and 21.11 (Protection of catchments, waterways and groundwater). Other key objectives of the CCMA Strategies include:

- Maintain and protect existing waterways in near natural condition, which may involve the use of appropriate buffer areas alongside known waterways.
- Improved community awareness of floodplain issues and flood risk. There is a need to ensure informed decisions on planning development can be made in full knowledge of best practice floodplain and water management.

2.1.2 Environment

City of Greater Geelong Environment Management Strategy 2014-2017

The strategy provides a framework to build healthy, connected communities, which are able to live in a clean environment that is respected and cared for. It guides Council planning, decision-making and activities that impact on the Greater Geelong environment. The key drivers for Geelong's economic future are climate change, population growth, lifestyles and the economic model.

The strategy is set out under the following five broad themes:

1. Council leadership
2. Enhanced natural areas and ecosystem health
3. Sustainable urban and rural development
4. Greener economy
5. Sustainable living

Key actions under the strategy for Barwon Heads are:

- 1.11 Develop an Integrated Water Catchment Management Strategy for areas of Council responsibility.
- 2.17 Restrict illegal and inappropriate vehicle and pedestrian access through sand dunes and coastal access tracks.
- 2.23 Undertake works to minimise gully erosion and improve beach stability along the Bellarine Peninsula.
- 3.09 Increase the amount of tree canopy cover in urban areas.

- 5.22 Support communities to adapt to climate change via development of a vulnerability map identifying areas of the most vulnerable populations and urban areas.

City of Greater Geelong Biodiversity Strategy 2003

The vision of this strategy is for “a natural environment that is rich in biodiversity and is managed and maintained to protect, both now and in the future, the ecological systems upon which life depends”.

The Strategy notes that the Lake Connewarre State Game Reserve is one of only a small number of areas within the municipality which retains extensive vegetation remnants and fauna habitat of high quality. The lower Barwon River is also noted in the strategy due the high conservation significance of the riparian and in-stream vegetation within this location.

In conjunction with the above areas Murtnaghurt Swamp and 13th Beach Reserve are also considered to be significant habitat areas for a wide range of fauna, including endangered species.

Greater Geelong Climate Change Adaptation Strategy, 2011

The Adaptation Strategy aims to prepare Council and the broader Greater Geelong community for climate change impacts and to assist Council in prioritising short and long term adaptation actions.

Council’s strategic objectives for adaptation are to:

1. Lead the City of Greater Geelong community in adapting appropriately to climate change.
2. Build awareness and understanding of climate change across Council and within the community.
3. Acknowledge the links between climate change and other challenges and opportunities for the City of Greater Geelong.
4. Plan for decisions that remain viable under the widest possible range of climate futures.
5. Use lessons from the results of past decisions to inform better decisions in the future.
6. Link with others to drive understanding of and action on climate change adaptation.
7. Implement solutions that:
 - a. are cost effective
 - b. are transparent and defensible
 - c. recognise the needs of vulnerable groups
 - d. ensure equitable outcomes.

Key priority actions include: Coastal planning is the most pressing climate change priority for the City of Greater Geelong, given the region’s ‘soft’ erodible beaches and exposed housing stock. The risks that this area embodies not only relate to current and future planning decisions, but also challenging issues relating to the impact on existing developments and property rights.

Climate change impacts have the potential to significantly impact the region’s biodiversity, through affecting ecosystem resilience and shifting appropriate habitat ranges.

City of Greater Geelong Urban Forest Strategy 2015 – 2025

Trees provide shade and cool the city as well as improving the look, feel and livability of Geelong. They have a strong positive influence on the health of the community and are worth investing in for the future. The strategy’s vision is that “Geelong will be a cool green city for the future”.

The Strategy sets guidelines for the management of the City’s urban tree network and provides objectives and actions to increase canopy cover. A key target is to improve tree canopy cover from 14% to 25% over a thirty year period. The strategy encourages green roofs and walls, amenity plantings and garden beds where possible.

Barwon River Land Use and Open Space Corridor Plan (2003)

This plan was developed and adopted by Council in 2003 with its intent being to guide the future recreational use and landscape character of the river and adjoining open spaces in a manner that is compatible with its environmental values.

Within the Plan the area around Barwon Heads is located within Reach 5 (Reedy Lake and Lake Connewarre) and Reach 6 (Ocean Grove and Barwon Heads). The key actions for the Barwon Heads area as included in Reach 6 are:

- Improve walking links through along the Barwon River and associated open space system.
- Retain current boating and fishing access to the Barwon River, including restriction to 5 knots. Support current proposals to establish fishing access points along the bank, to reduce damage to waterway banks.
- Protect and improve the natural riparian vegetation values including White Mangroves and Moonah Woodland through the continued adherence to the existing Environmental Significance Overlay.
- Introduce the Significant Landscape Overlay or other suitable planning mechanisms on freehold land adjoining the Barwon River in Barwon Heads to protect the view sheds from significant change to built form and urban fabric.

Greater Geelong Flood Management Plan 2013

Describes key flood management planning and response activities and outlines the roles and responsibilities of the key agencies. Developed jointly by Council, CCMA and Melbourne Water, the actions recommended in the report are generic to the municipality on topics including flood mapping standards, translation of mapping into planning controls, capital works programming and community education.

Barwon Heads Drainage Flood Management Plan (2005)

Prepared by WBM Oceanics, this report characterises existing flooding and develops a flood management strategy to mitigate stormwater flooding in Barwon Heads.

The Report identified that the significant drainage related flooding problems within the township are related to the township being located within a number of low-lying depressions and the nature of the drainage systems. The study found that at least 440 properties within the study area are affected by the 100 year Average Recurrence Interval (ARI) flood event, with 61 of these properties subject to above-floor flooding. The Plan stated that *“it is not feasible to prevent above-floor flooding of all or most of the 61 affected properties. Physical constraints (eg existing built form) make it very expensive to ‘retrofit’ the required drainage infrastructure and in effect impossible to achieve the industry recognised 100 year ARI flood protection”*.

Flooding and stormwater is further discussed in Section 6.3.

2.1.3 Urban Growth and Land Use Planning

G21 Regional Growth Plan – 2013.

The G21 Regional Growth Plan (Growth Plan) considers growth and land use pressures to 2050 for Geelong, Queenscliff, Golden Plains, Surf Coast and Colac Otway Municipalities. It pulls together the strategic land use and growth planning already undertaken across the region and builds on this to identify where future residential and employment growth will occur and identifies the critical infrastructure required to support it.

Relevant elements of the growth plan include:

- Building on our strategic assets and competitive advantages to support and manage growth across the region.
- Reducing pressures on our agricultural areas and natural assets.
- Supporting planned growth and identified district towns across the region.
- Acknowledging the key role that Geelong and the G21 region play in relation to Melbourne while preserving Geelong’s identity as a separate settlement to Melbourne.

- Ensuring boundaries of towns are clear and breaks between settlements are managed carefully.
- Identifying the major infrastructure required to support a region of 500,000 and beyond, such as the roll out of more efficient transport networks, the National Broadband Network and water, energy and community infrastructure.

Barwon Heads is not identified as a town with a growth role under the plan. Barwon Heads is a coastal settlement that will experience modest growth and play an important tourism and agricultural role to surrounding areas. Growth is limited to identified structure plan settlement boundaries.

The plan reinforces the role of Structure Plans as the key policy document to provide more detailed growth planning for townships, including Barwon Heads.

G21 Implementation Plan

The plan identifies funding priorities and a plan for critical infrastructure provision to support the key population growth directions of the G21 Regional Growth Plan. No 'priority projects' are relevant to Barwon Heads. The Implementation Plan identifies the following 'Regional' level needs:

- Barwon Heads Road to Barwon Heads. Concept estimated for 2025-2027 at approximately \$15-20 million.

No regional level works are planned for water supply, sewerage and drainage, utilities, community facilities, business and tourism or environmental projects.

The Implementation Plan sets the context for the preparation of land supply reporting within the G21 Region to be used in the review of Structure Plans. The reports identify broad hectare, major infill, minor infill and rural residential supply levels to provide richer, 'real supply' data for different housing supply segments. The land supply data is recommended to inform the review of Structure Plans. See Section 7.0 for more information on residential land supply.

Plan Melbourne (2017)

The plan sets out the Planning Strategy and vision for Melbourne to guide Melbourne's housing, commercial and industrial development through to 2050. It seeks to integrate long-term land use, infrastructure and transport planning to meet the population, housing and employment needs of the future.

Barwon Heads is outside the Plan Melbourne boundary area, however there are a number of cross over strategic linkages with the Bellarine as a peri-urban region, including:

- the need to produce localised planning statements in partnership with local governments, including for the Bellarine Peninsula.

Bellarine Peninsula Localised Planning Statement (LPS)

The LPS seeks to identify key valued attributes of the Bellarine and put in place objectives and strategies to ensure that they are preserved and enhanced for ongoing use by present and future generations. Objectives include:

1. To protect and enhance the rural and coastal environment on the Bellarine Peninsula and maintain non-urban breaks with open farmed landscapes between settlements.
2. To support the ongoing use of rural land on the Bellarine Peninsula for agriculture and to preserve the open farmed landscape.
3. To preserve and maintain the ecology of the Bellarine Peninsula's environmentally significant coastal, wetland and vegetated areas.
4. To protect, preserve and enhance built heritage, cultural and urban character values and preserve the individual identity and role of townships.

5. To facilitate residential growth to the growth locations of Drysdale/ Clifton Springs, Leopold and Ocean Grove. In Barwon Heads provide retail, commercial and community uses and facilities that serve the daily needs of the community and encourage street based activity and local employment.
 - Ensure land use and development proceeds generally in accordance with the Structure Plan Map [strategy].
6. To support and encourage diverse and sustainable tourism as a key economic activity in townships and in rural areas where it complements and respects the farmed rural landscape of the area, does not impact upon existing farming activities and contributes to the local economy.

The LPS is recognised in the Regional Planning Policy Statement of the Greater Geelong Planning Scheme at Section 11.14.



Figure 1 - Bellarine Peninsula Localised Planning Statement- Framework Plan

Planning Practice Note 36 Implementing a Coastal Settlement Boundary August 2015 (PPN 36)

PPN36 states that a settlement boundary which is clearly articulated in the planning scheme provides an appropriate level of transparency and necessary statutory weight to help guide decision-making. A coastal settlement boundary is a fixed outer boundary of urban development and represents the future growth expectations for a settlement. A coastal settlement boundary is established on the premise of a minimum 10 year planning horizon.

PPN36 advises that any change to a coastal settlement boundary should be the product of a comprehensive strategic review. This will involve assessment of progress against the established coastal settlement boundary in the context of other planning issues arising across the municipality.

The extent of the review will depend on the issues to be addressed. There must be adequate recognition of the VCS, including analysis of the hierarchy of principles for coastal planning and management and consistency with the strategies objectives.

Barwon Heads Urban Design Framework (2003)

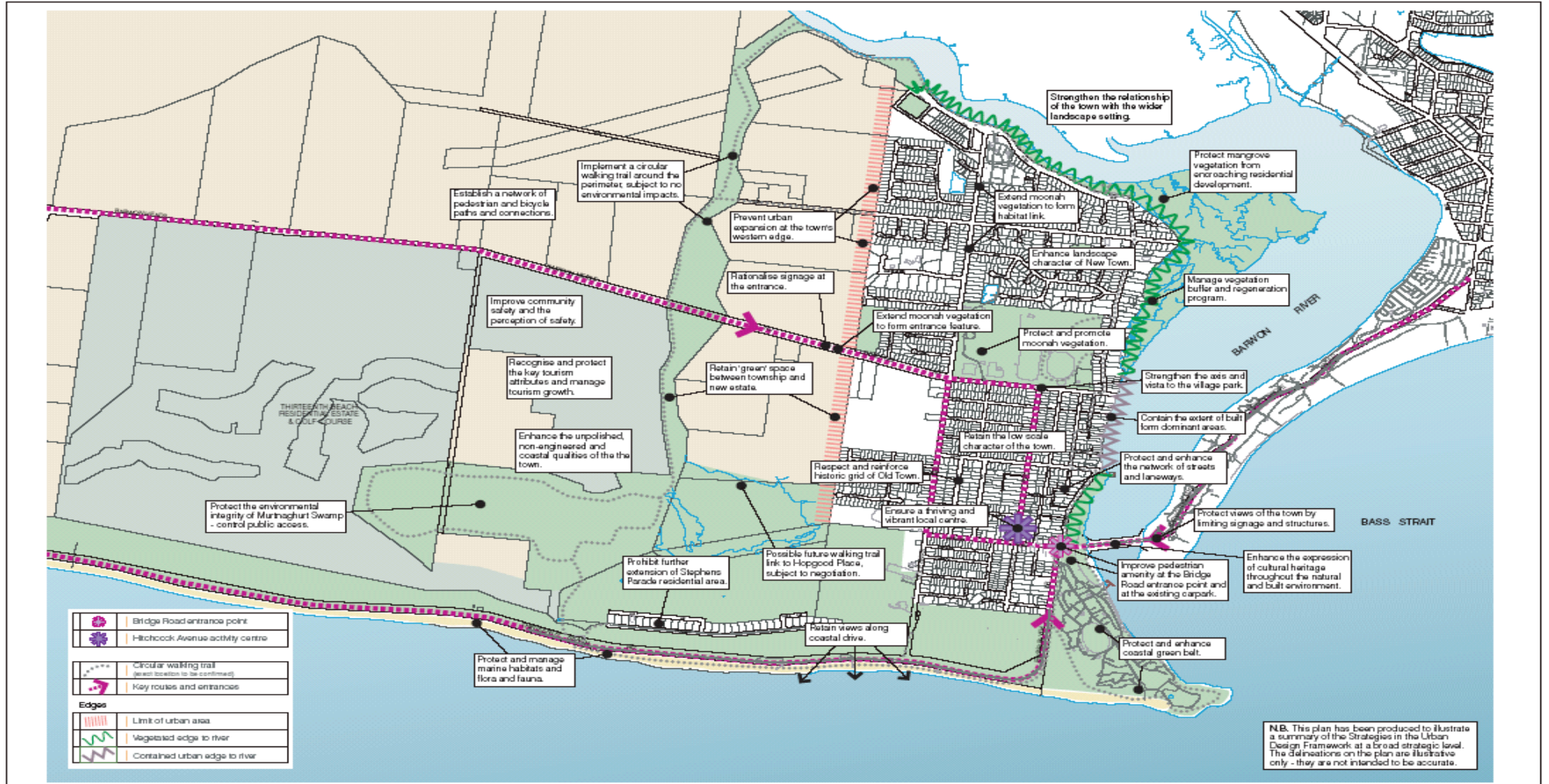
The Urban Development Framework (UDF) identifies Barwon Heads as a small residential coastal village undergoing considerable change and pressure because of a range of reasons. The UDF also identifies a range of values for the area and the significant need to protect these values, including the underlying landscape and environmental qualities and street layout including the use of laneways within the urban fabric to provide pedestrian permeability.

The UDF was developed to provide protection through modifications to the planning scheme and included actions to:

- Strengthen the western boundary;
- Application of a Vegetation Protection Overlay (VPO) to provide protection for significant vegetation within the township;
- Some changes to the existing Residential 1 Zone within the commercial area on Hitchcock Avenue to provide Mixed Use opportunities; and
- Direction for streetscape improvement works.

Map 4 shows the UDF summary map. (see also section 3.2.1)

Map 7 - UDF Summary Map (not to scale)



City of Greater Geelong Housing Diversity Strategy 2007

The strategy recommends that residential areas within 400 metres of an identified activity centre should be subject to increased housing diversity. The strategy maps Increased Housing Diversity Area (IHDA) boundaries around existing activity centres in the municipality. It recommends that areas identified for increased housing diversity should:

- Encourage increased residential densities, particularly within defined business zones and immediately adjoining business zones where mixed use and higher use of residential land can support the concepts of urban villages and activity centre planning. This may include the redevelopment of under-utilised commercial and industrial sites to provide additional housing. The intensity and scale of such development will need to be in keeping with the scale of individual centres;
- Acknowledge that residential character in these areas will adapt and evolve over time, particularly close to the centre of business areas;
- Ensure that greater consideration is given to the existing residential character/preferred character at the edges of IHDAs, where the existing and preferred character of adjoining incremental change areas will dominate; and
- Promote greater use of walking and non-private vehicle transport through design of new development that supports safe and accessible pedestrian environments to and through activity centres and IHDAs.

Section 6.2. Further strategic work.

This section recommends that subject to the review of the Residential Character Study [*existing*] or other specific studies undertaken by Council, consider the use of Significant Landscape, Design and Development or similar Overlays to protect areas of specific urban design continuity as identified in the Residential Character Study, notably specific areas of...Barwon Heads (RCS Precinct 2, 4, 5 and 6).

Key outcomes from the strategy are incorporated into the Municipal Strategic Statement and the Local Planning Policy: Clause 22.63 (Increased Housing Diversity Areas). See also Section 3.3.1, which outlines the application of the IHDAs.

City of Greater Geelong Rural Land Use Strategy 2007 (RLUS)

Rural areas are highly valued by the Greater Geelong community and help with the continued economic prosperity, liveability and amenity of the whole municipality. The RLUS seeks to ensure that the predominant use of the land be retained for agriculture. The Bellarine Peninsula has some of the best agricultural land in Geelong and most is rated as Class 2 and 3, which is deemed suitable for some intensive uses and extensive cropping and grazing. The following are key directions of the policy:

- Preserving and enhancing the productive capacity of the land, the rural farmed landscape and environmental condition of rural areas are key aspects of the strategy. It emphasises that the city's "unspoilt" rural areas can be quickly eroded by poor, out of character developments.
- Appropriate rural land subdivision controls need to be based on the size required to maintain the farmed landscape and provide opportunities for productive agricultural uses. For the Bellarine this is set at a minimum of 40 hectares.
- Housing lot excisions are inappropriate as they will result in an increased density of development.
- Maintaining a distinct separation between urban and rural areas with clearly defined urban areas is of particular importance.
- Tourism is recognised as an important part of the Geelong economy and in particular on the Bellarine Peninsula reflecting the coast and rural landscapes. The strategy directs that appropriate tourism and accommodation uses only occur where they are small scale and in conjunction with agricultural use on the property.
- Traditional rural living (rural residential) should be limited to existing nodes, with no further nodes developed.

Key outcomes from the strategy are incorporated into the Municipal Strategic Statement and the *Local Planning Policy: Clause 22.05 Agriculture, Rural Dwellings and Subdivision* and *Cause 22.06 Tourism Development in Rural Areas*, which has been amended through Planning scheme Amendment C347. A new *Clause 22.64 Discretionary Uses in Rural Areas* has also been added through C347.

2.1.4 Community Development

Bellarine Peninsula Strategic Plan 2006-2016 (BPSP)

The BPSP reported on the community, land use and community service issues on the Bellarine Peninsula. It brought together community visions, updated monitoring of land uses, and assessment of future residential lot supply, demographic profiles and an assessment of community service needs. Many of the visions, strategies and actions of the plans are implemented through the Barwon Heads Structure Plan 2010.

Since its adoption in June 2006, the BPSP has been utilised by Council as a key planning and reference document for determining Council priorities and actions on the Bellarine Peninsula. The BPSP is also widely used by community organisations, other levels of government, individuals, business and local communities who are interested and active in planning, providing services or addressing community priorities. The BPSP was set out in a number of parts; with a summary of the relevant parts set out below, including details of the five year review of the BPSP undertaken in 2012.

1. The Barwon Heads Peninsula Community Vision is set out in Part B: The Bellarine Peninsula Community Visions 2006 – 2016. For Barwon Heads the community vision is:

“In the year 2016 Barwon Heads will be a unique, sustainable, residential and environmental hub; a landlocked community surrounded by pristine river, coast and wetlands. An intimate community which supports all age groups and provides a place of belonging for residents and visitors alike; where human impact is managed to support the fragile natural surroundings by:

- *Clearly defined limitations on urban development*
- *Protecting and nurturing natural surroundings by managing human footprint*
- *Supporting walking, cycling, fishing, sailing, surfing, swimming and generally enjoying what our coastal village has to offer in an environmentally sensitive way”.*

The vision also sets out objectives and a series of actions, targets and partners to assist the Barwon Heads community in meeting the vision.

The strategies and actions sought by the community under the plan for Barwon Heads include:

- Preserve the unique qualities of the township by limiting hard surfaces, reinforcing and retaining informal streets, protecting and enhancing walking tracks, protecting and preserving views to the water, protecting coastal vegetation, parkland, river and beach.
- Provide older persons in the town facilities to meet their physical and emotional well being and encourage their continued involvement and feeling of worth within the community.
- Provide the youth of all ages facilities to meet their physical and emotional well being and encourage and promote a strong community awareness and belonging.
- Ensure that town boundaries are clearly designated in the Barwon Heads local area planning provisions, the principles of the Coastal Spaces Project are embedded in the MSS and reflected in the Coastal Area provisions of the Geelong Planning Scheme.
- Preserve the low key, coastal village character; limit population of the town.
- Revise overlays to restrict high density housing, including limiting height to 2 storey, and protect heritage and environment.
- Provide improved parking, traffic management and public transport now and into the future by keeping abreast of local population and tourism growth.

- Conserve natural environment and protect indigenous vegetation, implement new indigenous plantings and eradication of environmental weeds.
2. Bellarine Peninsula Community Service Plan 2006 – 2016.

The plan is a joint service plan which identifies areas of community service need and recommended responses for the Bellarine Peninsula, including Portarlington.

3. Bellarine Peninsula Strategic Plan – Five Year Progress Report (2012)

The audit provides a mid term report of the 'Actions' set out in the BPSP Visions and Service Plans parts of the strategic plan. Most (83%) of the actions set out in the Barwon Heads Community Vision are either on schedule (46%) or completed (37%).

A major issue that has been delayed is the community support for the 'Around Barwon Heads bike and walking track' due to a change in organisation [CoGG] direction.

City of Greater Geelong - Social Infrastructure Plan 2014 – 2031 Executive Summary (SIP)

The SIP is intended to inform and assist the provision and delivery of social infrastructure through planning, partnerships and advocacy advice. It provides direction to CoGG for its role and acknowledges that Council does not have sole responsibility for funding the social infrastructure requirements as identified in the SIP. Importantly, the Plan emphasises the need for Council to partner with a range of stakeholders such as funding bodies to provide the required infrastructure.

The vision for CoGG social Infrastructure is to be:

1. Well designed and inspiring;
2. Planned to be flexible, versatile and innovative to match changing needs over time;
3. Well managed and provides a focal point to enhance community identity;
4. Existing facilities/space will be maximised and will complement new facilities/spaces ;and
5. Well located and connected to the community it serves.

Council has adopted the executive summary for the Social Infrastructure plan, but not the full document and detail for implementation. Further discussion around community facilities is provided in Section 5.1.

2.1.5 Economic and Infrastructure

G21 Economic Development Strategy 2014

The strategy identifies the economic opportunities and advantages in the G21 region and outlines strategies to support regional development that is accommodating of the G21 region's anticipated growth. These strategies include:

- Prioritise new and existing economic development opportunities.
- Identify opportunities that will lead to an increase in wealth, prosperity and regional standards of living;
- Identify the genuine competitive advantage of the G21 region.
- Produce a compelling and evidence-based map showing how to 'build value' into the G21 regional economy.
- Provide advice on the most appropriate governance model to implement the strategy.

The Strategy sees tourism as an integral element of the Region's economy and acknowledges the Bellarine Peninsula's potential for increased tourism activities.

Geelong Retail Strategy 2006

The purpose of the Retail Strategy is to provide direction for the development and planning of retail uses within the municipality. It was formulated having regard to population growth, socio-economic and demographic characteristics, retailing trends and growth in new residential areas. The foundation of the Strategy is to support the established retail hierarchy within the municipality to provide for a viable and accessible retail sector.

Based on the retail definitions within the existing strategy Barwon Heads is defined as a 'Town Centre', where a 'Town Centre':

"generally [sic] serves the role as a key local destination for basic convenience shopping facilities, and also as a key service centre for the surrounding local catchment, including a range of non-retail commercial, community, administrative and cultural functions. The role of Town Centres as a focus for holidaymaker and other visitor spending is recognised and where appropriate suitable retail facilities and town centre amenities should be made available for this market (eg, bus parking; public toilets). This may result in a higher provision of retailing being made available than the resident population would otherwise support."

Draft Retail Strategy 2017.

Council is currently undertaking an update to the Retail Strategy and a final draft is yet to be adopted by Council. Emerging outcomes of the Strategy have been used in Section 7.6 to guide the policy outcomes.

Draft Geelong and the Bellarine Tourism Development Strategy 2015.

The Tourism Development Strategy has been prepared for the Greater Geelong and the Bellarine region, which includes Greater Geelong, Queenscliff and Golden Plains Local Authorities. The Strategy has been developed to identify projects which will assist in growing the visitor economy in Greater Geelong over the next 10-15 years. Overall for the region visitation is expected to grow between 1.2 and 1.7 million visitors to 2030.

Barwon Heads is located within the Bellarine South sub-region. It was estimated in 2014 that total visitation was 777,669 people capturing 16% of the market to the region. Of that, total trips to the Bellarine South sub-region 264,544 were daytrips; or 34%. Accommodation in the sub-region is dominated by caravan/ cabin accommodation (41%) and self-contained/ holiday home (30%). There is only a small amount of B&B accommodation in Barwon Heads at 2%. The report does not provide figures on Air BnB stays.

Key attractions to the subregion include the two golf courses at Barwon Heads, as well as wineries and the Adventure Park theme park located outside of Barwon Heads.

The strategy identifies priority projects for the development of across Greater Geelong. No priority projects are identified for the Bellarine South sub-region. The growth of tourism in Barwon Heads is discussed further in Section 5.3.

G21 Integrated Public Transport Strategy 2008

The strategy includes a number of outcomes related to improving road and rail infrastructure, freight transport, integrated public transport and improved amenity associated with walking and cycling and alternative transport modes. Actions under public transport include:

- Improving the effectiveness and coverage of public transport related service;
- Developing land use and spatial planning approaches to facilitate access to transport services.
- Developing a Regional Public Transport Policy to provide for integration of networks and encourage best practice.

Department of Transport Public Transport Guidelines for Land Use Development 2008

The guidelines aim to facilitate walking, cycling and public transport in new urban and regional developments. The guidelines will deliver broad community benefits by:

- Encouraging sustainable travel options.
- Alleviating traffic congestion.
- Improving urban amenity, connectivity and accessibility between communities, workplaces and urban centres.

The guidelines set out design principles and provide advice on where to access detailed public transport and planning information. This includes advice on trains, trams, buses and interchanges. There is particular advice on:

- Bus routes in new subdivisions.
- Road design.
- Walking and cycling.
- Design requirements for public transport infrastructure such as stops and parking facilities.
- *Disability Discrimination Act* requirements for public transport.

City of Greater Geelong Integrated Comprehensive Transport Plan January 2015

The Plan provides a cohesive transport and land use planning framework for the City. The Plan outlines short, medium and long term actions for planning, development and management of an integrated transport system.

The Plan outlines a number of actions and challenges facing the municipality that are relevant to Barwon Heads and include:

- Action 1a- Evaluate the City of Greater Geelong's approach to all aspects of car parking.
- Action 1b- Investigate the funding and delivery options available to ensure footpaths are provided where they are required.
- Action 1c- identify those streets in populated areas where footpaths either do not exist or are not provided on both sides of the road.
- Action 1d- Produce a prioritised delivery program for providing footpaths in populated areas where they do not exist or are not provided on both sides of the road (Medium to Long term).
- Action 1g- Work with VicRoads to prioritise and deliver the proposed Principal Bicycle Network.

Barwon Heads Traffic and Parking Study (2010).

This Study was prepared by GTA on behalf of Council in 2010 and is an update of the original 2003 study. The study was undertaken to complement the Barwon Heads Structure Plan 2010. Objectives of the study were to:

- Establish the current parking supply and demand within the core commercial area of Barwon Heads, and traffic volumes on key roads;
- Identify local operation, amenity and safety issues relating to car parking, traffic, public transport, cycling and walking.
- Propose balanced and achievable solutions to the identified issues, taking into consideration the natural amenity and character of Barwon Heads.

Major issues that were identified during community engagement for the study were: inadequate pedestrian paths and crossing points of major roads, inadequate provision of parking in Hitchcock Avenue (particularly associated with new developments), congestion and safety issues created by parking in Clifford Parade and the increasing volume of traffic on arterial roads in Barwon Heads, in particular heavy vehicle volumes.

The final report provided a series of Council recommendations to the issues identified. These include the conversion of Clifford Parade to one-way operation, improved signage, advocacy for improved public transport (including a permanent internal town bus service), additional bicycle parking facilities and pedestrian refuge islands in Bridge Road to allow improved pedestrian crossing opportunities and vehicle safety.

Section 6.4 discusses the issue of traffic and parking in greater detail and details the improvements that have been made by Council.

2.1.6 Open Space and Recreation

City of Greater Geelong Bellarine Peninsula Recreation & Leisure Needs Study 2005

This Study investigated and quantified the recreation, open space and leisure needs of the current and future Peninsula communities and provides a broad direction on future resource allocation.

The study is now largely out of date and is due to be replaced by the emerging Open Space Strategy when this is adopted by Council. See section 5.2 for further discussion around open space and recreation provision.

Cycling into the Future 2013-23

The Victorian Government's cycling strategy, Cycling into the Future 2013-23, recognises the important role that cycling plays in our state – as part of the transport system, as an enjoyable recreation activity, a healthy form of exercise and a tourism draw card.

It aims to make it easier for people to get out on their bikes and safer for people who already ride. It will improve the well-being of all Victorians, create better places to live, support a stronger economy and generate jobs and contribute to a healthier environment.

City of Greater Geelong Cycle Strategy, 2008

The Strategy has been developed to provide Council with guidance on expanding Geelong's on and off road cycle network, improving bicycle facilities, enhancing cyclist education and delivering promotions that encourage people to cycle as a means of transport, recreation and sport. Providing for cycling is about connecting key origins such as residential areas with key destinations such as employment, education and sport or recreation areas via quality bicycle lanes and paths. Priorities for the improvement of the network are outlined in Section 6.5.3.

2.2 Planning Scheme Provisions

Many of the strategies and guidelines detailed above form part of the Greater Geelong Planning Scheme, and are included as reference documents to guide the exercise of discretion when considering applications for uses and/or development within the municipality.

The key State and Local Planning Policies, together with the zone/overlay provisions are summarised in tables 2, 3, 4 and 5).

Table 2. State Planning Policy Framework

Clause	Key Objectives & Strategies
11: Settlement – Urban Growth	Seeks to ensure there is sufficient land available for existing and future communities through the provision of housing, employment, commercial, recreational and open space, community and infrastructure. It sets out the need to facilitate the orderly development of urban areas through the preparation of a hierarchy of structure plans. There is a need to plan to accommodate projected population growth over at least a 15 year period and provide clear direction on locations where growth should occur. Residential land supply will be considered on a municipal basis, rather than a town-by-town basis.
11.14: Localised Planning Statements	To protect and enhance the valued attributes of the distinctive areas of the Bellarine Peninsula.

Clause	Key Objectives & Strategies
12: Environment and Landscape Values	<p>To protect the health of ecological systems and the biodiversity they support (including ecosystems, habitats, species and genetic diversity) and conserve areas with identified environmental and landscape values, including coastal areas.</p> <p>To ensure that strategic planning considers impacts of any change in land-use or development that may affect the biodiversity value of adjoining nationally or internationally significant sites including wetlands and wetland wildlife habitat designated under the Convention on Wetlands of International Importance (RAMSAR Convention), and sites utilised by species designated under the Japan-Australia Migratory Birds Agreement (JAMBA) or the China-Australia Migratory Birds Agreement (CAMBA).</p>
13: Environmental Risks	<p>To adopt a best practice environmental management and risk management approach which aims to avoid or minimise environmental degradation and hazards – climate change, floodplains, soil degradation, noise and air, and bushfire.</p> <p>Planning should identify and manage the potential for the environment and environmental changes, to impact upon the economic, environmental or social well-being of society.</p>
14: Natural Resource Management	<p>To assist in the conservation and wise use of natural resources including energy, water, land, stone and minerals to support both environmental quality and sustainable development.</p>
15: Built Environment and Heritage	<p>Ensure all new land use and development appropriately responds to its landscape, valued built form and cultural context, and protect places and sites with significant heritage, architectural, aesthetic, scientific and cultural value.</p> <p>Planning should achieve high quality urban design and architecture that:</p> <ul style="list-style-type: none"> • Contributes positively to local urban character and sense of place. • Reflects the particular characteristics, aspirations and cultural identity of the community. • Enhances liveability, diversity, amenity and safety of the public realm. • Promotes attractiveness of towns and cities within broader strategic contexts. • Minimises detrimental impact on neighbouring properties.
16: Housing	<p>Planning should provide for housing diversity and ensure the efficient provision of supporting infrastructure and to provide land for affordable housing. New housing should have access to services and be planned for long term sustainability, including walkability to activity centres, public transport, schools and open space.</p>
17: Economic Development	<p>To contribute to the economic well-being of communities and the State as a whole by supporting and fostering economic growth and development by providing land, facilitating decisions, and resolving land use conflicts, so that each district may build on its strengths and achieve its economic potential.</p>
18: Transport	<p>To ensure an integrated and sustainable transport system that provides access to social and economic opportunities, facilitates economic prosperity, contributes to environmental sustainability, coordinates reliable movements of people and goods, and is safe.</p>
19: Infrastructure	<p>Planning for efficient, equitable, accessible and timely social and physical infrastructure.</p>

Table 3. The Local Planning Policy Framework

Clause	Key issues	Strategies and implications for the study area
21.05: Natural Environment	The municipality includes a rich diversity of flora and fauna, including rare and unique species and communities, major waterways, large coastal areas and complex freshwater and marine wetlands.	<p>To protect, maintain and enhance waterways and the connectivity between waterways and wetlands, biodiversity and coastal environments.</p> <p>To focus urban coastal development within existing urban settlements, prevent lineal urban sprawl along the coast and provide appropriate setback buffers to accommodate coastal recession. To limit stormwater outlets.</p> <p>To reduce the amount of runoff from urban development and improve the quality of stormwater runoff entering waterways, estuarine and marine waters.</p> <p>To consider and avoid or minimise impacts of flooding, wildfires and climate change.</p> <p>To increase the use of renewable resources and encourage the efficient use of non-renewable resources.</p>
21.06: Settlement and Housing	<p>Between 2006 and 2031, it is estimated that the municipality will need to accommodate an additional 63,000 persons and approximately 41,000 new dwellings.</p> <p>The region's population is ageing rapidly.</p> <p>There is a need to provide for a range of housing typologies including unit, townhouse, attached, multilevel and apartment dwellings.</p> <p>New infill development should be directed to well serviced areas and all development should contribute positively to the quality of the urban environment.</p> <p>Rural living areas provide greater consumer choice, but can be inefficient to service.</p>	<p>Direct the majority of new greenfield residential development to the designated primary urban growth areas. Barwon Heads is not a designated growth area within the City of Greater Geelong.</p> <p>Ensure development occurs within designated settlement boundaries and where possible use natural boundaries to define the edges of urban areas.</p> <p>Provide for consolidation of urban areas in a managed way and ensure development responds to existing neighbourhood character.</p> <p>New subdivisions target of 15 dwellings per hectare.</p> <p>Increased housing density should be encouraged around the Barwon Heads Town centre which has been identified as an Increased Housing Diversity Area.</p> <p>Acknowledge that neighbourhood character in Increased Housing Diversity Areas will adapt over time. Ensure that development is responsive to the established character of the area. Support appropriate medium density housing that respects the existing neighbourhood character in General Residential Zones.</p> <p>Retain existing vegetation wherever possible.</p> <p>Limit rural living developments to existing nodes <i>[not including Barwon Heads]</i>.³</p>
21.07: Economic Development and Employment	The provision of high quality living, working and recreational environments is critical to attracting and retaining highly skilled people and the businesses in which they	Ensure that new retail development is directed to activity centres and is consistent with the role and function described in the Retail Activity Centre Hierarchy. The role of the Barwon Heads centre is defined as a 'Town Centre'.

³ Emphasis added.

Clause	Key issues	Strategies and implications for the study area
	work.	<p>Encourage a mix of retail, office, cafes, entertainment, housing, education and community facilities as well as accommodation above ground floor level in activity centres.</p> <p>Within the Bellarine Peninsula rural areas, support appropriately scaled, high quality, landscape responsive tourism uses that are subservient and complimentary to their rural landscape and environmental setting and are associated with agricultural activity on the land.</p> <p>Maintain land in large and productive parcels and ensure development respects the farmed landscape character.</p>
21.08: Development and Community Infrastructure	Establishes the need to provide social and community infrastructure and other key infrastructure such as utilities, roads, rail, port, public transport and open space in a efficient and timely manner.	To ensure safe, accessible and connected community infrastructure and open space network and improve public transport, bicycle and pedestrian linkages.
21.14: The Bellarine Peninsula <i>(Subject to change through the Barwon Heads Structure Plan Update and future Planning Scheme amendment process.)</i>	<p>The Bellarine Peninsula is one of the fastest growing areas in Geelong. Appropriately managing urban growth will be critical to retaining the Peninsula's identity and attributes.</p> <p>It is important to preserve the individual character, identity and role of each Bellarine township and maintain urban breaks between settlements.</p>	<p>Maintain a compact urban form and avoid outward sprawl. Protect the unique character of Barwon Heads as a coastal village located within a sensitive environment and significant landscape setting.</p> <p>Ensure the Hitchcock Avenue shopping centre remains the focus of retail activity in Barwon Heads.</p> <p>Restrict new commercial development to the existing business and mixed use zones in Hitchcock Avenue between Bridge Road and Ozone Road and the south side of Bridge Road.</p> <p>Ensure new housing development complements the character of Barwon Heads and provides for a variety of housing sizes and types.</p> <p>Support the continued development of 13th Beach Resort as a tourist destination.</p> <p>Continue upgrading the Barwon Heads Village Park and foreshore reserves in accordance with established master plans.</p> <p>Support development of appropriate tourist accommodation around the Barwon Heads town centre.</p>

Table 4 – Greater Geelong Planning Scheme Zones applicable to Barwon Heads

Zones	
Residential Growth Zone Schedule 3 (RGZ3) <i>[Recommended removal in Structure Plan update]</i>	The zone has been applied to land surrounding activity centres, known as Increased Housing Diversity Areas. It supports the provision of housing at increased densities and a range of housing types in locations offering good access to services and transport.
General Residential Zone – Schedule 1 (GRZ1)	The zone provides for residential development for a diversity of housing types and housing growth particularly in locations offering good access to services and transport.
General Residential zone. Schedule 2 (GRZ2)	The General Residential - Schedule 2, are known as incremental change areas.
Neighbourhood Residential Zone	The zone provides for predominantly single and double storey residential development that respects the identified neighbourhood character, heritage, environmental or landscape characteristics.
Low Density Residential Zone Schedule 1 (LDRZ2)	The zone has been applied to an area to the north of Stephens Parade and Link Avenue. Schedule 1 allows subdivision to a minimum lot size of 0.4ha in areas not connected to reticulated sewerage.
Commercial 1 Zone	The town centre is zoned Commercial 1. The purpose of this zone is to create vibrant mixed use commercial centres for retail, office, business, entertainment and community uses.
Mixed Use Zone	The zone is applied to an area north of the Commercial 1 Zone within the town centre. The zone provides for a range of residential development at higher densities, commercial, industrial and other uses that complement the mixed-use function of the locality.
Farming Zone (FZ)	The zone has been applied to land directly adjacent to the settlement boundary. The zone protects productive agricultural land and supports rural communities.
Rural Conservation Zone Schedules 4, 5 and 10	The zone has been applied to small areas of land with conservation values outside of the settlement boundary, including East of Black Rock, Pacey's Island and part of Murtnaghurt Lagoon.
Public Conservation and Resource Zone (PCRZ)	The zone is applied to significant areas of land surrounding Barwon Heads township, including the Murtnaghurt Lagoon, Barwon River and the Thirteenth Beach foreshore and environs.
Comprehensive Development Zone – Schedule 1.	The zone is applied to the 13 th Beach golf and recreational tourist resort with conference and accommodation facilities and residential development. The zone applies to Stage A, B and C of the resort.
Other zones	<ul style="list-style-type: none"> • Public Park and Recreation Zone (PPRZ) • Special Use Zone Schedule 3 - Private Golf Course (SUZ3) • Public Use Zone Schedule 1 - Service and Utility (PUZ1). • Road Zone

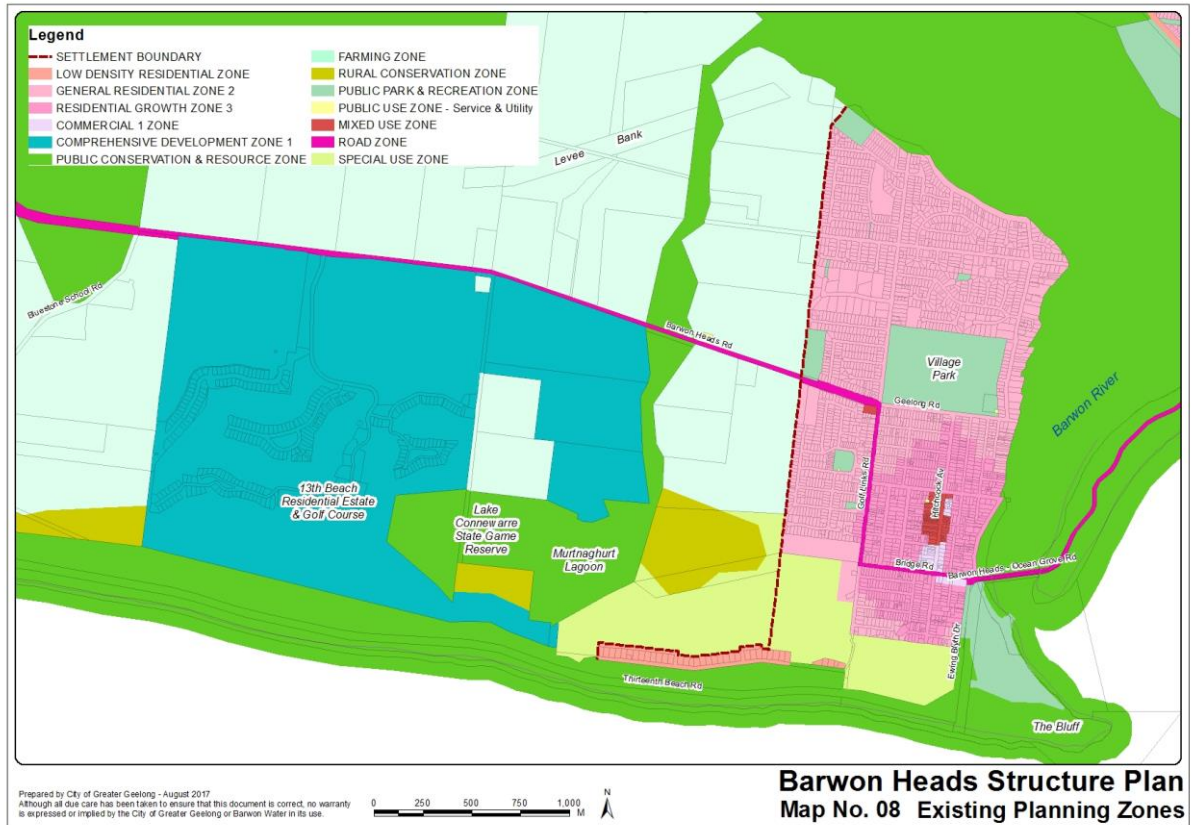
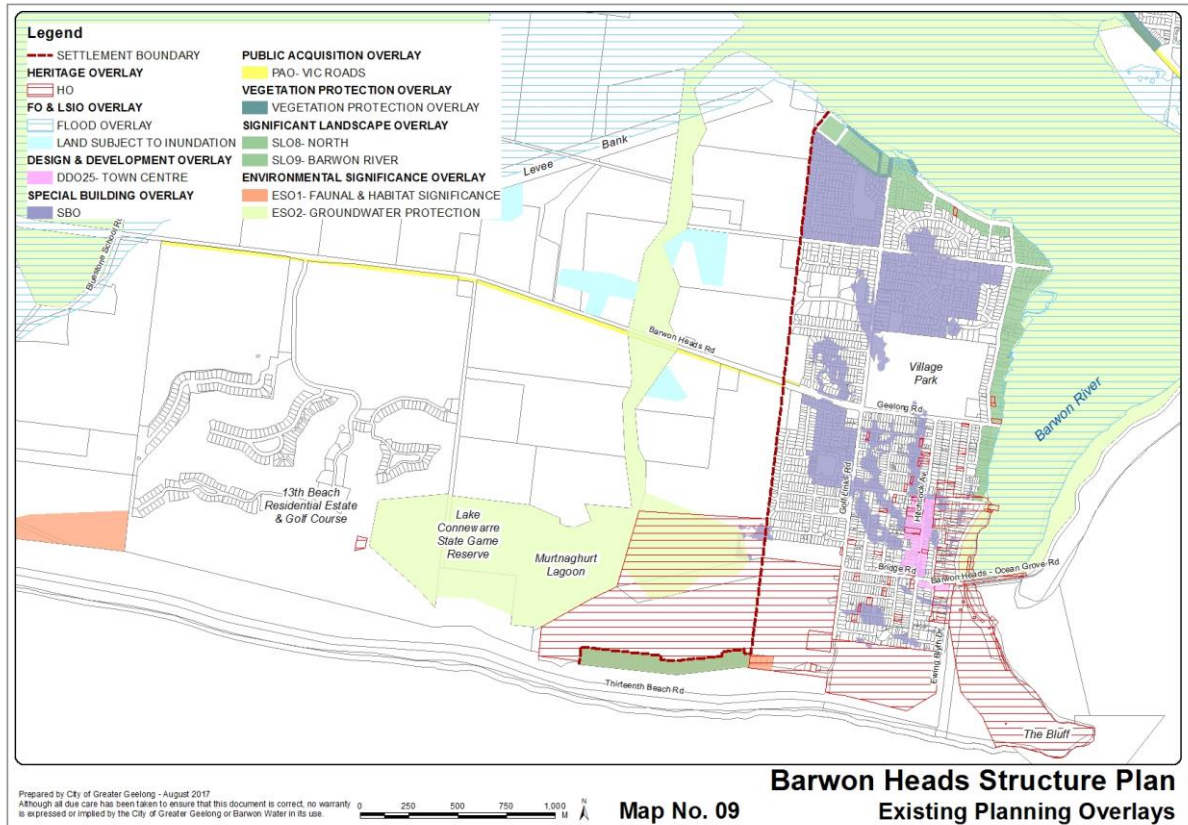


Table 5 – Greater Geelong Planning Scheme Overlays applicable to Barwon Heads

Overlays	
Design and Development Overlay	Schedule 25: Barwon Heads Town Centre.
Significant Landscape Overlay:	Schedule 8: Barwon Heads Semi-Bush Significant Landscape Area Schedule 9: Barwon River Environs Barwon Heads
Vegetation Protection Overlay	Part of Barwon Terrace, Sheepwash Road and River Parade.
Environmental Significance Overlay	Schedule 1: Areas of Flora and Fauna Habitat and of Geological and Natural Interest Schedule 2: High Value Wetlands and Associated Habitat Protection
Special Building Overlay	Ensures that development maintains the free passage and temporary storage of floodwaters.
Floodway Overlay	
Heritage Overlay	<ul style="list-style-type: none"> HO 1649 Flinders Heritage Area. Bounded generally by Margate St, Ozone Road, Grandview Parade, Golightly Street, Ewing Blyth Drive, Barwon Heads Park and the Barwon River. Supported by policy Clause 22.36. The policy notes that the precinct area is significant for its seaside character, formed by the strong visual connections with the Barwon River, ocean, bridge, jetties and with the Barwon Heads Park and Frank Ellis Reserve.

Overlays

- HO1650 Golf Links Heritage Area (Barwon Heads Golf Course)
Supported by policy Clause 22.37. The policy notes that the precinct area is significant for its intact links type golf course of 1920-22 and small number of large-medium scale, interwar Bungalow houses developed on the Golf Links/Golf Lands subdivision of c.1920.
- HO1672 Barwon Heads Golf Course Club House
- HO33 Earl of Charlemont Memorial
- HO1537 Barwon Heads Bridge
- HO1651 Residence 21 Bridge Road
- HO1653 Residence 47 Bridge Road
- HO1656 Residence 8 Ramsgate Street
- HO1657 Residence 19 Campbell Street
- HO1658 Residence 2 Carr Street
- HO1659 Stone Fence & Trees 20 Carr Street
- HO1660 Bluestone retaining wall 1 Ewing Blyth Road
- HO1661 Barwon Heads Park
- HO1662 Earl of Charlemont Anchor, Barwon Heads Park 7 Ewing Blyth Drive
- HO1663 Barwon Heads Jetties & Co-op sheds Barwon Heads Park 7 Ewing Blyth Road
- HO1664 Boot Room, Barwon Heads Park 7 Ewing Blyth Road
- HO1665 Orungal Secondary Anchor, Barwon Heads Park, 7 Ewing Blyth Drive
- HO1666 Lobster Pot Dance Hall Former, Barwon Heads Park. 7 Ewing Blyth Drive
- HO1667 Residence 20 Ewing Blyth Drive
- HO1668 Shop 1 Flinders Parade
- HO1670 Residence 26 George Street
- HO1671 Residence 29 George Street
- HO1673 Jessie McKechnie Memorial Gates & Plaque- Barwon Heads State School 3A Golf Links Road
- HO1674 Jeancourt Residence 34 Golf Links Road
- HO1676 Residence 11 Grove Road
- HO1679 Residence 33 Grove Road
- HO1680 Residence 6 Henley Street
- HO1681 Residence & Outbuilding 37 Hitchcock Avenue
- HO1683 All Saints Anglican Church 61-63 Hitchcock Avenue
- HO1685 Barwon Heads Uniting Church 71 Hitchcock Avenue
- HO1686 Barwon Heads Community Hall 79 Hitchcock Avenue
- HO1687 Holy Family Catholic Church 101 Hitchcock Avenue
- HO1688 Maxwellton Residence 105 Hitchcock Avenue
- HO1691 Residence 1 Noble Street
- HO1692 Residence 35 Noble Street
- HO1693 Latrines Sheds Ozone Road/ Flinders Parade
- HO1694 Boat House (former) 20 Ozone Road
- HO1695 Residence 31 Ozone Road
- HO1696 Barwon Heads Jetty
- HO1697 Residence 5 Punt Road
- HO1698 Residence 14 River Parade
- HO1700 Residence 29 Seaview Avenue
- HO1701 Residence 41 Seaview Avenue
- HO1702 Moondarra former school house 57 Seaview Avenue
- HO1707 Diesel Engine, former asparagus farm 13th Beach Golf Course
- HO1745 c1890-1920 Post Box opposite 51 Hitchcock Avenue
- HO1746 Shop & residence 56 Hitchcock Avenue
- HO1989, 9 Bridge Road (C354)



2.3 Key Influences

- Barwon Heads is not a designated growth location for residential growth under the Council’s Municipal Strategic Statement or the G21 Regional Growth Plan 2013, with modest growth to be limited to identified structure plan settlement boundaries;
- Barwon Heads has a ‘Town Centre’ classification under the retail hierarchy. Retail growth should be consistent with the established retail hierarchy and provide incremental growth as appropriate;
- Barwon Heads is not a designated location for intense commercial or industrial development;
- There is strong State and Local Planning Policy direction for the protection, enhancement and/ or management of:
 - coastal environments, coastal hazards and the coastal impacts of climate change;
 - sensitive environments, biodiversity and landscape features;
 - Barwon Heads and its surrounding area hold significant values for Indigenous cultural heritage;
 - rural environments and agricultural activities;
 - non-urban break between settlements;
 - building design and built form of the township including the opportunity for application of a range of policy and statutory planning controls;
- A need to provide direction relating to traffic and parking issues within the township;
- Opportunities exist for enhancement of open space, recreational facilities, cycling and pedestrian infrastructure and linkages;
- Appropriate provision of community facilities to meet community needs in line with the size and function of the town.

3.0 Natural and Urban Environment

The surrounding landscape of Barwon Heads is an intrinsic part of its identity. Barwon Heads is uniquely bounded by three significant water systems, Lake Connewarre and Murtnaghurt to the north and west, the Barwon River to the north and east and Bass Strait to the south.

The two main approaches to the town consolidate the “island” character of the town; the rural route to the west and the journey along the spit to the east from Ocean Grove. Barwon Heads is known as the “Village by the Sea”, a term that was coined in the 1980’s.

Within the Coastal Spaces Landscape Assessment Study (2006) the land surrounding Barwon Heads to the west and north is described as ‘localised flatlands’, with the land to the south and east described as ‘coastal cliffs and dunes formed by the wild seas and winds at the southern edge of the Bellarine Peninsula’.

3.1 Natural Environment

3.1.1 Key Environmental Features

To the north west of the township is Lake Connewarre which incorporates the Lake Connewarre State Game Reserve. Murtnaghurt Lagoon lies directly to the west, across a section of rural land, stretching down from Lake Connewarre towards the coast. This wetland area, together with Reedy Lake and the Barwon River estuary, are included on the Ramsar list, within the Port Phillip Bay and Bellarine Peninsula Site Listing. This entire area provides habitat for a number of migratory birds, including nationally and internationally threatened species. A number of threatened flora species are also found within the area, which is dominated by coastal saltmarsh, together with some sections of mangrove shrubland and the area also includes areas of Coastal Moonah Woodland communities listed as threatened under the *Flora and Fauna Guarantee Act 1988*.

The Strategic Management Plan for the Ramsar site notes that, given its location at the bottom of the catchment, this area is “directly affected by hydrological and water quality changes due to catchment processes and land use...the ecological character of the wetland system depends greatly on water quality and flows” (p.10).

The Barwon estuary directly to the north and east is classified as a moderately stratified estuary which experiences greater turbulent mixing due to a greater tidal range (Parks Victoria Technical Series No. 15 Estuary Opening Management, p.7). The Lower Barwon ‘occasionally has a well mixed structure, during spring tides when river discharge is relatively low’ (Ibid). On the southern part of the river bank, as the river makes its way south to the sea, is extensive areas of mangrove shrubland. The white mangrove on the banks of the river is fringed with stands of significant Coastal Moonah woodland community.

Across the Barwon River the Ocean Grove spit and the western coastline of the Ocean Grove township provide significant views to and from Barwon Heads.

To the south is Bass Strait, with the foreshore of Thirteenth Beach. The Barwon Heads Urban Design Framework 2003 identified this coastline approach, along Thirteenth Beach Road, as the third entry point to the town and this identifies the glimpses of the ocean and panoramic view over the township and the important vistas to protect”. Along this approach, at the urban edge of the town, is the historic Barwon Heads Golf Club set amongst secondary dunes and coastal scrub.

The Bluff is the south eastern edge of the town and is one of the most significant landscape features of the Peninsula. This headland, the highest point of which is known as Mount Colite, was created by numerous geological processes, which ultimately produced the calcarenite rock/dune limestone formation present today. There are two separate reefs lying beneath the Bluff which are of geological and geomorphological significance at the regional and local level⁴. The Bluff landscape includes more than ‘80 indigenous species of fauna including

⁴ www.parkweb.vic.gov.au

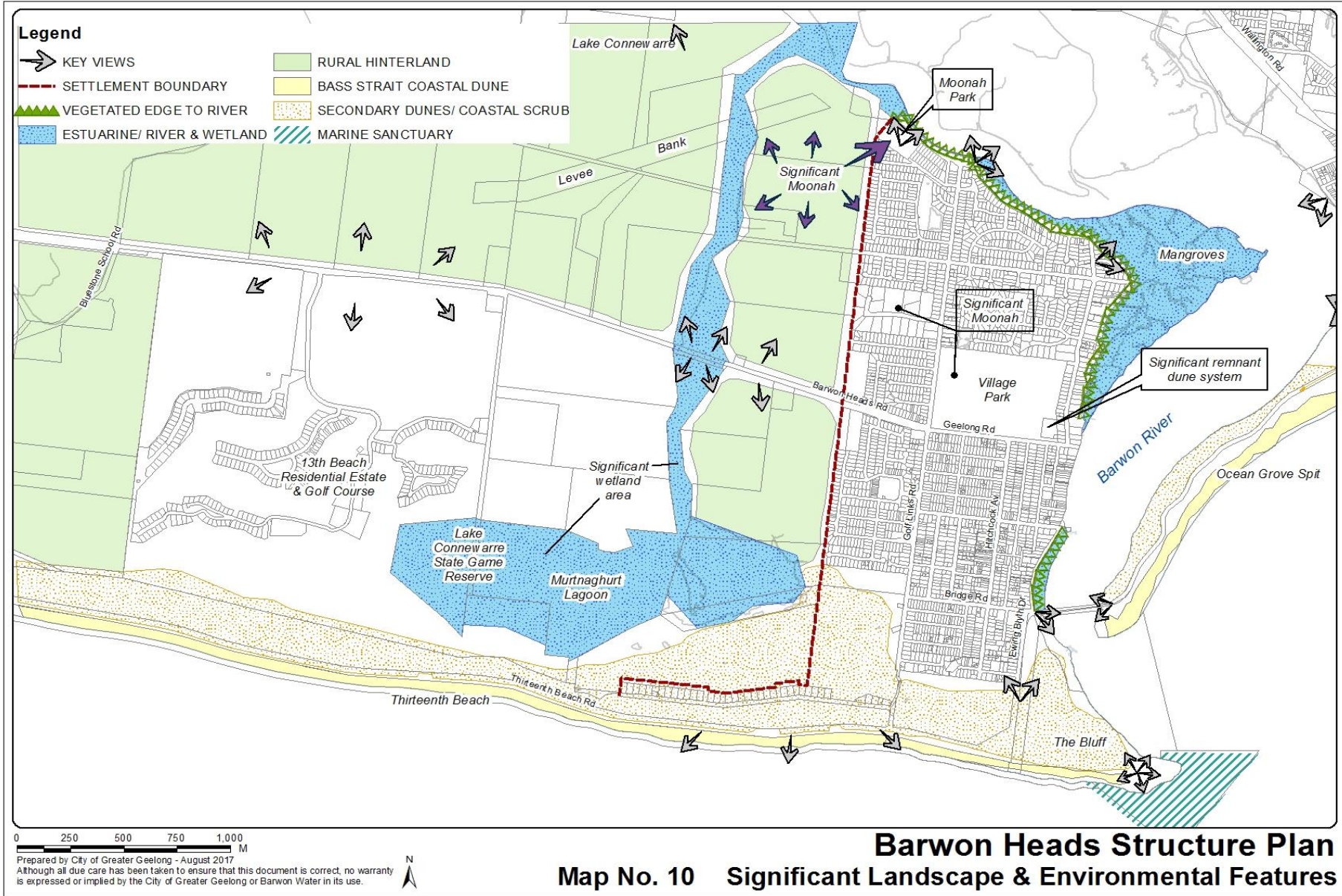
many that are considered locally rare and threatened⁵. The eastern tip of this headland is known as Point Flinders.

The Barwon Bluff Marine Sanctuary extends southeast from the Bluff and covers 17 hectares of sea. This Sanctuary is part of the system of Marine National Parks and Sanctuaries within Victorian waters and was reserved as a sanctuary under the National Parks Act 1975 (Victoria) in November 2002. The major Marine Habitat Classes in the Marine Sanctuary are subtidal soft sediment and subtidal and intertidal reef, which provide habitat for a diverse range of marine flora and fauna. The Bluff was an important meeting and camping place for the Wathaurong people, who continue their close association with the area. The Sanctuary is particularly significant for its values to marine education^{4&5}.

At the geographic centre of the town is the Village Park which contains sections of significant Moonah vegetation, some of which pre-dates European colonisation. A remnant dune system lies at the eastern boundary of the park containing Coastal Tea Tree and Coastal Wattle.

These key landscape, environment features and views are shown Map 10.

⁵ (www.barwonbluff.com.au)



3.1.2 Protection and Management of the Natural Environment

The management of the natural environment in Barwon Heads is complex due to the variety of natural features in the town and the range of agencies involved. Principally, there exists a single lead agency responsible for each specific feature or area appointed either through Commonwealth or State legislation (ie. BCCoM), who undertake their activities through formal strategies and management plans. These lead agencies work in partnership with other groups and agencies, such as “Friends of” groups, to manage and protect these areas.

The groups and government agencies involved in Barwon Heads includes, but is not limited to, the following:

- Wathaurong Aboriginal Co-operative;
- Friends of the Bluff;
- Barwon Heads Association;
- Save Barwon Heads Alliance;
- Barwon Heads Traders and Tourism Association;
- Parks Victoria;
- Barwon Coast Committee of Management (BCCoM);
- Corangamite Catchment Management Authority (CCMA);
- City of Greater Geelong; and
- Central Coast Board.

The following table provides a simplified explanation of the roles and responsibilities for each area and the basic objectives for their on-going management.

Table 6 - Management of the Environment: Roles and Objectives

Area	Lead Agency	Objectives
The coastline and the local port	The Barwon Coast Committee of Management (BCCoM) is responsible for management of all coastal reserves within the Study area, which is undertaken through their Coastal Management Plan 2012/13 to 2014/15 (currently under review). BCCoM is also responsible for the Barwon Heads Caravan Park.	The over-arching objective for the area is the continued protection and management of the natural environment for its environmental values, whilst providing for recreation and accommodation activities which do not adversely impact on that environment.
The Barwon Bluff Marine Sanctuary	The lead agency for the protection and management of the Marine Sanctuary is Parks Victoria through the Barwon Bluff Marine Sanctuary Plan.	The overall objective is to maintain this area for its environmental values, whilst providing a valuable education resource.
Wetlands (Murtnaghurt Lagoon and Lake Connewarre) and the Lake Connewarre State Game Reserve	The lead agency for management of these areas is Parks Victoria . The Department of Environment Land Water and Planning (DELWP) is identified as waterway manager for Lake Connewarre. The wetlands extend into private	Management of Murtnaghurt Lagoon and Lake Connewarre is undertaken in accordance with Nature Conservation Regulations and the Ramsar Site Management Plan, the primary purpose being the on-going protection and

	land and golf course with associated management responsibility extending to land owners/managers.	enhancement of the areas for their environmental values. DELWP) is identified as waterway manager for Lake Connewarre under the Guide to Vessel Operating and Zoning Rules (VOZR).
Village Park, small local parks and roadsides	The lead agency for the ongoing management and protection of these areas is the City of Greater Geelong through the Barwon Heads Village Park Master Plan 2012.	The overall objectives for these areas are to maintain their biodiversity and landscape values, whilst providing for passive and active recreation space and access.

3.2 Urban Environment

The urban environment of Barwon Heads is dominated by housing with a single commercial centre. As part of the preparation of the Barwon Heads UDF, an analysis of the built form, character and streetscapes of Barwon Heads was undertaken. This has been updated by the Barwon Heads Residential and Landscape Character Assessment (2017), which has been used to inform this Structure Plan Update. These are discussed in more detail below.

3.2.1 Town Centre and Hitchcock Avenue Streetscape

Section 2.1.3 set out the context of the Urban Design Framework (UDF). The UDF was prepared in 2003 and involved extensive analysis and community engagement. The UDF provided a comprehensive analysis and description of the town centre and recognised that it is the ‘casual beachyness and unpolished’ character’ of the streetscape which provides the atmosphere, including the varied front boundary setbacks and mixed built form and materials. A series of objectives were developed for the urban environment of the town centre.

Since its adoption the UDF has been used to inform the preparation of subsequent updates to the Structure Plan where many outcomes have either been incorporated into Structure Plan directions and implemented in the Planning Scheme through a Planning Scheme Amendment. Key aspects include:

- Design Objectives were incorporated into the Greater Geelong Planning Scheme as Design and Development Overlay – Schedule 25 (DDO25) Barwon Heads Town Centre. This provides design guidelines that seek development to respect the predominant height in the street and of adjacent properties, by generally restricting buildings to a maximum height of two storeys. It also seeks to enhance the established coastal character of the Town Centre and to protect the views and vistas from the Town Centre to the Barwon River and the coast.
- Improvement concepts for the streetscapes were developed in the UDF and undertaken in 2007. This included the street lighting, removal of overhead powerlines, new road and footpaths, tree planting and street furniture. As part of the streetscape redevelopment the existing toilet block in Hitchcock Avenue was renovated.
- Land to the north of the Commercial Zone 1 area was rezoned from Residential 1 to Mixed Use Zone through C159.
- Issues with car-parking were identified in the UDF and consideration of issues relating to parking provision and traffic are further explored in Section 6 of this Structure Plan.

3.2.2 Barwon Heads Residential and Landscape Character Study 2017

Introduction

The 2010 Structure Plan included a recommendation for Council to undertake further work regarding a Landscape Assessment study for the Ewing Blyth/ Golf Links/ Bridge Road residential areas with the intention to apply an overlay to protect existing character and vegetation.

In July 2016, Council commissioned Hansen Consultants to undertake the Barwon Heads Residential & Landscape Character Assessment (Character Assessment). The objectives of the Character Assessment were as follows:

- Confirm the identified Study Area.
- Undertake an analysis of the existing residential character statements from 2001.
- Identify what has changed, if anything from the character statements using site analysis observations.
- Analyse site development characteristics on private property within the study area using GIS, aerial photography, site inspections (from public land only), such as setbacks, site coverage, level of useable private open space, private vegetation cover.
- Make observations in relation to development in the area and the impacts this may have had on residential character based on land development data and trends.
- Identify the threat of continued infill development on the established neighbourhood character and the potential need for planning controls.
- Utilise existing Council data on street trees such as location, species, height, age to build up a picture of how vegetation plays a role for character in the study area;
- Analyse the findings and make recommendations including potential planning controls for these areas, such as overlays, residential zone schedules, local variations or zones.
- If planning controls are recommended, clearly identify the design or character objectives and guidelines that form the basis of them at either the precinct or township level.

The Barwon Heads Setting

It is important to recognise the context of Barwon Heads. Township character is different to neighbourhood character and is very important in the context of Barwon Heads. The existing policy for Barwon Heads (Clause 21.06 of the Planning Scheme) seeks to:

“Protect the unique character of Barwon Heads as a coastal village located in a sensitive environment and landscape setting; and

Ensure new housing development complements the character of Barwon Heads and provides for a variety of housing sizes and types.”

Key contributory factors to the character of Barwon Heads include:

- Its coastal location near a surf beach and its location on the Barwon River.
- Its clearly defined urban edges and entries and approaches to the town.
- Its clearly defined Town Centre and ‘heart’ of the town.
- Its location within a rural and wetlands setting.
- Its separation from other towns.
- Its size and scale, being only a small village, with a relatively small population and with limited opportunities for substantial population growth.
- The relatively limited range of services and facilities available within the town.

- Its dual roles as the home of a permanent population, with ties back to its holiday centre and its strong tourist role.
- Natural vegetation, landscapes and building style reflective of its coastal location.

What development has been occurring?

There has been significant new residential infill in Barwon Heads over recent years and densities are decreasing. However, contrary to the perceived community impression, most dwellings that are being constructed are not increased densities, but the replacement of a smaller single dwelling with a larger footprint dwelling. On average there are 11 dwellings being demolished each year; or around 25% of construction projects. This is an indicator as to how many dwellings or sites are being changed each year. Most of the dwellings that were constructed between 2006 and 2015 involve the construction of one residential dwelling (78%); although this figure declined to 71% between 2013 and 2015. Between 2013 and 2015 there were 101 construction projects. 25 of these projects (25%) resulted in two or more dwellings being built on a site. 80% of these projects resulted in the number of dwellings on a lot being only two.

Generally when there is a one-for-one replacement this involves the replacement of smaller and older dwelling stock with a large modern building. This has an implication on character and how infill development can be managed. Currently a planning permit is not required to construct a single dwelling in most parts of Barwon Heads. While there is a significant amount of construction projects, the majority of projects are being constructed as single houses, or renovation or extensions to existing dwellings (75%). Around 25% of new development has been multi-dwelling. Most of this has been in the form of dual occupancies, some smaller unit developments on single or consolidated lots, and the re-subdivision of existing larger blocks into small lots.

In terms of densities being developed the amount of land used per dwelling is decreasing. In 2005 this was on average 668m², which has decreased to 651m² in 2015. Development over the past three years shows that smaller sized lots are being developed. This resulted in an average of 573m² in the General Residential Zone 2 and an average of 433m² in the Residential Growth Zone. This is a reflection of the change in policy at state and local level for residential constructions to provide for more housing diversity and efficiency of development.

Existing residential character.

Analysis was undertaken to identify what the existing character of Barwon Head is. The residential and landscape character of Barwon Heads is mixed. There are a number of areas that have discernibly similar character traits that generally relate to the time when they were subdivided and the era of dwellings constructed. There is very little consistency in building design, which suggests that controls over design are less relevant. One of the more notable trends apparent is the mix of development that occurs in older areas closer to the town centre. This is particularly the case in the older area south of Geelong Road, east of Golf Links Road and north of Bridge Road. They have a consistent, semi-formal street typology based on a regular street pattern, with strong landscaping in the streets and a wide mix of housing. The area south of Bridge Road is a bit different. This area is generally characterised by large lots, narrower informal roads and a mix of buildings from all eras, with vegetation across both the public and private realms being notable and a variable topography.

A summary of the existing character for Barwon Heads is set out below (pg 23):

- Building age. A very mixed age of building in older parts of Barwon Heads and more consistent ages of building in newer development areas of the town, particularly from the 1990s developments areas.
- Building height. Vast majority are single storey, with a scattering of two storey buildings and very few three storey buildings.
- Building materials. Materials are quite mixed throughout most parts of Barwon Heads. Old Barwon Heads has a larger proportion of weather board dwellings and not many older fibro dwellings remain.
- Building typologies. Barwon Heads has traditionally had a strong detached character. This has started to change around the old part of the town where an increase of dual occupancies and some units are being developed.

- Front setbacks. The majority of setbacks in the township are over 6m with a large proportion over 8m. The vast majority of frontage setbacks involve grass lawns and garden beds, and informal vegetated front yards with canopy trees.
- Lot size. There is quite a mix of lot sizes across the town, but the vast majority are suburban lots less than 1,000m². The most consistent size of lots sizes is to the north west of the town centre where the majority of lots range between 500 to 700m².
- Site coverage. Almost entirely less than 50% throughout the whole township with many lots being less than 20%. Only a scattering of lots have site coverage between 50% and 70%.
- Street trees. Strong patterns of street tree plantings exist through Barwon Heads and this is one of the consistent character features.
- Street typology. There are a number areas of the town that have an informal typology with no kerb and channel or footpaths, or semi-formal.
- Newer areas such as Seabank Estate have smaller front setbacks and higher site coverage. Materials in Seabank are almost exclusively brick.

Community views.

Consultation on the character assessment was held with Council officers and Hansen Partnerships in October and November 2016 as part of the Structure Plan update process. Addressing residential character is a key issue for the community. There is a desire to retain an 'informal coastal' character that was differentiated from a 'suburban character'. It is important to retain this difference otherwise the attractiveness of the township as a destination would be reduced.

Most community members support or understand the need for a diversity of dwellings within Barwon Heads, consistent with Council existing policies, but are concerned that the scale / form or development allowable under the current controls is out of character. The broad sentiment expressed was that some control was needed, but that this needs to be reasonable and not too onerous.

Preferred future character.

Barwon Heads has seen incremental erosion of its 'coastal character' over the last few decades and this trend will continue without the application of controls to manage built form.

Fundamental to the concept of residential character is the distinction between the *existing* character of an area and the *future* character of an area. Unless there is clear policy that outlines an existing or preferred future character for an area, then an assessment will occur on a site-by-site basis and only the adjoining area / nearby properties will be looked at in assessing the 'fit' of new development into the existing character of an area. This has significant implications for Barwon Heads, as in many places the character is quite mixed, which means that those buildings that do not make a positive contribution to the character of the area may lead to an unintentional, progressive loss of character over time.

Key elements of character identified by the project team as defining Barwon Heads which reflect the community aspirations and broader 'vision' for the township include:

- A modest site coverage and retention of side setbacks.
- A mix of dwelling types, single and double storey dwellings with modest medium density development that presents to the street as single dwellings rather than apartment forms.
- Larger front setbacks for double storey forms to avoid dominance.
- Garages to be set behind building frontages and not dominate the public interface.
- Simple material palettes, with a strong focus on timber / weatherboard.
- Low or no fencing. If fencing is provided it should be visually permeable and reflect recent fencing (e.g. permeable vertical timber fences).

- Sufficient front setbacks to provide meaningful landscape with a strong preference for native and indigenous plantings in an informal setting.
- Accessways to remain unsealed and streets to retain an 'informal' character (noting that there may be other policy imperatives that influence this (for example, providing formal sealed footpaths along key routes).

It is also noted that a benchmarking of controls that currently apply to Barwon Heads with comparable townships indicates that almost every comparable township has detailed design controls applied through the planning scheme, making Barwon Heads an anomaly in the current lack of built form controls. It is considered that there is strong strategic justification for the application of design controls to the township.

Threats to Barwon Heads

The reason why the current mix of dwelling styles does not overly impact on the character of the town, is due to the more modest scale of older dwellings (regardless of their design) and the opportunity that exist for landscaping to mitigate the impacts of built form on the streetscape and on surrounding properties.

While there may be a 'desire' and demand for the construction of larger (and taller) single dwellings, this should not be facilitated to the detriment of the broader township character.

The main threats to the preferred neighbourhood character of Barwon Heads includes the following:

- The consolidation of individual house lots and the development of those lots with large, bulky buildings that are inconsistent with the existing pattern and rhythm of detached houses and multi-unit developments existing throughout the township.
- A high site coverage of buildings and the consequent loss of space on sites for landscaping and tree planting, especially within the front setbacks of residential lots.
- The formalisation of streetscapes through increased curb, channel and footpaths, and driveway crossings as well as the loss of informal tree plantings.
- Poorly designed dwellings that do not reflect the coastal character of Barwon Heads.
- Dwellings that dominate the streetscape and which do not have a balanced landscape outcome, due to dominant built form viewed from the street, in terms of garage doors, excessive paving, high front fences.
- Side by side development which does not allow views to rear yard vegetation and which dominate the streetscape.

The development of sites with more than one dwelling is not, in itself a threat to the neighbourhood character of Barwon Heads, provided that the design of the development is appropriate. All multi-dwelling developments require a planning permit. This enables all issues regarding the site layout, design, buildings materials and colours and landscaping to be assessed.

What is recommended to address the above issues?

To address the implications of the study two main recommendations are made:

1. Incremental Change Residential Areas.

Change zone from General Residential Zone – Schedule 2 (GRZ2) to Neighbourhood Residential Zone (NRZ) – Schedule: Barwon Heads Incremental Change Area.

The State Government reformed residential zones across Victoria in March 2017. The changes seek to protect the distinctiveness of suburbs whilst supporting the delivery of new housing in the right areas. Changes to the zones have a bias towards Melbourne, rather than Victoria's suburbs.

The current GRZ2 zone applies to most of the suburban area of Barwon Heads. The restrictions that were in place in the previous neighbourhood residential zone have been relaxed and there is no longer a purpose to limit opportunities for increase residential development (including a mandatory limitation to only two dwellings). The key purpose of the NRZ is:

“To recognise areas of predominantly single and double storey residential development”

“To manage and ensure that development respects the identified neighbourhood character, heritage, environmental or landscape characteristics.”

The intent of this zone is now not as restrictive a zone as it was previously and allows for a level of incremental change. The new purpose of the zone is also supported by the recommendations of the Character Assessment. There is now also a mandatory garden area requirement for all sites, which is based on a sliding scale due to lot size (400 – 500m² 25%; 501-650m² 30%; or, above 650m² 35%).

Apply a Design and Development Overlay (DDO) – Barwon Heads Incremental Change Residential Area.

The DDO will recognise the preferred future character noted above, and a full version is included in the Implementation Section 2.0. Other issues addressed in the DDOs include:

- Permit needed for a single dwelling where certain provisions are not met and a permit needed for the construction of more than one dwelling on a lot.
- Amends the base level for site coverage (40%), front (6m) and site setbacks (2m on one side), the dominance of garages, fencing height and landscaping requirements.
- Provide for a higher permeability that recognises a need for unsealed accessways and areas for landscaping; along with flood issues that occur in the town.
- A landscape plan is required when a permit is required.
- Planning permit applications for single dwellings to be exempt from advertising and third party appeal rights.
- For materials and specific design requirements this will be considered through Decision Guidelines for when a permit is required. If the built form meets the identified requirements of the DDO, then there will be lesser of an impact on the area from design and materials. This will recognise appropriate building design of simple coastal palettes, with lightweight and timber materials and to avoid typical suburban and box style designs.
- The DDO will not be applied to recent developed estates that are inconsistent with the design characteristics, or have their own design requirements (i.e. Seabank Estate).

2. Increased Housing Diversity Area (IHDA).

The application of the Residential Growth Zone (RGZ) in Barwon Heads appears to focus more on the *intensification* of the built form in these areas, rather than the *diversification* of housing stock. Therefore the area is accommodating single dwellings with large footprints and smaller more diverse forms are not being constructed to meet the intent of increasing diversity. Often dwellings are being constructed with generous back yards. This is also a likely result on the relatively small, individually owned lots in the area.

The Structure Plan recommends:

- a) changing the zone from Residential Growth Zone (RGZ) – Schedule 3 to General Residential Zone – Schedule 1 (GRZ1).

For Barwon Heads there are inconsistencies between the fundamental purpose of the zone and the desire to achieve character outcomes. The recent changes by the State Government have exacerbated this impact given that there is now a 13.5m height requirement, which is not consistent with the preferred character of Barwon Heads. A consequence of the new GRZ1 zone is that the height limit is set at 11m, which is a mandatory requirement and cannot be altered. The proposed DDO (see below) provides design requirements to ensure that dwellings are designed, sited and screened in a manner to reduce the dominance that a two or three storey building would have on the streetscape and surrounding properties.

- b) retaining the IHDA designation, although removing this from the area south of Bridge Road. The area south of Bridge Road should also be rezoned to NRZ – Incremental Change Residential Area.

There is a need to encourage increased diversity of housing of the right type, which would include one and two bed units along with older persons housing to recognise the ageing population of the community. It recognises Council's broad policy to promote density and change near town centres. But also that the scale is reflective of the range of facilities and services (including limited public transport) not being the same extent as other areas or Ocean Grove. The need for some increase in diversity has been part of the policy for 10 years. It also recognises the strategic policy in the G21 Growth Plan for Barwon Heads to receive a "moderate" degree of new residential development, which respects the existing character of the town.

As noted earlier the area south of Bridge Road is unique and is not consistent in terms of streetscapes, landscaping, topography and lot sizes.

Hansen consultants have also recommended that the IHDA be extended to the north to Geelong Road parallel with the Village Park. The area has been subject to infill residential development in recent times and it has an existing character that has been influenced by redevelopment and a grid pattern of streets and lot sizes that are consistent with the remainder of the IHDA area. The extended of the IHDA is not supported by Council. The community has generally sought that Council reduce the size of the IHDA area and no submissions were received to support the extension through community engagement.

- c) applying a new DDO to the IHDA area.

To achieve the balance between modest housing growth and managing the impacts of character a DDO is proposed. The DDO recognises the preferred future character noted above and other issues addressed in the DDOs include:

- Permit needed for a single dwelling where certain provisions are not met and a permit needed for the construction of more than one dwelling on a lot;
- Amends the base level for front (6m) and site setbacks (2m on one side), the dominance of garages, fencing height and landscaping requirements;
- Site coverage is retained at 60%, which has been reduced from 70% under the RGZ3;
- Height is to be set at 11m as per the mandatory zone requirement;
- A higher permeability is not required, however, the garden area requirements that have been brought about by the State's recent changes to residential areas (and noted for NRZ above) will now apply;
- A landscape plan is required when a permit is required;
- Planning permit applications for single dwellings to be exempt from advertising and third party appeal rights.
- For materials and specific design requirements this will be considered through Decision Guidelines for when a permit is required. If the built form meets the identified requirements of the DDO, then there will be lesser of an impact on the area from design and materials. This will recognise appropriate building design of simple coastal palettes, with lightweight and timber materials and to avoid typical suburban and box style designs.

The DDO triggers a permit if design requirements are not met. If genuine housing diversity is being delivered there would be scope to provide flexibility in the design response. However, it will be important that the design will not be an overly dominant apartment form and is designed to have outstanding architectural merit consistent with the coastal character of Barwon Heads. Buildings will also need to retain and provide vegetation and landscaping for softening buildings and to ensure they are not dominant through recessed scales/ design etc. The appropriate design of upper levels of a building will be important and will need to be designed to not dominant streetscapes or adjoining buildings through the use of appropriate setbacks, vegetation softening, landscaping, recessive elements and articulation.

3. Design guidelines and other recommendations for streetscapes.

To assist permit applicants, Council may consider the preparation of design guidelines for the two DDOs areas which contain a range of photographic examples and sample materials and building details which are reflective of the 'preferred future character'. These guidelines would not form part of the Planning Scheme but should be developed as a tool to support the development of appropriate housing, and to broaden community understanding.

Street tree planting and engineering design standards for roads, stormwater drainage, footpaths, driveways and street furniture within road reserves and parks, makes a very important contribution to the character of Barwon Heads. As identified, incremental upgrades of streetscapes for one-off projects could unintentionally undermine the character of the township. Works undertaken by Council or other Authorities throughout Barwon Heads should be guided by a focus on:

- The protection of existing street trees and the introduction of additional street trees;
- The introduction of additional informal landscaping in streets, including support for appropriate 'soft edges' between the public and private realms;
- Water sensitive urban design treatments in streets;
- Avoiding hard curb and channel treatments in favour of 'soft edges'; and
- The gradual removal of overhead powerlines, wherever and whenever possible.

Council may wish to consider the preparation of a Coastal Streetscape Design Guide to assist with the above.

The preparation of any the guidance noted above would be subject to Council's availability of budget and resourcing.

4. Other consequential changes required.

Consequential changes will be made to Significant Landscape Overlay – Schedule 9: Barwon Heads River Environs Barwon Heads and Clause 22.63: Increased Housing Diversity Areas to ensure consistency with the above proposed DDOs.

3.2.3 Warrenbeen Court Area and Taits Road west of Settlement Boundary

The Warrenbeen Court area is a residential area that is located within a unique vegetation and landscape setting. It is characterised by very large residential properties that are almost entirely covered by indigenous Coastal Moonah Woodland vegetation communities. Remnant indigenous vegetation in the area is representative of the Ecological Vegetation Class: Coastal Alkaline Scrub (EVC 858).

Covenant restrictions were listed against the titles when the subdivision was undertaken in the late 1990s to benefit other landowners of the area. The covenants seek to protect vegetation on the land through the following restrictions on development:

1. *The owners...shall not allow the erection of more than one dwelling on any single lot or further subdivision of any lot.* [COVENANT X290849N of 01/02/2001 – expires on 31 December 2020]
2. *The owners...shall not develop the land other than in accordance with an approved neighbourhood design plan pursuant to planning permit No.1057/97.*[COVENANT PS412071E of 20/09/1999 – no expiry date. It may be removed (or replaced) only "by agreement of all interested parties"]

The neighbourhood design plan identifies building envelopes and outside of the identified building envelopes where 'no building or part of the building shall be located'.

The 2010 Barwon Heads Structure Plan outlined a need to undertake an appropriate assessment of the area to identify the need to put in place further protection of vegetation in the area through the Planning Scheme. As such, Council commissioned Ecology Heritage Partners to conduct a significant tree assessment within private land at Warrenbeen Court, which was completed in October 2016. Key conclusions of the study are as follows:

- The study area contains indigenous vegetation of State significance, listed as threatened under the Flora and Fauna Guarantee Act 1988, and Endangered within the Otway Plain bioregion.
- The study area contains Coastal Moonah woodland community (*Melaleuca lanceolata*) (Coastal Moonah) ranging from poor to good condition. Condition is a representation of the overall vegetation community structure. Very Large Old Trees are present, and contain good quality habitat for indigenous fauna, supporting hollows, cracks and crevices.
- Areas in good condition contained an intact overstorey and a relatively species rich understorey, with a moderate to low cover of weeds.
- The presence of poor condition, or relatively poor condition, Moonah woodland is an indication of poor management of the understorey potentially caused from thick mulching preventing the recruitment of indigenous plants; or may have been the result of a slow decline in quality over time from residential use of the site (eg. trampling by humans and/or dogs, weed invasion, mowing).
- Further degradation of understorey vegetation throughout the study area remains a high risk. All areas supporting remnant vegetation within the study area, including those in poor condition, should be retained and maintained, to prevent further incremental decrease in the extent and condition of the community.
- To ensure that the significance of the Moonah in this area is maintained, and over time enhanced, the study recommends that Council protect and improve the diversity of remnant vegetation through planning controls. It also recommends that Council undertakes public education with landowners to encourage better awareness and management.

Discussion

There is strong justification to support the need for planning controls within the Warrenbeen Court area supported by the conclusions of the significant tree assessment. Further, the need for planning controls was included as a further action required under the adopted 2010 Structure Plan (and earlier drafts going back to 2007).

There has been long standing knowledge of the importance of the vegetation through the Covenants on property titles. All landowners who have bought properties have known about the protection through the covenants being included on Certificates of Title and the building envelopes. The covenant requirement for the building envelopes will remain in perpetuity.

Landowners in the area have been directly notified by letter as part of the Have Your Say engagement in October 2016 and Draft Structure Plan engagements in May 2017. During the Draft Structure Plan engagement a proposed Environmental Significance Overlay was available. Engagement on the Draft SP has resulted in four neighbour objections being received. In summary the objections include that there is an expectation of development when the covenant restrictions are removed; there are already exemptions for removal of trees through bushfire exemptions; a Vegetation Protection Overlay (VPO) would be more appropriate; and there are issues with the cost of maintenance in the rural areas.

A Supreme Court of Victoria decision (VSC 677) in November 2016 has highlighted that there is a need to prepare planning controls to protect vegetation in the area. The decision involves a dispute between two neighbours in Warrenbeen Court over construction of buildings outside of the building envelopes. The Supreme Court has ruled that there is no longer any legal protection of vegetation in the area excepting in cases where building is proposed outside of the permitted envelope. Whilst the Court recognises the purpose of the covenant as being protection of the vegetation, absent of a breach of the covenant there are no vegetation controls (other than for sites over 0.4 hectares). The decision also confirms that there are two covenants in place and the covenant that restricts development within the building envelopes remains in perpetuity. Therefore the expectation that the land can be developed is incorrect. The whole uniqueness of the area is dependent on the retention of large allotments and retention of vegetation is the primary component of the character. The ability to subdivide or undertake further development would seriously risk this.

Council has also identified an area of private land in the Farming Zone north of Tait's Road with significant Moonah Woodland. An additional study was undertaken by Ecology and Heritage Partners and completed in February 2017. The study makes similar conclusions to those noted above for the Warrenbeen Court Area. The Moonah Woodland is in poor or relatively poor condition and should be protected and maintained and in time

enhanced. Planning controls should also be introduced for this area and tested with the community through the Structure Plan engagement process.

Clause 52.48 Bushfire Protection – Vegetation Clearance Exemptions. Clause 52.48 results in exempting the requirements of obtaining a planning permit resulting from a prohibition of the removal, destruction or lopping of vegetation. Council considered a Report and wrote to the Minister for Planning in early 2016 to request the Minister investigate the blanket application of this provision as it is seeing vegetation removed in urban areas with no identified fire threat. The Minister advised in writing in June 2016 that DELWP is currently investigating a proposed update to the clause based on a more risk based approach and the matter will be considered 'in due course'. No response has yet been received by the Minister.

Two types of control are recommended in order to retain the protections put in place by Covenants:

1. Land zoning Warrenbeen Court Area

The area is zoned General Residential Zone - Schedule 2. The purpose of this zone is to encourage a diversity of housing types and housing growth, particularly in locations offering good access to services and transport. The Warrenbeen Court area provides around 6ha of land. Using the State policy requirement of 15 dwellings per hectare in greenfield areas as a guide, the Warrenbeen Court area could provide 90 dwellings. Clearly the General Residential Zone is the incorrect zone for the area in the context of the zone purpose, the vegetation importance and the unique character of the area.

The appropriate zone for the Warrenbeen Court Area is the Neighbourhood Residential Zone (NRZ). The purpose of the NRZ is to manage and ensure that development respects the identified neighbourhood character, heritage, environmental or landscape characteristics. It is recommended that a schedule be added to the zone that restricts the size of allotments in the area to 4,000m² and limits development to one dwelling per lot. 4,000m² represents the general size of the allotments in the area without allowing additional subdivision. The only site that could potentially be subdivided would be 32-38 Warrenbeen Court, which is around 10ha; a size that is out of character with the rest of the area. The NRZ is also consistent with the NRZ proposed for the surrounding residential areas of Barwon Heads. The draft zone control is provided in Section 2.0.

2. Overlay Protection Warrenbeen Court Area and north of Taits Road

There are a range of overlays that could be considered for the area. These are considered below in the context of the Planning Practice Note PPN07: Vegetation Protection in Urban Areas :

- **Environmental Significance Overlay (ESO).** This would protect the trees and their ecological values and habitats (community). The overlay would also require a permit for most building works. This would provide the best protection for the trees, habitats and understorey – the overall ecological values of the community.
- **Vegetation Protection Overlay (VPO).** This would protect the trees only, but not trigger a permit for dwelling or outbuilding construction (unless a tree is removed). Ultimately this would mean that specific trees are protected, but not necessarily the vegetation community, including the understorey. Building or construction works could be undertaken without the need for a permit, which may not impact on a specific tree, but could impact the vegetation community.
- **Significant Landscape Overlay (SLO).** This would consider vegetation in the context of the landscape setting and requires a permit for some building works. This overlay is used when vegetation is primarily of aesthetic or visual importance in the broader landscape, or contributes to the character of the area.

The Environmental Significance overlay is the most appropriate overlay to put in place, in order to protect the Coastal Moonah Woodland 'Community'. The full details of the recommended overlay is included in Section 2.0. The overlay will apply to properties identified in Map 4.

The Ecology and Heritage Partners assessment noted that increasing awareness of the Moonah Woodland with landowners, and educate on the best methods for maintenance and enhancement. Council's Environment Team may undertake a program of education with landowners.

Other vegetation in Barwon Heads

Council's Environment Team are currently undertaking work to assess vegetation in public areas (parks and roadsides) across the Bellarine Peninsula as well as within Barwon Heads. A future project will be undertaken to incorporate appropriate planning controls where budgets and resources allow.

3.3 Key Influences

- A need to recognise the significant landscape setting and key views of the coast and rural hinterland that surround the Barwon Heads 'island';
- There are significant biodiversity and sensitive environment features that require protection, including Ramsar wetlands;
- Indigenous cultural heritage values require protection;
- Protection and management of significant landscape and environmental features requires on-going coordination with public landowners and agencies;
- Significant new residential infill in Barwon Heads has been occurring over recent years however this is predominantly existing smaller dwellings being replaced by a larger dwelling and footprint;
 - The intent of the Increased Housing Diversity Area (IHDA) to provide smaller and more diverse housing forms is not being met.
- Residential character for Barwon Heads is unique overall as a coastal township, although within the township the residential and landscape character is mixed;
 - There is a need for planning controls and appropriate residential zones to be applied to define a preferred residential character to recognise outcomes of the Residential and Landscape Character Assessment as well as community feedback.
- A need to protect and enhance the significant Coastal Moonah Woodland Community of the Warrenbeen Court Area and rural land north of Taits Road;
- A need to ensure that the unique landscape character and large lot composition of Warrenbeen Court Area is recognised through the appropriate residential zone.

4.0 Demographics & Social Profile

Statistics in this section refer to the 2016 census and the ID.Profile module or forecasts from the ID.Forecasting module (unless otherwise stated). The boundaries for both modules are different and for the ID.Profile module this does not include the 13th Beach Golf Course or rural land north of Geelong Road. The ID.Forecast Module includes Barwon Heads – Connewarre – Breamlea.

4.1 Past Population Growth

In 2016 Barwon Heads had a total permanent population of 3,875 usual residents. This is an increase from a population of 3,540 usual residents in 2006, or 335 people. Data from the Australian Bureau of Statistics census demonstrates that during the period between 1981 and 2001 the population of Barwon Heads doubled from 1,245 persons to 2,600 persons. The most significant growth occurred between the census periods of 1981-1986 and 1996-2001.

Table 7. Barwon Heads usual residence population.

Year	2001	2006	2011	2016
Population of Barwon Heads (Usual residence)	2,660	2,992	3,540	3,875

4.2 Peak Population

A significant number of tourists and holiday makers visit Barwon Heads during the summer holiday period and have a significant impact on the resident population and retails sectors of the township. The estimated peak overnight population for the township over the Christmas school holiday period during December 2013 and January 2014 was 11,924. This has increased 13.2% from the peak overnight population of 10,531 during December 2005/ January 2006, but is considerably lower than the peak overnight population for a similar sized coastal township like Portarlington of 16,678. Table 8 below provides a snapshot of the distribution of tourist/holiday maker accommodation.

Table 8 - Peak Overnight Population Dec 2013-Jan 2014

Permanent Population in 2013	Population Holiday Homes	Population Caravan Parks	Population Hotels, Motels, Units & B&Bs	Peak Overnight Population
4,332*	4,482	2,780	340	11,924

(Source: Geelong Economic Indicators Bulletin 2013/2014 – this used a different population estimate and boundary than used by ID.)

As a result of being a popular tourist town Barwon Heads experiences relatively high dwelling vacancy rates outside of the summer holiday period. On census night in 2016 the dwelling vacancy rate was 37%; compared to 14% for all of Greater Geelong. The dwelling vacancy rates for Barwon Heads have been in decline since the early 1980s when they were around 46%, although the dwelling vacancy rates have been reasonably consistent over recent years when compared to 2001 at 36%.

4.3 Age Structure

The age structure of Barwon Heads has changed over the years. In the early 1980s the town was a popular retiree township with over 30% of people being older than 60 years. The percentage of people over 60 years dropped to 20% in 2011, but has again risen to 26% in 2016; whereas 'Parents and Homebuilders' aged between 35 to 49 has increased from around 10% in the early 1980s to 22% in 2016 (down from 25% in 2011). 'Parents

and Homebuilders' represented the most significant age group in Barwon Heads. At the same time those aged between 18 and 34 is low in Barwon Heads at 12.05%, when compared to overall Greater Geelong at 22%.

Barwon Heads has a high proportion of 'Primary schoolers' (13%) when compared to overall Greater Geelong at 8.5% respectively. Barwon Heads also has a high number of 'Empty nesters and retirees' (14.4%) when compared to Greater Geelong (12%).

The median age for Barwon Heads residents is 43 years old, which compares to 40 years old for Greater Geelong.

Table 9 - Age Structure – service age groups 2011 and 2016.

Service Age Group	Barwon Heads 2016 (%)	Barwon Heads 2011 (%)	Greater Geelong 2016 (%)
0-4 (Babies & Pre-schoolers)	6.7	7.3	6.1
5-11 (Primary Schoolers)	13.1	11.9	8.5
12-17 (Secondary Schoolers)	7.8	8.2	7.1
18-24 (Tertiary Ed and independence)	5.9	5.5	9.2
25 to 34 (Young workforce)	6.2	8.1	12.7
35-49 (Parents & homebuilders)	21.8	25.2	19.0
50-59 (Older workers & pre-retirees)	13.4	13.7	12.8
60-69 (Empty nesters & retirees)	14.4	10.6	11.8
70 to 84 (Seniors)	9.9	7.5	10.1
85 and over (Elderly)	1.7	2.0	2.8

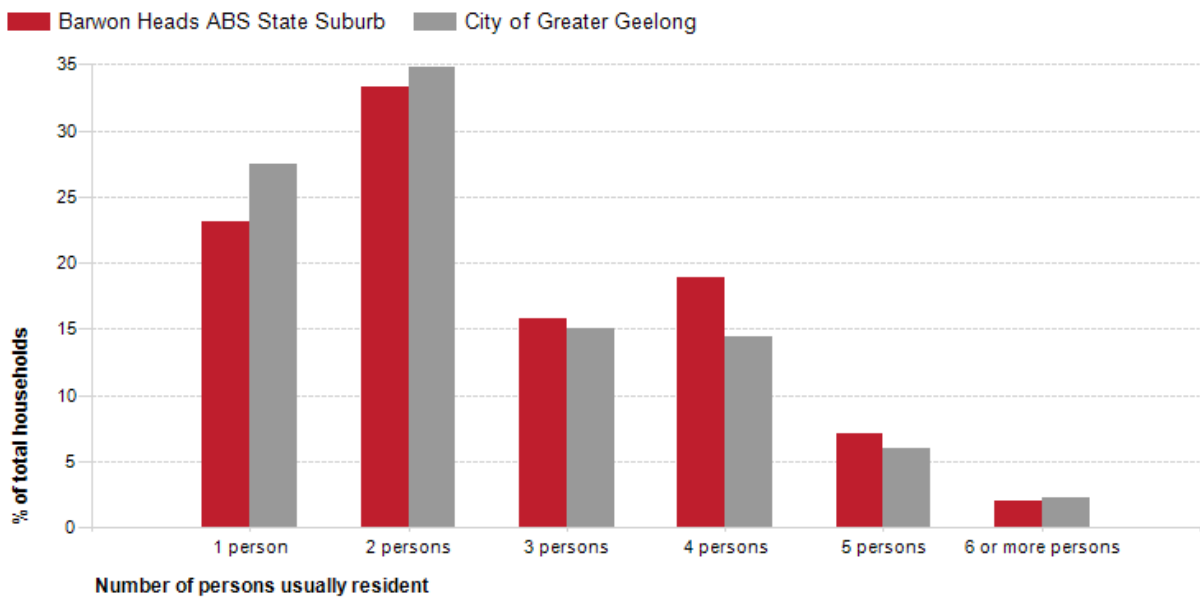
4.4 Dwellings & Household Size

The number of private dwellings in Barwon Heads in 2015 was 2,218⁶. This has increased from 1,812 in 2005; a total change of 406. The annual net change is 41 dwellings per year, or 2.0%. At the 2016 census there were 2,144 private dwellings of which 1,354 were occupied. Of total households, 43.5% were fully owned; an increase from 33.7% in 2011. The percentage of homes mortgaged was 35.4% with 19% rented.

The average household size within Barwon Heads was 2.6 persons, which has increased from 2.46 persons in 2011; as well as the Greater Geelong household size average size of 2.4 persons. The distribution of household size within the township is displayed in Figure 3 below (2011 Census – ID Community Profile).

⁶ Based on housing supply data undertaken for G21 analysis.

Household size, 2011



Source: Australian Bureau of Statistics, Census of Population and Housing, 2011 (Enumerated data)
Compiled and presented in profile.id by .id, the population experts.



Figure 3. Barwon Heads Household Size (Note. Figure based on the 2011 Census as the ID Community Profile is yet to be updated).

4.5 Labour Force & Income (Based on 2011 Census as 2016 Census data not yet available)

Median household income of \$1,397 is one of the highest for Greater Geelong and compares to the Greater Geelong median of \$1,049. There are 29.9% of people in the highest household income quartiles, which has increased significantly from 19.3% in 2001 and compares to 19.5% for Greater Geelong. There are 21% of people in the lowest household income quartile, which compares to 29.0% for Greater Geelong.

The “labour force” consists of persons aged 15 years and over who are employed, or those who do not have a job but are actively looking for work. The Labour Force participation rate for Barwon Heads was 61.8%, which is similar to Greater Geelong at 58.8%. Barwon Heads has a low unemployment rate of 2.6%, which compares favourably to the Greater Geelong unemployment rate of 5.6%. This is also an indicator of change for the township as being popular for families, given that popular retirement townships, such as Portarlington tend to have high unemployment and low income rates.

The main industries that people work in are ‘Health Care and Social Assistance’ (15.2%), ‘Education and Training’ (12.8%), ‘Construction’ (12.6%) and ‘Retail Trade’ 8.9%. In terms of occupation Barwon Heads has a high proportion of ‘Professionals’ at 31.7%, which compares to 19.5% for Greater Geelong. Barwon Heads also has 16.2% employed as ‘Technicians and Trades’ and 14.6% employed as ‘Managers’.

4.6 House prices (Based on 2011 Census as 2016 Census data not yet available)

Out of 31 ABS State Suburbs across Greater Geelong, Barwon Heads has the third highest ‘high’ mortgage repayments (over \$2,600) amount at 21.8%, which compares to 11.7 % for Greater Geelong. For median monthly mortgage repayments Barwon Heads has the fourth highest with \$1,810, which compares to \$1,517 for Greater Geelong.

It is noted that these figures are indicators only and do not provide current house prices.

The Real Estate Institute of Victoria data⁷ sets out that the median house price for the 12 months to March 2017, of \$908,750 is along with Connewarre the most expensive for Greater Geelong.

4.7 Journey to Work (Based on 2011 Census as 2016 Census data not yet available)

ABS Statistics for 2011 demonstrates that the private car is the dominant mode of transport for those residents of Barwon Heads who must travel to work.

On census night the private car, either as driver or passenger, was used by 67.8% of employed persons in Barwon Heads who travel to work (similar to Greater Geelong). The statistics also demonstrate that only 2.3% of the Barwon Heads work force walks to work and 4.3% use public transport. There were also 8.3% of people that worked from home (compared to 3.2% for Greater Geelong), which has increased from 5.5% in 2006 and 4.1% in 2001. These statistics could lead to the conclusion that the majority of the town's workforce would be employed outside the township, utilising private vehicles to travel to work.

Note. 12.4% of people did not go to work.

4.8 Socio-Economic Index and Vulnerability (Based on 2011 Census as 2016 Census data not yet available)

Barwon Heads can be considered a relatively wealthy township as shown by the income and house price data in Sections 4.5 and 4.6. The Socio Economic Index for Areas (SEIFA) measures the relative level of social disadvantage. The SEIFA index is derived from attributes that reflect disadvantage such as low income, low educational attainment, high unemployment, and jobs in relatively unskilled occupations.

The Australian average of SEIFA is set at 1,000 and Greater Geelong has a SEIFA rating of 992.9. Barwon Heads with a SEIFA of 1,077 is the 3rd highest for ABS State suburb of disadvantage in Greater Geelong out of 29⁸. The SEIFA index for Geelong ranges from 745.4 in Norlane – Northshore to 1102.7 in Wandana. Victoria has a SEIFA of 1009.6.

Australian Early Development Index 2012 (AEDI) measures childhood development across five domains: physical health and wellbeing, social competence, emotional maturity, language and cognitive skills, and communication skills and general knowledge. When compared to Greater Geelong, Barwon Heads children have lower than average rates of vulnerability with 10.4% of children being identified as developmentally vulnerable in one or more domains of the AEDI compared with 18.8% of the Greater Geelong community.

4.9 Population Projection 2016

The projected population of Barwon Heads is shown in Table 9 below. As noted in the introduction to this section the statistics used in this section use the ID.Forecast module, which is different to the ID.Community Profile statistics that apply to the Barwon Heads township. The ID Forecasts module includes Barwon Heads – Connewarre – Breamlea; or Barwon Heads and part of the surrounding rural area. Since the population and anticipated residential growth in the rural areas is minimal, with most of the growth to be within Barwon Heads township itself, the statistics for this area are appropriate to use as an indicator of growth for Barwon Heads.

Table 10 – Barwon Heads Projected Population

Year	2016	2017	2021	2026	2031
ID. Profile Persons	4,493	4,531	4,619	4,685	4,738

⁷ www.reiv.com.au/property-data/median-prices/median-house-prices

⁸ For SEIFA the State Suburb boundary is used. Not all Greater Geelong State Suburbs have a SEIFA index provided, including rural State Suburbs with small or limited populations.

Statistics for the Barwon Heads – Connewarre – Breamlea area show that the population growth is forecast to slow considerably. In the 15 years from 2016 to 2031 the population is anticipated to grow by only 5.4%; or 0.36% each year. In comparison, the population of Barwon Heads township grew at significantly higher rates between 2007 and 2015 at 34.8%; or 4.35% per year.

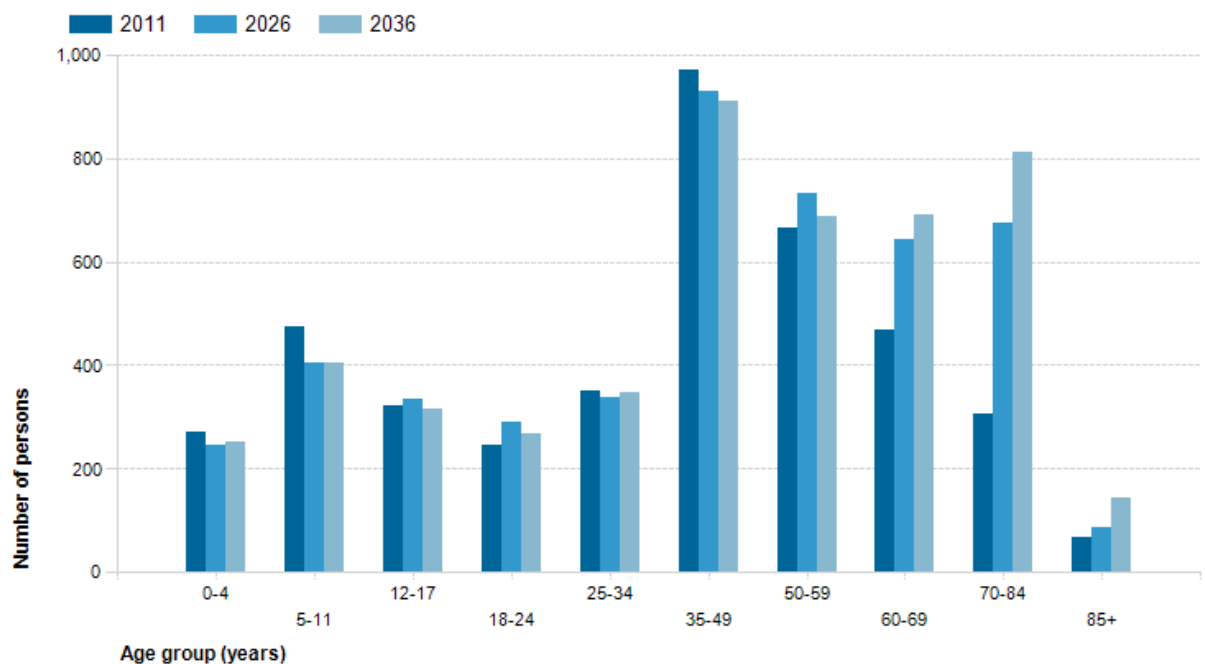
Population growth and demographic forecasting is based on a number of factors and modelling techniques. A key factor that contributes to population growth is potential housing supply. The forecasts are based on the current structure plan housing supply and broadhectare supply will run out over the next five years. Therefore population growth will slow. Infill growth will continue to occur, but is harder to predict.

The population projections indicate that there will be a significant growth in older residents and particularly those aged between 60-69 and 70-84. This is consistent with the trend towards an ageing population across the State and Australia wide; although Barwon Heads will have a higher proportion of people near or within the retirement age. Therefore, providers of community and health services will have to focus on supporting an increasing number of elderly residents.

The forecasts also show that the number of pre-school and primary school aged children will actually decrease. The number of people aged between 12 and 34 will stay relatively the same. 'Parents and Homebuilders' between 35 and 49, will continue to contribute the highest number of persons; although this will fall slightly.

Forecast age structure - Service age groups

Barwon Heads - Connewarre - Breamlea - Total persons



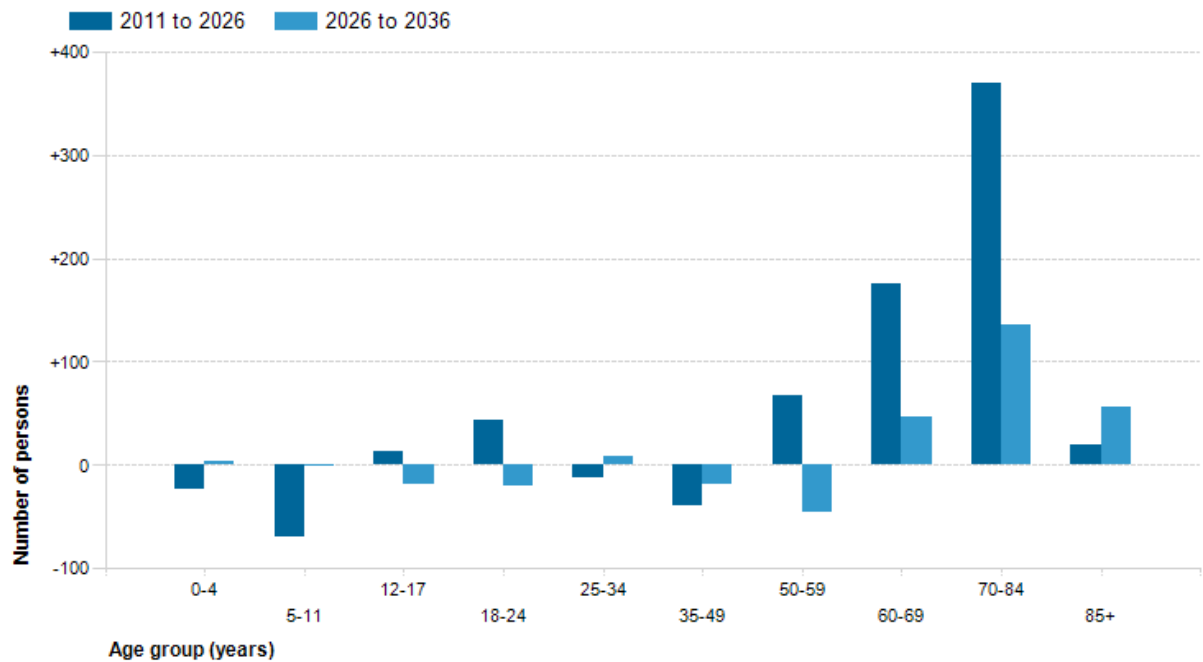
Population and household forecasts, 2011 to 2036, prepared by .id the population experts, May 2015.



Figure 4. Barwon Heads Forecast age structure – Service age groups.

Forecast change in age structure - Service age groups

Barwon Heads - Connewarre - Breamlea - Total persons



Population and household forecasts, 2011 to 2036, prepared by .id the population experts, May 2015.



Figure 5. Forecast change in age structure – Service age groups.

4.10 Key Influences

- Age structure has changed over recent decades with an increase of 'Parents and Homebuilders' aged between 35 to 49 as well as 'Primary schooled' children;
- There has been a reduction in the number of retirees over recent decades; although the number of people near or within retirement age is forecast to again grow significantly to 2031;
- The town has a significant influx of people in the peak summer holiday season with moderate dwelling vacancy rates during the off season;
- A relatively wealthy and advantaged population with low unemployment;
- A private car reliant population;
- Slowing population growth as housing supply decreases.

5.0 Township Facilities & Services

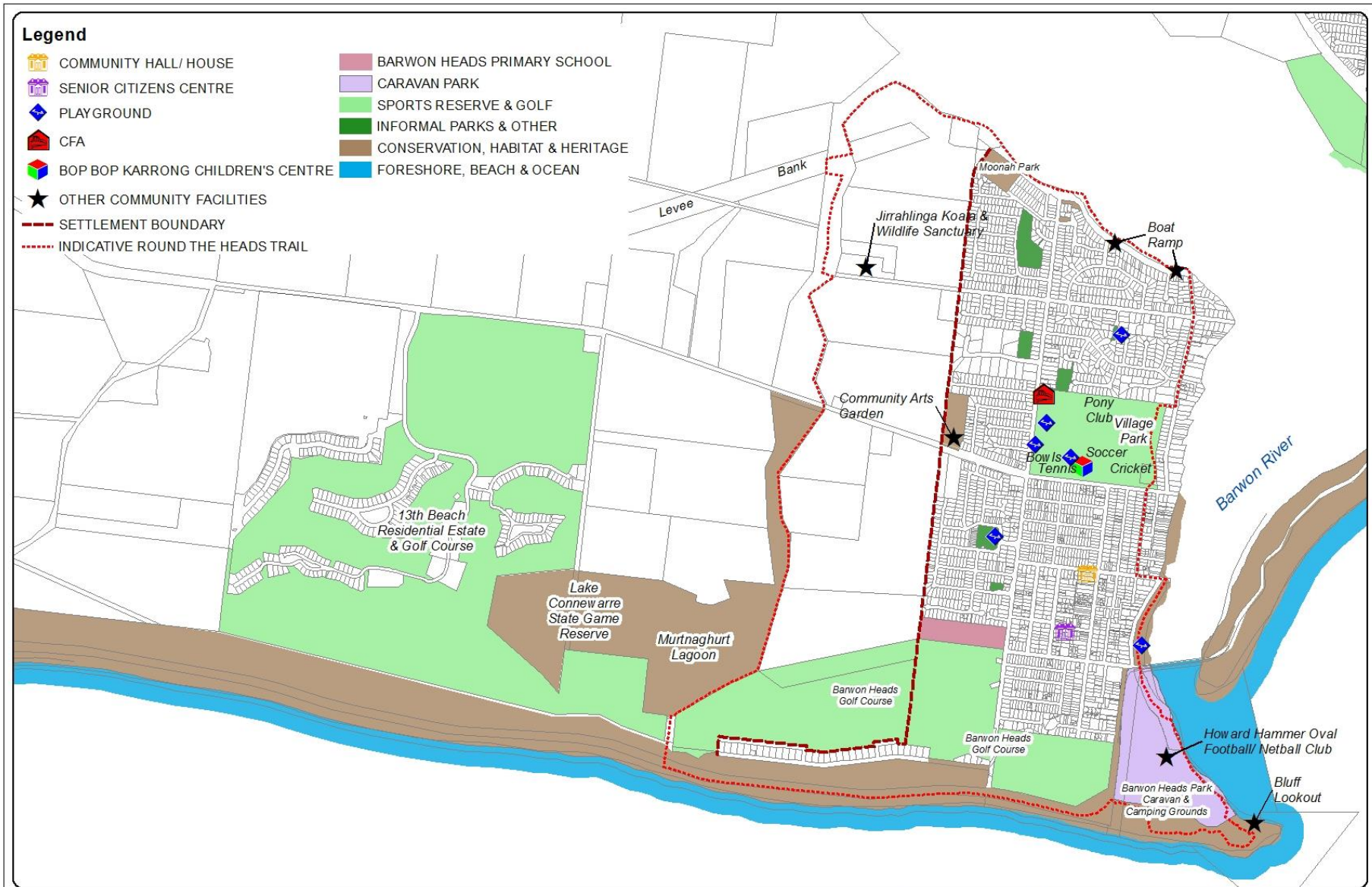
For the size of the township, Barwon Heads is very well serviced when compared to other areas across Greater Geelong. Given the size of the town and population profile, the Barwon Heads community does however, rely on Ocean Grove, and also Geelong, for a range of community services. The inter-relationship of Ocean Grove and Barwon Heads in providing services to residents of Barwon Heads is important for local needs.

5.1 Local Community Services and Facilities

The following is a list of the key local facilities available within the township:

- Bop Bop Karrong integrated children's centre and maternal child and health centre.
- Barwon Heads Senior Citizens Club
- Barwon Heads Primary School
- Country Fire Authority Station
- Scouts Hall
- Returned Services League
- Community Hall/ House
- Multi Purpose Facility at Howard Harmer Reserve
- Library – Primary school (limited hours and service)
- Lobster Pot – Barwon Estuary Heritage Centre
- Barwon Heads Community Arts Garden
- Three churches

(Map 11 provides a list of community facilities)



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Map No. 11

Barwon Heads Structure Plan Community & Recreational Facilities

5.1.1 Health services

Bellarine Community Health Inc (BCH) provides a wide range of primary health and aged care community services to residents of the Bellarine Peninsula, including community health programs and Home and Community Services. BCH operates five community health centres on the Bellarine Peninsula, the closest being at Ocean Grove.

The social infrastructure plan recommends that Council support BCH to develop sub-acute 24 hour services to support the Bellarine community. A proposed location for this service has not yet been identified.

5.1.2 Aged care

As highlighted in Section 4.10 the population of Barwon Heads is anticipated to age with strong growth projected in the numbers of people at retirement age. This is likely to result in an increased demand on services and multipurpose community space. There currently is limited facilities for residents of Barwon Heads, with the nearest facilities being located in Ocean Grove, Wallington or Leopold.

The Commonwealth Government's planning for aged care is on a 'needs-based planning framework'. Under the framework the Government seeks to achieve a national provision level of 125 residential and home care places for every 1,000 people aged 70 years or over by 2021-22. This figure is split into 80 places in a residential setting and 45 places in a home care setting.

Residents should be encouraged to stay in their homes as long as possible through adaptable housing design. Ultimately housing for older residents should be encouraged close to existing commercial, social and other relevant services to allow pedestrian accessibility. The development of facilities is essentially driven by market demand. Council can set policy to assist and is supported through the inclusion of the Increased Housing Diversity Area, which aims to provide for a broader range of house types, including house types for older people.

5.1.3 Education Facilities – Schools

The Barwon Heads Primary School is located in Golf Links Road. School enrolment has been steadily increasing over the past six years and has increased from 325 in 2010 to 464 in 2016. Based on population projections the population of primary school aged children is expected to decline from 472 children to 404, by the year 2036.

The Department of Education and Training (DET) plans for the future development of schools on a twenty-year timeframe and adopts a yield of 0.64 students per household to calculate the population threshold required to support a school. The long-term benchmark for a new primary school is currently 450 students. A long-term enrolment of between 900 and 1400 students is required to support the development of a new Years P-12 school.

Given the projected numbers of school aged children in 2016, it is not necessary for this Structure Plan to designate future areas for educational purposes, nor consider availability of land for additional educational facilities. Council has also liaised with DET about future educational requirements and has not indicated a need for any additional schools in the township. DET has informed Council that there is sufficient land to expand the school at its existing site, if required. Further, advice received from the Barwon Heads Primary School indicates that facilities at the school are currently being expanded with the construction of five classrooms and the removal of some existing temporary buildings. This is considered to be sufficient to address increased capacity from 2017 onwards. The school does not foresee any current local unmet needs or particular challenges other than if there was a significant increase in the population of primary school age children.

If the settlement boundary was to be extended, Council would then need to consider whether more land was needed for primary school education purposes. Since this is not supported by Council there is no need for future land to be considered.

For a Catholic primary school long-term enrolment is usually planned for 400 students and would normally be between 300 and 500 students. The Our Lady of the Sea Catholic Primary School at Ocean Grove has been steadily increasing enrolments over recent years. Current enrolments are 457 students, but only 29, or 6% reside in Barwon Heads. The Long Term Enrolment at full development is expected to peak at 570 at Our Lady of the

Sea, with current capacity being 404 students. The Melbourne Archdiocese Strategic Provision Plan 2014 identifies that strategies will be required to accommodate the potential increase in enrolment demand. However, an additional Catholic primary school in Barwon Heads is not required.

With regard to secondary education facilities there are two campuses of the Bellarine Secondary College within 20 kilometres of the township, at Drysdale and Ocean Grove. These two facilities provide for secondary school education for the whole of the Bellarine Peninsula. It is envisaged that these schools will adequately service the secondary school aged population of Barwon Heads given that it is not anticipated that a secondary school could be supported for the life of this Structure Plan.

5.1.4 Early childhood services.

The Bop Bop Karrong Child and Family Centre provides an Occasional Child Care service. The Barwon Heads Primary School also provide an Outside School Hours Care program during school terms, which is licensed for 30 primary school age children.

Bop Bop Karrong opened in 2015 and provides a modern and fully integrated early childhood and family services centre including:

- Maternal and child health;
- Double room kindergarten (for 4 and 3 year-old programs);
- Multi-purpose room (for occasional child care and playgroups);
- Flexible consulting room for family support services (or expansion of existing services).

The provision of long day child care is consistently identified as a gap in local service provision within Barwon Heads through consultations with parents and young families. However, the population of Barwon Heads remains too small to be able to sustain a financially viable child care centre. Child care provision is provided within the population catchments of Ocean Grove and future provision within Armstrong Creek.

5.1.5 Community Centres

There are two community centres within Barwon Heads. The first is a Council owned building in Clifford Avenue managed by the Barwon Heads Senior Citizens Club and their committee of management. The centre is heavily used by a broad range of community groups and programs. The second is the Barwon Heads Hall that is owned and managed by the Barwon Heads Association. It hosts an array of community events including markets, film nights, exercise classes, meetings, concerts and social functions.

There are limited library services provided at the Barwon Heads Primary School. Barwon Heads is part of the Ocean Grove catchment for library services. Future redevelopment of the Ocean Grove Library would provide improved service delivery outcomes for the library catchment of Ocean Grove. A review of library services undertaken by the Geelong Regional Library Corporation (GRLC) undertaken in 2017 has recommended the closure of the Barwon Heads Library. At the Council meeting on 26 April 2017 Council resolved to “continue to operate the branch until 30 September 2017 to allow time for consultation with the community to identify appropriate community space(s) and/or supports required to meet and connect.

The old kindergarten building in Clifford Avenue is owned by Council and is currently vacant. Council is yet to resolve a way forward for how the site can be used. There has been interest shown for the use of the site from both the Barwon Heads Arts Council, to use as a community arts hub or from traders in the town centre to support increased parking in the town centre. Reuse of the building would require remedial/ capital works to be undertaken.

The Barwon Heads Arts Council have been undertaking a Feasibility Study to determine the viability of a community arts hub. Stage 1 of the study (July 2016) concluded there is sufficient community need to undertake Stage 2 – site options analysis and development of a Business Plan is yet to be completed.

The town also has a Community Arts Garden at Moonah Gates Park. This is a vibrant community gardening, display and gathering space.

5.1.6 Emergency Services

Emergency services such as police and ambulance are provided to Barwon Heads via the 24 hour stations in Ocean Grove. The State Emergency Service operates a unit within the peninsula, co-located with the ambulance branch in Drysdale.

The Country Fire Authority (CFA) operates a volunteer brigade out of premises in Sheepwash Road with reliance on the Ocean Grove station.

There are no future plans to locate or improve their branches within Barwon Heads and the expected growth of the town over the next ten years within the existing urban boundaries can be appropriately serviced by their existing branches on the peninsula.

5.2 Open Space, Leisure and Recreation Facilities

A number of public leisure and recreation facilities are offered in Barwon Heads and the attractive coastal aspect of the town provides a significant range of water based recreational activities. The Barwon Coast Committee of Management is the delegated local port Manager for the Port of Barwon Heads. The following is a list of the leisure and recreation facilities within the township, further illustrated on Map 11.

- Village Park;
- Howard Harmer Oval Reserve;
- Moonah Gates Park;
- Barwon Heads 13th Beach Surf Lifesaving Club;
- Barwon Heads Golf Club (private);
- 13th Beach Golf Links (private resort – See Section 7.4);
- Barwon Heads Sailing Association;
- Extensive foreshore and riverside reserves and beach areas;
- Various boat launching facilities.

(Map 11 provides a list of sport and recreation facilities)

5.2.1 Barwon Heads Village Park

Barwon Heads Village Park is a large 24 hectare recreation reserve located north of Geelong Road. The park caters for a range of sporting clubs and community organisations. It has a bush land setting, including a significant population of threatened Coastal Moonah Woodland community. Areas within the park have also been identified for cultural and archaeological significance, including midden shells and stone artefacts. The reserve is home to the following clubs and facilities:

- Two cricket ovals/ fields (H Blyth Field and R.T. Fuller Oval) and pavilion, primarily used by the Barwon Heads Cricket Club, Barwon Heads Soccer Club and Ocean Grove/ Barwon Heads Little Athletics;
- Six tennis courts and pavilion; primarily used by the Barwon Heads Tennis Club;
- L.G. Frost Reserve and pavilion; used by the Barwon Heads and District Pony Club;
- Synthetic bowling greens; used by the Barwon Heads Bowling Club;
- Barwon Grove Golf Club Rooms;
- Barwon Heads Scout Group pavilion and Scouts Hall;

- Skate park and basketball half-court;
- Adventure playground;
- Extensive unsealed walking path network;
- Community BBQ and amenity areas;
- Bop Bop Karrong Community Centre (completed 2015).

5.2.2 Barwon Heads Village Park Master Plan 2012

The City of Greater Geelong is the appointed land manager of the Village Park under the *Crown Land Reserves Act 1978*. Management of the park is undertaken through the 2012 Management Plan, which has been prepared following extensive community consultation and development. Management principles for the park include:

- Enhance and protect the existing character of the Village Park;
- Protect the Coastal Moonah Woodland community;
- Protect the significance of the remnant dune;
- Cease cross-country equestrian in the dune system;
- Enhance informal and passive recreation opportunities in the park.

A number of the actions have been delivered under this plan. High priority actions that have not yet been implemented include car park and traffic management works to improve access and safety and an upgrade to the sporting pavilion to better serve the needs of woman and girls soccer participants.

5.2.3 Moonah Gates Park

Moonah Gates Park is a significant environmental park with impressive stands of coastal Moonah woodland community. The park provides a scenic walking track on the banks of the Barwon River.

5.2.4 Howard Hammer Oval

Howard Harmer Reserve is located within the caravan park and is managed by the Barwon Coast Committee of Management (BCCoM). It provides one football oval, two netball courts and a pavilion for the Barwon Heads Football and Netball Club. The G21 and AFL Barwon Regional Strategy identifies that the courts and change rooms for the netball facilities need improvement as well as the football oval surface. The works have been implemented through funding from the State Government and BCCoM.

5.3 Improvements to Open Space, Leisure and Recreation Facilities

The current and future needs of open space is considered in the Bellarine Peninsula Recreation and Leisure Needs Study 2005. This document is now out of date and is due to be replaced by the emerging Greater Geelong Open Space Strategy (OSS); however is still used for reference by Sport and Leisure. The study concluded that the current provision of open space is adequate to meet existing needs in Barwon Heads and noted that new informal parks would need to be acquired within any new residential areas. One issue raised in the study was the lack of footpaths and walking tracks in some parts of the town and is still relevant today.

The emerging OSS does not identify a need for additional open space land or land acquisitions to meet the needs of the community. A draft action of the strategy is to explore opportunities to improve access to and enhance existing open space in the area north of Tait's Road. Other general draft principles that are relevant to Barwon Heads include:

- Ensure development interfaces are sympathetic to areas of significant environmental value;
- Provide linkages between existing and new residential areas, open space, natural areas and coast;

- Ensure additional recreation reserve provision is provided proportionate with population growth;
- Improve integration between sporting and natural areas at recreation reserves.

Sports and Recreation have advised that most of the town's passive open space provision hinges on the Village Park, the coast and river estuary. Passive open space has not been well provided for in recent developments within the town, with most consisting of encumbered land/ drainage basins which provide limited passive use opportunities. Many of these are small and irregularly shaped and are not consistent with current standards. In addition the Geelong Play Strategy (2012-2021) notes that there is a gap in play space provision in the north western area of the town. Future subdivisions or for park improvement priorities within Barwon Heads will need to recognise this in terms of location, quality and type of passive open space provided.

The Schedule to Clause 52.01 of the Greater Geelong Planning Scheme requires a public open space contribution of between 5 and 10 percent of the land area or value resulting from subdivision. Any future subdivision will be required to provide their own unencumbered open space.

Sport and Recreation have advised that when considered together Barwon Heads and Ocean Grove are at or near capacity in terms of active open space. In the future there will be a need for an 8 hectare active open space reserve to serve both of the towns within the settlement boundary. At present there are limited options within Barwon Heads due to significant constraints on Village Park, including the presence of the coastal Moonah woodland community and the remnant dune system. The need for a facility would be driven by population growth resulting from an extension to the boundary. For reasons outlined in Section 7.3.2 a boundary extension is not supported by Council.

5.3.1 Recreation Trails

There are a number of potential major trail projects for Barwon Heads, although these are subject to both Council and other agency budgets and funding. These are outlined below:

- Rounds the Heads Trail. The trail would establish a continuous 11.5 kilometre recreation trail around Barwon Heads. A feasibility study was completed in 2009. Some sections of the trail are already in place as part of the existing pathway network (See Map 11). To proceed to detailed design would require permanent or part closure of a section of the Lake Connewarre State Game Reserve, potential acquisition or negotiation of private land and available budget. Council continues to support the development of the trail although the project timeline is currently unknown.
- Barwon River Parklands. The 2012 Parklands Strategy seeks to improve recreation and trail opportunities along the 36km Barwon River corridor, as well as preserving and enhancing natural features of the river and lake system. The original intent was to deliver a continuous trail along the river from the Geelong CBD to Barwon Heads. Following extensive consultation, it was determined that this trail was not possible due to the extent of private landholdings adjacent to the river and environmental sensitivities of many areas. Works that have been completed in Barwon Heads include the Frank Ellis Reserve playground update and riverbank revitalisation. A high priority project that is yet to be completed is the construction of Barwon estuary boardwalks upstream of Sheepwash Road to protect sensitive saltmarsh, mangroves and intertidal zones from uncontrolled access. Parks Victoria are responsible for the upgrades, but currently have insufficient funding to complete the \$1million project over the next 10 years.

The Barwon River Parklands (such as the boardwalks upgrade) is also identified in the Growing Adventure Tourism in Barwon South West (2015-2020) as a 'supporting trail'. This plan prioritises the development of 'leading trails', which may make it more difficult for 'supporting trails' to get state funding.

- Queenscliff to Barwon Heads. The Growing Adventure Tourism plan also identifies a potential trail between Queenscliff and Barwon Heads, but is a lower priority as it is not listed as a 'leading trail' or 'supporting trail'.
- 13th Beach Trail – See Barwon Coast Committee of Management below.

5.3.2 Barwon Coast Committee of Management

As noted in Section 2.1.1 the Barwon Coast Committee of Management (BCCoM) has responsibility for the management coastal areas of Barwon Heads through their Coastal Management Plan 2012/13 to 2014/15. BCCoM are currently in the process of updating their plan and this is expected to be adopted in the second half of 2017.

The construction of a shared pathway along Thirteenth Beach Road (13th Beach Trail) from the caravan park is a priority project for BCCoM. This would also form part of the Round The Heads Trail and is supported by Council's Cycling Strategy. BCCoM have constructed a stage of a modified Thirteenth Beach trail project, which links the car park along Thirteenth Beach Road to Stephens Parade. Further construction of a 13th Beach Trail is currently being considered by a working group being led by Council and involving BCCoM and the 13th Beach Residents Group. This will involve a connection to the Barwon Heads township for the 13th Beach Surf Life Saving Club and the 13th Beach Resort. Ideally this would involve an off-road path along Thirteenth Beach Road, however, due to design constraints and costs a modified path may alternatively run along Stephens Parade. Assessment and implementation of the path will be determined by Council in due course subject to budget availability. (See also Section 6.4).

5.4 Tourism

Tourism is an essential part of the vitality and economic future of Barwon Heads. The popularity of the town is a direct consequence of the natural features, beaches, parklands and recreation the town offers. Barwon Heads continues to be a popular family holiday location and popular day visit locality. The town also has a number of tourist attractions including:

- Jirrahlinga Koala and Wildlife Sanctuary;
- 13th Beach Golf Resort;
- Barwon Heads Golf Club;
- Barwon Heads Camping and Caravan Park;
- A vibrant town centre 'village', including Barwon Heads hotel, various restaurants, cafes and boutique shopping;
- Other tourist accommodation

5.4.1 Golf courses

Barwon Heads boasts two golf courses that are regularly rated in the top 30 golf courses in Australia:

- **13th Beach Golf Resort and Conference Centre**

The resort offers accommodation with a range of one, two and three bedroom, self contained apartments and two 18 hole golf courses. Facilities also include a clubhouse with restaurant and bar, pro-shop, golf academy with driving range, swimming pool, spa, tennis court, and walking track access to 13th Beach. (See Section 7.4 development of Stage C of the resort)

- **Barwon Heads Golf Club**

A private 18-hole course, which provides a substantial range of clubhouse services including dining room, a number of bars and conference facilities. Accommodation is provided in the clubhouse and is available only to members and their guests.

5.4.2 Accommodation

As identified in the Geelong and the Bellarine Tourism Development Strategy (Section 2.1.5) accommodation in Barwon Heads is predominantly caravan/ cabin accommodation (41%) and self-contained/ holiday home (30%). The golf resort noted above contributes 16% of accommodation. Hotel/ motel contributes 11% and the Barwon Heads hotel is the main 'hotel' in the town and provides around 10 rooms. Only 2% of accommodation is for B&B/ guest house.

Caravan and Camping Parks

The Barwon Heads Caravan Park is located adjacent to the historic Barwon Heads Bridge and caters for around 450 camping sites. This park is operated by BCCoM and offers camping and caravan sites, together with a number of self-contained cabins. BCCoM have advised that once the Coastal Management Plan has been completed they will prepare specific Precinct Master Plans, including a plan for the caravan park, which will consider the mix of camping sites and cabins.

The former Rondor Caravan Park that was located in the northern part of the town has now closed and been redeveloped as residential housing.

The importance of the caravan parks is recognised as is the need for further investment in caravan parks and the potential over time to vary the tourist accommodation mix; these existing operations are also an important part of the town's relaxed coastal character and attraction.

The future of tourism

The importance of tourism to the Bellarine Peninsula and Barwon Heads is outlined in the Geelong & Bellarine Tourism Development Strategy (Section 2.1.5). Tourism visitation is anticipated to increase both from overnight trips and daytrippers. Daytripper numbers will also be influenced by the amount of population growth that is anticipated in Geelong and particularly in the growth areas, such as Armstrong Creek. Tourism based facilities are steadily growing in number and it is important that this Structure Plan supports the continued, sustainable growth of this aspect of the town. Key opportunities identified in the tourism strategy include:

- An indicative accommodation gap of 20 rooms for nature-based cabins and 80 rooms of hotel accommodation
- Potential for nature based accommodation (e.g. cabins) along the Barwon River, Lake Connewarre or overlooking the coast.
- Reinvestment of existing commercial accommodation and caravan parks, including additional self-contained cabin development and improved facilities in caravan parks.

The seasonal nature of tourism in the region being focused on summer periods means that increased stress is placed on road networks and parking in the town centre and at key beach access points. The sustainable management of tourism is important in this context. The management of traffic is discussed in more detail in Section 6.4.

There has previously been a concern from operators that high land costs and difficulty in expansion within an urban setting (residential zoning) will make it difficult for tourism operators to be viable in the longer term.

5.5 Key Influences

- Barwon Heads provides for basic community needs and essential retail services with major social, health and community services provided in larger Bellarine Peninsula townships and Geelong;
- No forecast need to provide additional education facilities in town;
- The amount of open space within the town is sufficient to support the projected population;
- Opportunity to enhance existing passive open space and recreation areas, particularly in northern areas of the town and improve linkages between recreational facilities;
- Opportunity for the continued improvement of facilities and amenities of the Village Park;
- Opportunity to establish and improve recreational paths and trails, including the Round the Heads Trail and 13th Beach Link;
- Tourism is important to the local economy and opportunities exist to support and improve tourist accommodation options and tourism facilities;
- A need for affordable residential aged care, including adaptable home design.

6.0 Physical Infrastructure and Transport

6.1 Water Supply

Barwon Heads is supplied with water by gravity from Barwon Water's Ocean Grove Tank (20ML) in Grubb Road, Ocean Grove. The water is conveyed to the town via the Barwon Heads bridge.

Barwon Water have advised that there is currently sufficient potable water to cater for the existing township as well as infill growth within the current settlement boundary. However, any future extension of the settlement boundary would require water supply works to be undertaken. This would require augmentation with new water feeder mains constructed from the roundabout at Golf Links Road via Barwon Heads Road. The cost of works could approach \$2 million. Barwon Water's current application of the Essential Services Commission guidelines for New Customer Contributions (ECS) requires assets greater than DN150mm to be funded by Barwon Water. It is likely these assets would be DN225 and DN300mm and as such would need to be funded by Barwon Water.

6.2 Sewer

Barwon Heads is serviced via a conventional gravity sewerage system along with 11 sewerage pump stations which collect flows and pump them via a series of rising mains and gravity mains to the Barwon Heads pump station No.11. This pump station at 1939 Barwon Heads Road on the western edge of the town transfers all flows to the Black Rock Water Reclamation Plant at Breamlea.

Barwon Water have advised that there has been a significant amount of sewerage works within Barwon Heads over the past five years to cater for growth in the southern Bellarine Peninsula. These works have largely been completed and can accommodate identified growth for the foreseeable future, including infill growth. Recent upgrade works include:

- Barwon Heads new sewer pipe to Black Rock – constructed 2009
- Barwon Heads pump station no.11 – constructed 2010
- Barwon Heads pump station no.1 – upgraded 2011

The existing sewerage system to the east does not currently have sufficient capacity to cater for growth beyond the current settlement boundary. The Barwon Heads No.11 Pump Station on the western boundary of these proposed growth areas does have capacity to accept flows and as such flows could be directed to this pump station. Detailed servicing requirements (i.e. pumped or gravity connection) would need to be considered by the land owners should this land be rezoned in the future. Barwon Water's application of the Essential Services Commission guidelines for New Customer Contributions requires small pump stations and sewer mains such as this to be funded by the developers (i.e. not Barwon Water). As such, sewerage provision is not a constraint to growth west of Barwon Heads.

6.3 Storm-water and Flooding

Barwon Heads township is located on low lying land since it originally made up part of the floodplain for the Barwon River. The town experiences relatively serious and frequent stormwater flooding. To inform flood management in the town Council is guided by the Barwon Heads Drainage Flood Management Plan 2005 (FMP). The FMP is due to be updated in 2018-19. As noted in the FMP:

"Topography of the area is undulating, with the majority of the township situated in a low-lying depression, surrounded by ridgelines to the north and east and higher ground to the south. Ground levels range from 1.0m to 17.0m AHD (Australian Height Datum with 0.0m being approximately mean sea level)" (p. 1-1, FMP).

The natural drainage pattern is unusual as it consists of a series of small 'self-contained' sub-catchments that drain to the low point of each sub-catchment (See Map 12).

The FMP found that the pipe network for stormwater is generally undersized by today's standards. Drainage is primarily underground, with the stormwater runoff generally released to the Barwon River via a network of stormwater pipes and pumps, or it enters the groundwater through natural infiltration and constructed infiltration pits. Historic subdivision has not provided for flooding or for the conveyance of overland flows within the road network. Therefore above floor flooding in residential and commercial areas may occur where the capacity of the drainage system is exceeded. Some of the more recent subdivisions in the northern section of the town have been designed to store stormwater runoff within depressed roadways and retarding basins in the event of pump failures or major storms. Council has sought to manage stormwater by putting in place mitigation measures that are implemented from the FMP. These include:

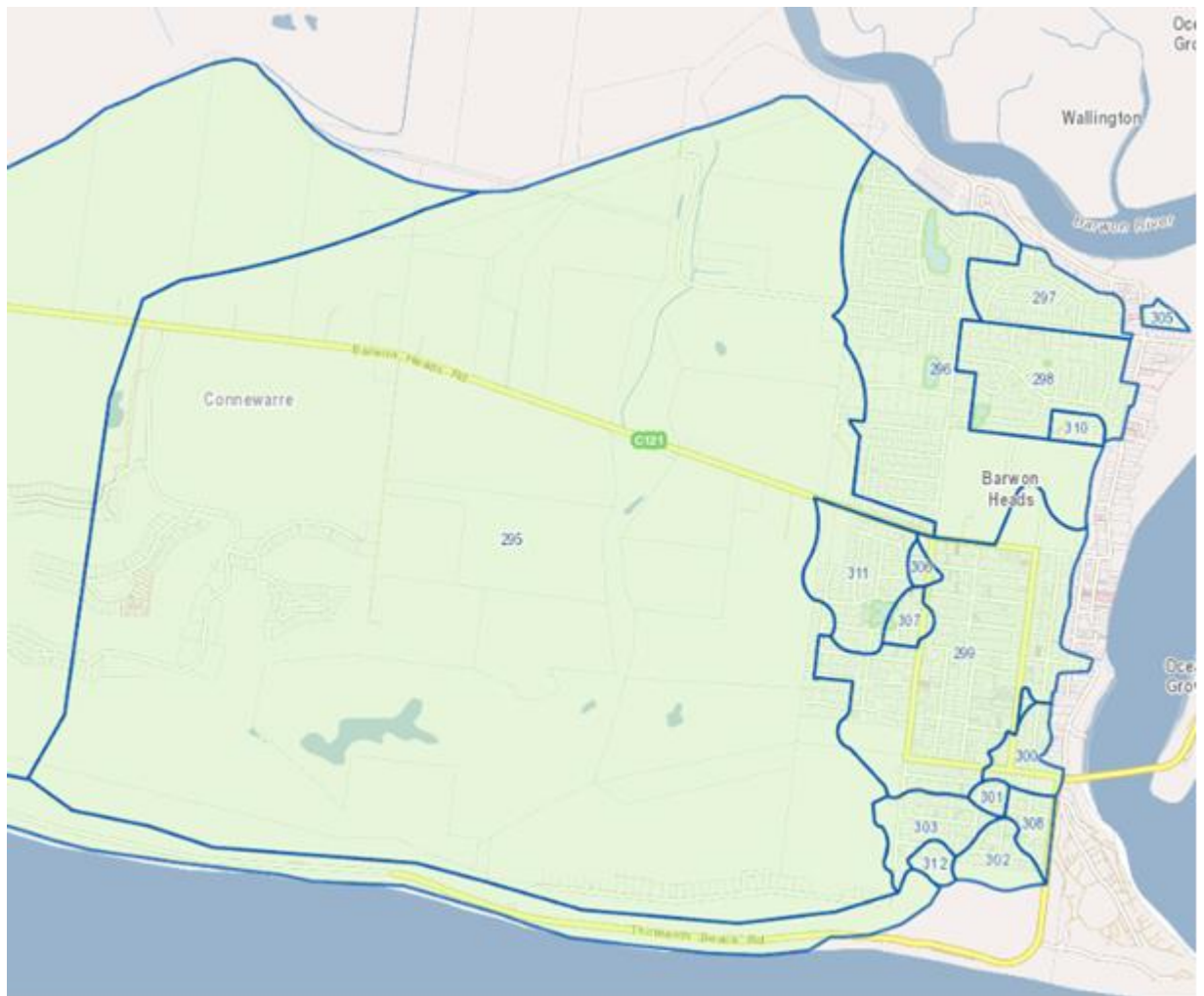
- Special building Overlay. All land identified as subject to flooding in the 1% flood event is designated flood prone under the Building Regulations 1994. Most of the land affected is covered by a Special building Overlay that ensures development manages the flood hazard by elevating floor levels and allowing the free passage of floodwaters.
- Pumping station. A new pump station was constructed in Clifford Parade to more efficiently convey stormwater to the river. The construction of the Ozone Road outfall is due for completion in late 2017. This has been designed to cater for more frequent, lower intensity rain events and will not eliminate flooding.
- The upgrade of stormwater pipes in various areas of the Barwon Heads township since the FMP was adopted.

Future development has the potential to increase flood risk to people and property. The FMP recommended that the assessment of rezoning proposals should apply the principle of zero adverse flood impact on adjacent, upstream and downstream areas. Development and subdivision applications should apply best practice guidance for development within or upstream of flood prone areas.

Land west of the current township boundary is subject to flooding, originating from Murtnaghurt Lagoon. Land subject to 1% (1 in 100 year) flooding events are shown in Map13. The majority of the Barwon Heads township is well protected from riverine flooding by high ground to the east and the levee located to the north west. This levee is 1,700 metres long and was constructed in 1952 to prevent floodwaters entering the town from the north at "sheepwash". Following a flood event in 1995, the levee was reconstructed to a crest height set at a level to protect against an estimated 0.1% Annual Exceedance Probability (AEP) flood level (1 in 1,000 year). The location of the town boundary has always left a buffer of rural zoned land between the levee and more intensive development. Any alteration of the township boundary to the west would need to be informed by a detailed risk assessment, including structural assessment of the levee and imposition of appropriate buffers in accordance with the Victorian Floodplain Management Strategy 2016.

Wetland areas have been the subject of an assessment which expresses concern about the environmental impacts caused by the discharge of stormwater. Council's Environment Team have advised that the Federal Environment Office is concerned over the City's approach to the increased volume of freshwater from urban development being discharged into the low lying coastal ephemeral wetlands; particularly for Ramsar wetlands. Council is currently considering the extent of detail for assessment that is needed and what may need to be included in Structure Plans or overlays in the Planning Scheme. Further advice on the issue is required from DELWP. Where new development drains to sensitive receiving waters, groundwater recharge and infiltration measures should be considered as part of any stormwater management strategy.

New developments must meet Best Practice Environmental Management targets for the quantity and quality of discharged stormwater, however contemporary practice seeks to extend this by considering whole-of-cycle water management, rather than simply treating stormwater at the point of discharge. Integrated Water Cycle Management (IWCM) considers the natural, built and service aspects of the water cycle, and should be considered in any development proposal, particularly greenfield subdivision.



Map 12. Water Catchment Areas

6.3.1 Infill development

The majority of future growth in the town will be the result of infill development. As noted earlier Council recognises that flooding is a problem for the existing township area and infill development needs to respond to known hazards. Flooding has been exacerbated by the fact that the historic road layout of roads is not sympathetic to the unusual natural drainage pattern of the area. The southern part of the town, bounded by Bridge Road, Golf Links Road, Ewing Blyth Drive and the golf course has no conventional drainage system and is reliant on soakage systems that have variable effectiveness. The area is generally reliant on soakage systems that have highly variable effectiveness and are generally only appropriate for a modestly sized dwelling on a larger parcel.

Land within 400m of the Town Centre has been designated as an 'increased housing diversity area' (IHDA) and is currently zoned as Residential Growth Zone 3 (RGZ3). The assumption is that these areas are prime locations for considerable increases in density on land that can be adequately served by infrastructure. The blanket decision by Council to nominate IHDA's within all 400m of all town centres, without full assessment of augmentation of drainage capacity, has come under some criticism from VCAT (*Pacor v Greater Geelong CC* [2013] (VCAT 960)).

The FMP was based on residential areas having pervious land cover of at least 50% (including driveways and other hardstand). The RGZ3 and General Residential Zone 2 (GRZ2) zones currently require a need to provide at least 20% of pervious land.

It would be impossible to eliminate all flooding by increasing capacity of the underground drain network. Outcomes from this structure plan seek to address the extent of the impacts of stormwater flooding impacts by putting in place the following measures:

1. Zone and IHDA changes. The recommended zone change from RGZ to GRZ2 around the town centre outlined in Section 3.3.2. Also removing the IHDA from the land south of Bridge Road.
The change of zone from GRZ2 to Neighbourhood Residential Zone (NRZ) for most of the remaining residential areas of the township.
2. New Design and Development Overlays. Changes to zone schedules to decrease site coverage to 40% in the NRZ. Also to provide larger front setbacks of 6 metres and a side setback requirement of 2 metres on one boundary for both the NRZ and IHDA area. This will help to not restrict stormwater flows, as well as creating space around buildings to provide for landscaping and the planting of vegetation. The State Government has also recently required that minimum garden areas are provided in the NRZ and GRZ zones that increases the ability to provide pervious surfaces and is not able to include a driveway.
3. All new development will be required to include measures to restrict stormwater discharge to acceptable levels; including on-site detention, stormwater re-use and/ or off-site augmentation works. Major development to be informed by a detailed stormwater management plan and flood assessment to demonstrate surrounding properties will not be adversely affected.
4. If indicated through a future updated FMP study there may be a need for planning controls to be put in place to address localised stormwater flooding. This may, however, further limit how people could redevelop their properties in the future. Problems resulting from groundwater and river levels may also provide limits on the ability to undertake future drainage additions.

Council may seek to strengthen local planning policy to restrict the development of flood prone land in accordance with SPPF Clause 13-03-01 in order "Avoid intensifying flood impacts through inappropriately located and designed developments". This would need to be completed at a municipal level and not for Barwon Heads only.

6.3.2 Climate Change

The Victorian Coastal Inundation Dataset provides a high level assessment of the potential risks from sea level rise and storm surge at a state wide regional scale. It compares 2009 with 2040, 2070 and 2100. Due to the high level (state wide) methodology used, the outcomes from this study can only be used as a guide.

Council also has a Climate Adaptation Strategy 2011. To further the objectives of this strategy Council has undertaken an inundation report for the **Bellarine Peninsula – Corio Bay Local Coastal Hazard Assessment**. This provides a more refined local level assessment than the State datasets and considers mitigation or defence measures already in place.

Two compartment areas address Barwon Heads:

- Compartment 2: Blue Rocks to Barwon Estuary. Thirteenth Beach is backed by high dunes/ cliffs at the central and eastern ends of the beach. Due to the height of cliffs in the area the likelihood of dune/ cliff breaching and flooding the low-lying hinterland is very low.
- Compartment 3. Barwon Heads, Barwon Estuary and Lake Connewarre. Currently the Barwon Heads township is protected by a series of high vertical and masonry retaining walls. These protect the hinterland properties against high river and coastal flooding events with wall elevations ranging from 1.6m to over 3m AHD. There is a section near Ozone Road with no protection; however this backs onto high ground.

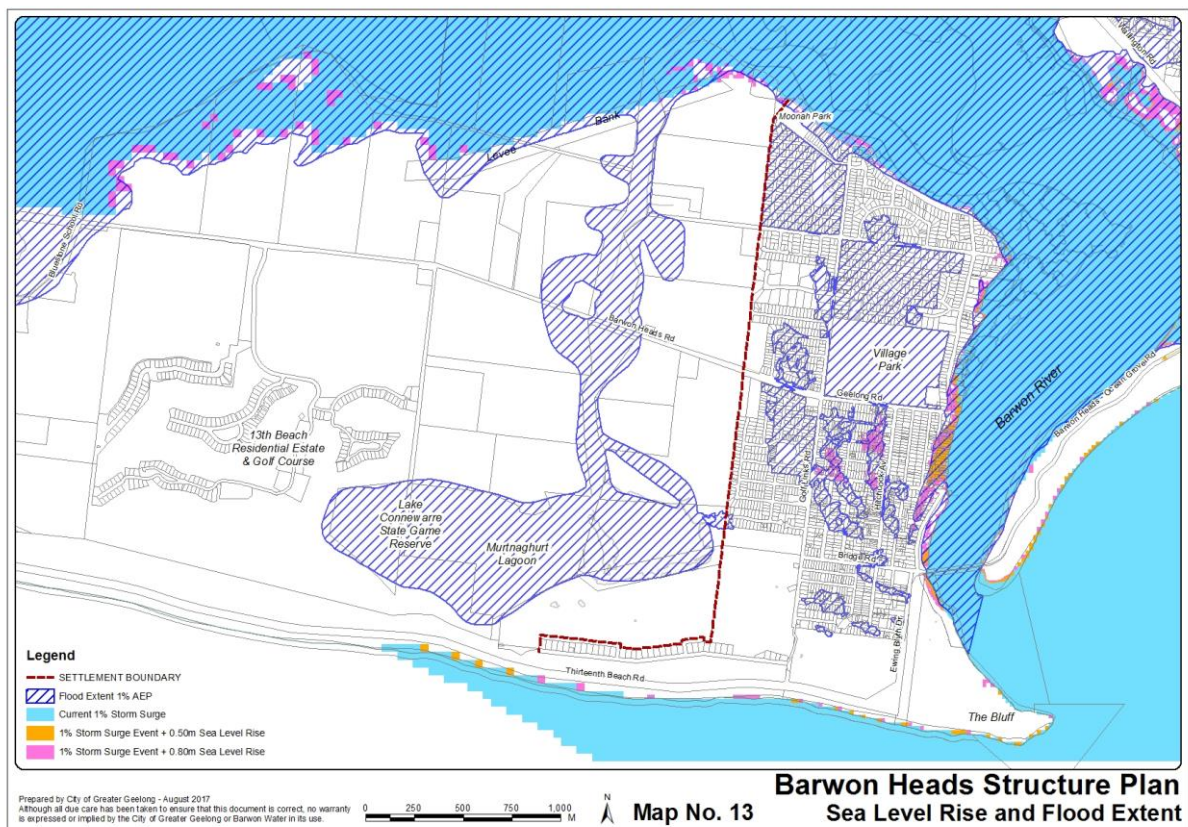
Low lying, undeveloped areas of the estuary are inundated under a 1% (1 in 100 year) storm tide event with no sea level rise. For all increases on this level in sea level and catchment based flooding, inundation extents increase, with sea level rises of 0.5m and greater impacting on dwellings at Ocean Grove and Barwon Heads, including some sites remote from the river front. A 1% AEP storm tide event with sea level rise of 0.2m is largely contained within the river channel due to the presence of low-crested revetments along the riverbank.

It is noted that State datasets show that there are issues with potential future sea level rise for the Murtnaghurt swamp area. The local coastal assessment (3rd pass assessment) did not assess this area west of the township boundary. Further assessment by a developer would be needed of the local level impacts in this location prior to potential development being considered.

Map 13 shows the flood risk (1 in 100 year) and climate change risk to 2070 and 2100. Risks shown in the map are for events that occur under a 1% (1 in 100 year) storm tide on top of sea level rise scenarios. This does not constitute constant inundation. The map can help policy makers plan for future climate change scenarios and implications.

There is a broader consideration required about the need for specific planning controls to guide land use and development in coastal adaptation areas, such as a new planning zone or planning overlay. These would need to be developed by the State Government. Until sufficient adaptation investigations have been undertaken on a state-wide basis, it is unlikely that such controls will be prepared.

The 2040 and 2100 sea level rise along with the 2100 storm 1% AEP storm surge is shown in Map 07. The impact of coastal inundation by the year 2100 will require careful coastal planning in the future. While some of these areas have established land uses, where new development is proposed it will need to be planned and assessed with regard to the State Planning Policy Framework, Local Planning Policy Framework including State Government advice on coastal planning matters and importantly, the findings and recommendations of the 3rd Pass Local Coastal Hazards Assessment and Council's Climate Change Adaptation Strategy. Council is currently working with the Borough of Queenscliffe to determine appropriate planning mechanisms to include in the Planning Scheme resulting from the LCHA from existing available overlays under Victorian Planning Provisions.



6.4 Transport Infrastructure

The transport network within Barwon Heads is focused on road based movements. There is a lack of a formal path network in the majority of residential streets with linkages between open space areas and to and from the Town Centre, being poor in some parts of the town.

The scale of traffic flows through the town and the amount of car parking supply is continuously raised as an issue requiring attention by residents and traders. To address this Council undertook traffic and parking studies to support the Structure Plans in 2003 and an update in 2010 (See also section 2.1.5). The report outlines that issues around traffic and parking are worsened by the significant increases in visitor traffic during the peak holiday periods of December and January. Outside of these peak times volumes on the arterial and collector roads are

generally within the capacity of these roads and consistent with their function under the road system. Likewise for parking outside of the key peak periods there is generally sufficient capacity within the commercial areas to cater for parking demands.

Updates to the studies and improvements undertaken by Council to mitigate the influence of the impacts to traffic and parking are discussed below. There are two important factors that influence Council's ability to undertake improvements:

1. Some roads are managed by VicRoads and Council cannot control the works that occur on these roads – only advocate.
2. Proposed improvement works and mitigation measures are consulted on with the community, however, there are often significant differences of opinion throughout the community and community groups as to the best way forward. Council must balance these differing views.

6.4.1 Roads

The township of Barwon Heads is accessed via three main roads: Barwon Heads Road the main entry point, across the Barwon Heads Bridge from Ocean Grove and Thirteenth Beach Road (which becomes Ewing Blyth Road). The 2003 Urban Design Framework (UDF) highlighted the importance of these entrances to the township, and the overall contribution they make to the towns "village character" (See Map 14).

The primary route through the town is via Barwon Heads Road, Golf Links Road, Bridge Road and across the Barwon Heads Bridge. This 'Arterial Road' is managed by VicRoads and decisions relating to load and speed limits, pedestrian crossings and traffic devices are ultimately determined by VicRoads, not Council. All other Roads are managed by Council. Given the decision by the Minister for Planning in 2007 to retain the historical location of the Barwon Heads Bridge, this existing configuration will remain unchanged for the foreseeable future. Council must work within the limitations which this road alignment, and its management, presents in relation to traffic movements and associated issues for the wider township. Barwon Heads will continue to be subject to periods of high traffic demands for certain periods and this may increase with population growth of the surrounding growth areas. To address traffic issues a number of mitigation measures and improvement works have been undertaken in Barwon Heads to implement outcomes of 2010 Structure Plan, the GTA Studies and feedback from the community. These are outlined in the box below.

Traffic measures introduced by Council.

- Council undertakes regular traffic and speed counts around the town to determine decisions for making traffic improvements. These can be compared to the earlier GTA Traffic Studies in 2003 and 2010.
 - Bridge Road around 14,600 vpd January 2014
 - Hitchcock Ave 4,564 vpd July 2013/ 4,885 February 2010.
- Influenced VicRoads to implement lower speeds limits across the town:
 - 50km/hr in all residential streets
 - 40km/hr in pedestrian activity areas – Hitchcock Ave & part of Bridge Rd.
- Influenced VicRoads to transfer the main road status from Hitchcock Avenue to the present location to allow Council to undertake street improvement works.
 - Street improvement works to Hitchcock Avenue include new loading zones, a mail zone, a new pedestrian crossing and 'active' road width reductions through line marking.
- Worked with VicRoads to install zebra crossings at Bridge Road, Hitchcock Avenue, Flinders Parade and Ewing Blyth Road.
 - This has caused concern with motorists and increased travel times. However, locations are the result of working with community groups and responding to consultation.
 - Community consultation revealed 77% support for zebra crossings.
 - Concerns of motorists needs to be balanced with pedestrian safety.
- Clifford Parade converted to one-way traffic between Hitchcock Avenue and Grove Road to improve safety and parking options. Parking restriction sign posted.
- Give way line-marking installed on Margate Street, Seaview Avenue and the northern end of Riverside Terrace for traffic calming.
- Slow points installed on Seaview Ave.

Actions not implemented – future consideration

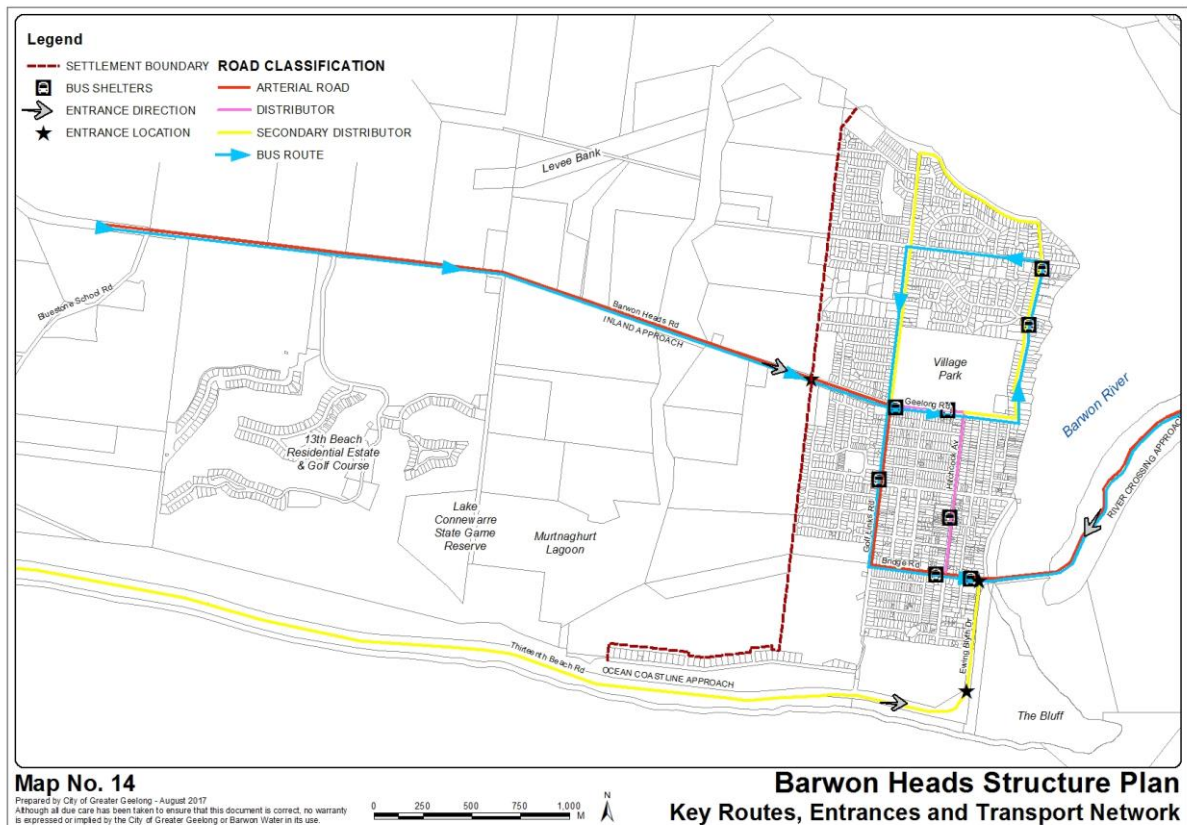
- Reconstruction of Golf Links Road, with cycle lanes provided.
- Further extension of the 40km/hr zone on Hitchcock Avenue.
- Construction of a roundabout at the intersection of Hitchcock Avenue and Geelong Road. Future consideration by Council.
- Park and ride is a potential option for traffic management and is discussed in relation to parking.

One issue that was raised as a concern by the community involves traffic counts. This relates to rat running occurring on other streets other than primary routes, such as Margate Street, Seaview Avenue, and Riverside Terrace. Requests have therefore been made to reduce speeds to 40 kilometres per hour on these streets. Transport and Traffic Management have undertaken vehicle and speed counts on these roads, which have informed management works noted in the box above. It is noted that a change to 40 kilometres per hour along part of Bridge Road, which was requested by the community, also has an influence on slowing traffic in this area and potentially directing traffic to other roads. Further, the change to 40 kilometres per hour in the additional noted areas could simply result in moving traffic to other roads. Traffic counts have also shown that due to increased traffic, the speeds in peak times actually reduce as cars are not able to travel as fast. During the holiday peak speeds were an average of 45 kilometres per hour (85% percentile - 6 Jan 2017), which is compared to non peaks times of 54 kilometres per hour (85% percentile – 5 June 2015). Further, a blanket reducing of speeds across Barwon Heads would likely have a detriment impact on the overall traffic flows in the town and there would likely

be considerable objection to this from the community. Traffic Management do not recommend reducing speed limits on any other streets in Barwon Heads.

Council's Traffic Management Team will continue to monitor the traffic system and determine whether further works and mitigation measures are required. Residents are encouraged to continue reporting transport issues to the Traffic Management Team where these are identified.

The State Government have committed to funding in the 2016/ 17 budget for the planning of Barwon Heads Road duplication as well as the continuation of the Geelong Ring Road (Baanip Boulevard) from Surf Coast Highway to the Bellarine Highway (Bellarine Link).



6.4.2 Public Transport

Public transport in and around Barwon Heads is limited. One bus service route (55) runs from Geelong to and from Ocean Grove via Barwon Heads on a daily basis (See map 15). The service runs on average every hour during weekdays with some increased frequency during peak times to Geelong. On Saturday and Sunday the service runs approximately every two hours with less early morning and later evening buses.

Public Transport Victoria have advised that there are no current plans to make changes to the public transport network and will continue to monitor the route to ensure it is optimal for public transport users.

A free shuttle bus service run by BCCoM also operates between the town and Ocean Grove during the summer holiday period. The bus operates daily on the hour, eight times a day. It is a 30 seater bus and provides around 5,000 trips per year. The bus costs \$30,000 per annum to run and is part funded by BCCoM, Council and local sponsors.

There are requests from the community to improve this service and potentially link it to a park and ride. Not only to provide a bus service, but also to reduce the reliance on vehicles in the town centre. BCCoM have advised that currently it is not feasible to expand the bus as it is not always reliable, particularly during peak traffic times, and there is no 'real time' trip information. BCCoM are currently investigating options to develop an app, however this

is difficult to achieve for a very minor service. It would also require significantly more funding to expand and most likely budget from Council or ultimately that Council takes responsibility for managing and implementing the service.

6.4.3 Pedestrian and Bicycle Network (Active transport network)

The majority of residential streets in Barwon Heads have no formal footpaths, where wide and often treed grassy verges and a lack of kerb and channel are a significant character element of the township. In some areas of the town roads also remained unsealed. The presence of these 'informal' roads that generally lack any formal pedestrian treatment results in narrow streets.

Intra-township bicycle and pedestrian movements are generally delegated to the grassy verges and roadways, with the unmade lanes in the "old town" identified in the UDF as providing a unique connection to the town centre. The network of paths in the Village Park provide for pedestrian connections between Hitchcock Avenue and the north-west corner of the park.

The Barwon Heads Walks Project was undertaken in 2012, although this was never formally adopted by Council. As such a formal implementation plan has not been put in place. This is used as a guide by Council's Infrastructure Management Team for consideration of path locations. It is noted that across Greater Geelong there is a large backlog for projects for the installation or upgrading of footpaths and is subject to resourcing and Council priorities.

The retention of these 'informal' unsealed roadways and grassy verges within the township are often a source of debate for the community. Many people support the retention of these features as they define the character of the town. On the other hand they can reduce traffic flows (particularly unsealed roads), reduce pedestrian connectivity, reduce safety or usability in poor weather conditions or for older people. As noted in the discussion regarding the Residential and Landscape Character Assessment (see Section 3.2.2), the informal streets do provide an important character element for the town and should generally be protected. There will sometimes be a need to provide footpaths to improve pedestrian connections and active travel around the town; although these are prioritised in high movement areas and/or the most direct route or where identified in a Council plan.

Barwon Heads is becoming increasingly popular for cyclists. However the only formal routes are on-road cycle lanes located along Golf Links Road between Bridge Road and Geelong Road. Council's Cycle Strategy has identified opportunities to create areas of on-road and off-road cycling paths; although much of this is still proposed infrastructure. The following infrastructure improvements are proposed for Barwon Heads:

Network Improvement Priorities

- Barwon River Parkland – Continuous cycle path from the ring road reserve to Barwon Heads. **Not completed. Determined to be unfeasible.**
- Advocate for improved design for cyclists on the Barwon Heads Bridge. **Completed – new bridge constructed.**
- Install bicycle lanes along Sheepwash Road from the Round the Heads Trail to Barwon Heads Village Park (priority E). **Not completed.**

Long term proposals

- Advocate for an off-road shared path along the foreshore from Barwon Heads to the proposed off-road path in Surf Coast Shire.

The G21 Principal Bicycle Network (PBN) has also been endorsed by Council and VicRoads. The PBN has been prepared by Bike Safe and provides a strategic plan to prioritise and encourage investment of roads and paths across the region for upgrading, modification and/ or completing or building connections.

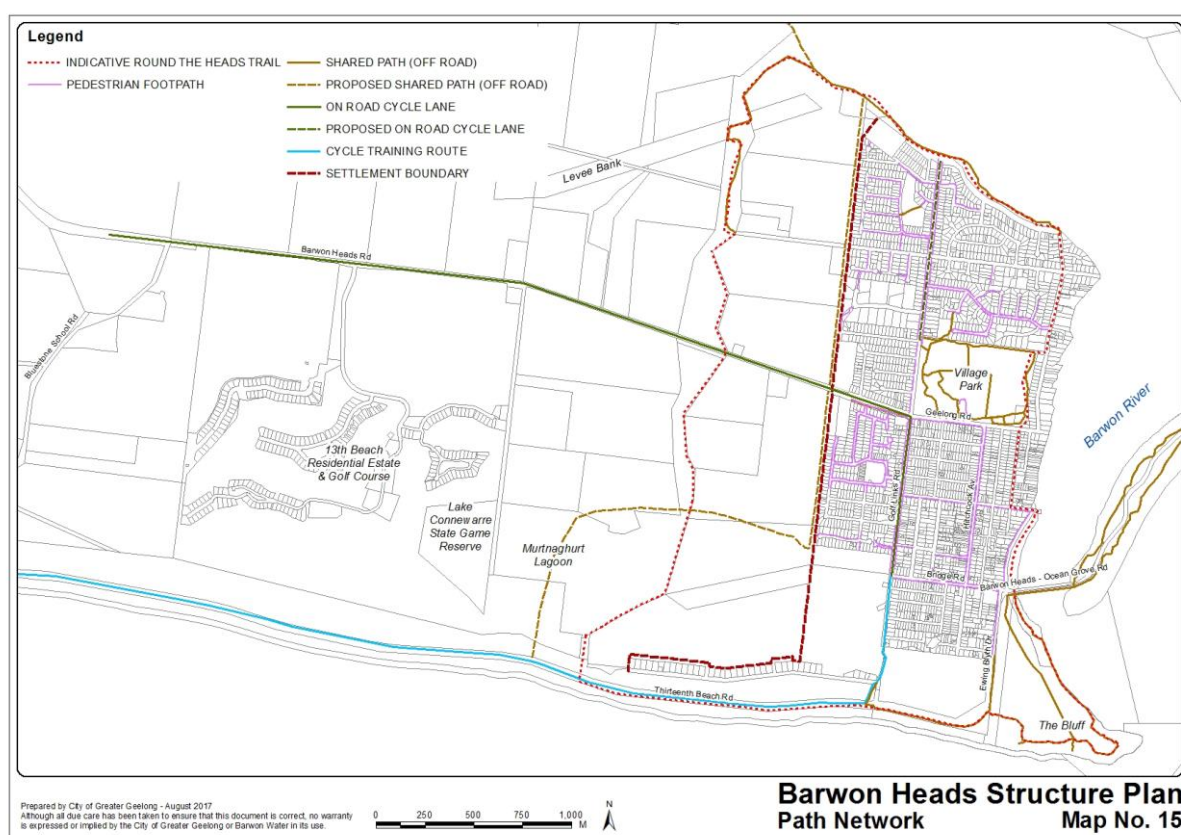
The PBN priority projects were adopted by Council in January 2014 for bicycle path improvements. Generally this identifies the major links that would have the greatest overall benefit for the Geelong community. The links for Barwon Heads include:

- Ewing Blyth Road;
- 13th Beach Road;
- Bridge Road;

The existing and proposed paths identified in the Cycle Strategy and PBN are shown in Map 15.

It is noted that four bicycle parking hoops are to be installed in the front of the upgraded IGA. In December 2016 a footpath extension was undertaken along Hitchcock Avenue.

Council will continue to undertake improvements to the road and pedestrian network and facilities when funding is available and inline with Council strategies and priorities.



6.4.4 Parking

Parking within Barwon Heads is principally provided on-street. There are only two formalised off-street parking areas in the vicinity of town centre: the BCCoM foreshore car park and the privately owned hotel car park. A total of 30 car parking spaces are proposed onsite for the upgraded IGA Supermarket on Bridge Road when completed. Parking restrictions in the town are limited to the southern end of Hitchcock Avenue, with the majority of on-street parking available unrestricted. Many of the business premises at the southern end of Hitchcock Avenue only provide limited off-street parking for customers and in some instances none is provided at all.

In the summer peak period parking problems are pronounced around the town centre and Hitchcock Avenue as well as along Flinders Parade and beach parking areas. Demand at beach parking areas is of particular concern to the BCCoM, including illegal parking in dune areas.

A number of parking studies have been undertaken over the last 15 years to inform the GTA Studies in 2003 and 2010. The parking studies provide a 'snapshot' of demand and have had variations in the extent and location of the study area. The largest study undertaken was in 2007 and this incorporated an area from the town centre up to Geelong Road west to Golf Links Road and south to Bell Street. There were a total of 1,645 spaces in this area (not including off street parking other than the hotel car park). A study in 2008 showed that there is around 273 parking spaces in the core commercial area. The 2010 GTA study concluded that there is generally sufficient car parking capacity within the commercial area to cater for parking demands, other than at absolute peak holiday periods.

A Traffic and Transport Assessment was prepared by Cardno to inform the Planning Permit for the extension of the Barwon Heads IGA. A car parking survey was undertaken as a part of this assessment in July 2015. The area surveyed included on-street and off-street parking within approximately 200 metres of the subject site along Bridge Road, Hitchcock Avenue and Grandview parade. A total of 228 parking spaces were identified in the study area (122 on-street and 106 off street). Peak occupancies were identified at 1.00pm on Thursday and 2.00pm on Friday, when totals of 81 and 96 parking spaces were occupied. This survey was clearly focussed on need relating to a specific property and was undertaken outside of the peak holiday season and not during a weekend. It does provide a snapshot of recent off peak parking availability.

There clearly is a significant issue with parking during peak holiday times and this has been reported to Council over the past decade. As a result of the GTA studies Council has put in place a range of measures to alleviate some of the issues:

- On-street parking improvements around the town centre, including increased parking restrictions (reduced times) along Hitchcock Avenue and standardisation of parking bays in town centre areas;
- Rationalisation of existing car spaces;
- Parking direction signs installed on Ozone Rd, Seaview Ave and Flinders Parade;
- Improved and formalised parking areas provided on both sides of Flinders Parade; and
- Conversion of Clifford Parade to one-way has resulted in additional parking provision.

Potential future works.

- Extension of 2 hour parking restrictions to Ozone Road;
- Formalise the parking area on the corner of Ozone Road and Seaview Avenue (5-7 Ozone) with materials sympathetic to the coastal environment. Subject to future Council priorities and decisions;
- Formalise the on-street parking at the southern end of Hitchcock Avenue, on the south side of Bridge Road, through the partial sealing of the roadway, the establishment of angle parking on the east side (using part Road Reserve) and the line marking of parking bays. Not currently a priority and would only have limited impact on parking; and
- Line marking and informal sealing of the parking area at the rear of the community hall (corner Ozone Road and Hitchcock Road) and the parking area adjacent to the senior citizens centre (Clifford Parade).

Catering for Parking Demands

Many people within the community see parking as the main issue that needs to be addressed in Barwon Heads. This is a complex issue as the significant problems in the holiday peak of around two months skews the impacts and makes it difficult to plan for and to justify budgets for Council. Further, there are many different views across the community as to what solutions people think would be appropriate for Barwon Heads.

During recent community engagement feedback from many residents indicated they accepted the parking situation and realise that there is a need for people to consider walking or cycling more often. Often there is an expectation for people being able to park outside a specific shop or service with a lack of willingness to walk any distance. This is not a realistic expectation all year round, which is comparable to many areas across Geelong. It does reiterate the need to improve the pedestrian and cycle network, particularly to key destinations. With more and more people wishing to visit Barwon Heads in summer periods there will continue to be parking issues.

Based on the peak/ off-peak situation, Council's Engineering Team do not at this stage recommend any significant changes to the parking regime and infrastructure that is available to Barwon Heads. This is continually monitored by the team and the following options could be considered in the future by Council should it be considered expedient:

- Residents permit parking or paid metres in the city centre.

Both these options would have merit; although there would need to be extensive community consultation as residents may not be happy to pay for parking year round to help address an issue that is only a major problem for part of the year. Metered parking could also push more cars out of the Town Centre area in into residential areas and Council would only install metered parking in the heart of the commercial area where vehicle turnover is critical.

- Park and ride

The provision of a park and ride system that could take people into the town from the outskirts was a popular choice for the community through consultation. For this type of facility to work there would need to be a disincentive to people driving into and parking in the town. In the summer there is already the disincentive of lack of parking and slow traffic flows. The key incentive would be the need for parking measures to be put in place such as significant parking or permit restrictions and expensive metered parking in areas of the town to create demand for the facility and make it financially viable.

It is anticipated that the introduction of high parking rates and restricted parking would result in opposition from the community also. So appropriate community consultation would be needed.

A key question would be where the park and ride facility could be located? There are very limited sites within the town centre, other than the Village Park. A park and ride on the Village Park would be unfeasible due to significant constraints. Therefore, it would rely on the availability of land being able to be purchased or leased on the edge of the town.

Overall the introduction of a park and ride would be expensive for Council due to the need to obtain land, undertake construction works and operate the service.

Another option for a park and ride would be to link the service to the community bus and extend this service (See Section 6.4.2). This would still require acquisition of land.

- Council purchase and development of off-street car parks

Council can purchase land for the purpose of public car parking through the accrual of funds, such as developer contributions. However, generally the location of such parking facilities must be in close proximity to the businesses which they serve. This is particularly the case when development contributions are obtained in lieu of car spaces on individual sites. The cost of providing the parking facility includes the purchase of the land, the required earthworks and sealing of the car park and the on-going upkeep of the land.

Large off-street car parking areas provide direct parking access in the middle of activity centres. However, the costs of such facilities will likely make this unfeasible for Council in Barwon Heads given the value of land within the town centre where properties around Hitchcock Avenue can be valued in excess of \$1 million. Further, given the existing lot layout and depth of lots in this area, Council would be required to purchase a number of adjoining lots to gain sufficient land to yield a viable number of car spaces. There are also significant costs involved for drainage and construction works in addition to the land costs. Development of open air car parking would also impact on the character of the town centre.

As was noted in the Community Facilities Section 5.1.5 the old kindergarten building in Clifford Avenue is currently vacant and Council is yet to resolve a way forward for the use of the site. One option may be to convert the site to car parking. However, there are other interests for the use of the site or building and this would likely be subject to community consultation.

Other facilities such as parking buildings etc would not be feasible based on cost and would be out of character for the town centre.

- Special Rates and Charges Scheme

A Special Rates and Charges Scheme (SRCS) could be initiated by the Council to fund future car park development or parking infrastructure; or improved footpath and pedestrian infrastructure. A SRCS is money that is raised by Council via a levy on ratepayers in order to fund works. Consultation would be needed with the community due to the financial implications on the community.

Other issues for parking:

- Parking enforcement

Parking is enforced in Barwon Heads and there is no systematic timing for enforcement, in terms of number of days or times. There is also increased enforcement in summer months or when there are complaints. Barwon Heads is not large enough to have round the clock enforcement.

BCCoM have noted that the car parks managed by the Committee are gazetted to allow for negotiations with Council to establish enforceable controls to assist management of illegal parking. Bollards have been installed in some locations, but people are still able to park illegally. In the preparation of a new caravan park precinct plan car parking facilities may be developed to reduce the use of the jetty road area by campers.

- Parking waivers.

Parking waivers have been supported for a number of developments along Hitchcock Avenue. The provision for parking waivers are determined through the planning permit process on a case by case basis. As noted earlier the site sizes in Barwon Heads are relatively small, so a strict requirement to meet the parking requirements would inhibit the ability to develop sites viably. There does need to be careful consideration over the scale of development, particularly where there is a residential component to the development.

6.5 Key Influences

- Adequate water and sewer infrastructure provision serve the existing township;
- Identified urban stormwater runoff poses a substantial threat to wetlands and sensitive coastal environments;
- There are potential impacts associated with flooding, climate change and sea level rise and storm events on future settlement and development;
- Infill development has the potential to impact on flood and stormwater risk to people and property;
- The two month holiday season peak causes problems for managing traffic flow and parking provision during this time;
- Barwon Heads has a very limited public transport service;
- Opportunity to improve the operation and management of the community bus.
- There is a lack of formal footpaths and cycle lanes within the township with primary linkages to key destinations and services;
- A need to continue to monitor traffic and parking in the town and identify opportunities for improvements;
- Opportunity to follow best practice for stormwater management when planning for future development;

7.0 Township Growth and Residential Lot Supply

7.1 Township Growth

The settlement boundary for Barwon Heads has been set for a number of decades and has not changed since the 1996 Barwon Heads Structure Plan was adopted. Since the adoption of both the 1996 and 2010 Structure Plans the major areas of development are set out below.

- The Seabank Estate

The estate is located to the south of Barwon Heads Road and to the west of Golf Links Road. It provided for around 170 lots and was largely developed in the mid to late 2000s. This was the largest area of land developed since 1996.

- South of Tait's Road and West of Sheepwash Road

The subdivision provided for around 70 lots and was largely developed in the early to mid 2000s.

- Former Rondor Caravan Park

The estate is located east off Sheepwash Road and south of River Parade. The subdivision was approved in 2010 and provides for around 45 lots. Most of the estate has been developed; although there remain some undeveloped lots.

- Eddystone Court

A subdivision that was approved in 2012 and provides for around 35 lots. The construction of dwellings within the subdivision has been occurring steadily over the past couple of years.

- 13th Beach Golf Links Resort

Located to the west of the Barwon Heads township. There is a significant amount of planning history for the site and is formerly known as the Tomara Estate. The site provides for two 18 hole golf courses, a 120 seat restaurant and function centre and residential accommodation for around 280 villa lots and 150 apartments. Residential development of the resort has been occurring over the past 15 years and there still remain some undeveloped lots.

7.2 Residential Lot Supply

Council's preferred method for establishing land supply data within the municipality and for individual towns is the G21 Region Residential Land Supply Monitoring Tool prepared by Spatial Economics June 2015 and update 2016.

Council is required to consider residential land supply on a municipal basis, rather than on a town-by-town basis. However, it is useful to review localised development trends to inform the Structure Plan review process. Figure 6 and 7 sets out the residential supply for the Barwon Heads urban area, including vacant urban lots, recent and future proposed developments and potential undeveloped land.

The G21 Residential Land Monitoring Tool uses various supply types definitions for residential land that are defined as:

- **Broad hectare**, which is new development on Greenfield sites (sites that have not been used for urban development previously or previously subdivided for normal density development), typically on the fringe of the established urban areas.
- **Major Infill**, which is undeveloped land or sites identified for redevelopment within the existing urban area, zoned for residential development, and parent lot or existing lot greater than 5,000sqm and with an expected lot/dwelling yield greater than 10.

- **Minor Infill** is defined as vacant land within the existing urban area or within broadhectare land release areas, zoned for residential development and existing lot sized less than 5,000sqm.
- **Future (potential) Residential**, which is land identified by the relevant municipal authority for future residential development and current zoning not supportive of 'normal density' residential development. Land which has an 'Urban Growth Zone' applied, and a precinct structure plan has not yet been approved, falls into this category.
- **Rural Residential**, which is defined through the land zoning of the Low Density Rural Residential (LDRZ) and Rural Living (RLZ) zones. Not relevant to Barwon Heads.

To determine lot supply it is necessary to consider the three factors of supply as set out below and Figure 6 and 7; Tables 11 and 12:

- Broad Hectare land supply
- Vacant urban lot supply; and
- Future urban land supply (potential residential).

No Broad Hectare lots are expected to be created over the next five years. The only Broad Hectare Supply is proposed for 11+ years timeframe for a small block of land to the north west of the Seabanks Estate. It is proposed that the development would create 28 lots. It is noted that the timing identified in the land supply report map is only indicative of anticipated release (typically overstated) and is not a reflection of years supply of adequacy of supply.

There are 183 vacant urban lots in Barwon Heads.

Table 11 and 12 set out the timing for the release of land in Barwon Heads and the nature of vacant lots.

7.2.1 Future land supply.

No future urban land supply has been identified for Barwon Heads. However, there have been a number of requests for the settlement boundary to be extended in order to provide for additional future urban supply. Council does not support the extension of the Settlement Boundary through this Structure Plan. Consideration of sites recommended are discussed in more detail in Section 7.3.1.

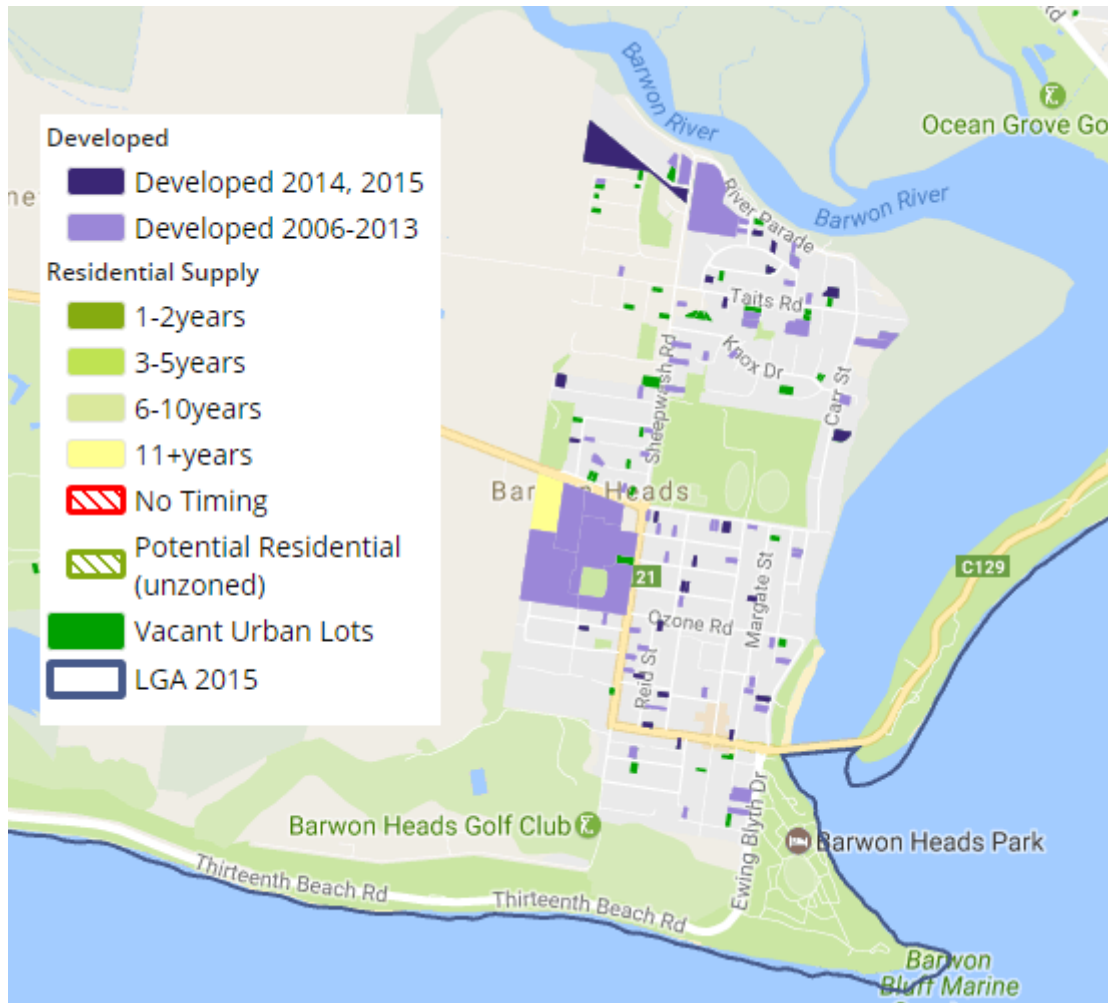


Figure 6 Residential lot supply in Barwon Heads



Figure 7 Residential lot supply for 13th Beach Resort.

Table 11 - Residential Lot Potential by Supply Type

Region/Urban Centre/LGA	Broad hectare	Major/ Minor Infill	Potential Residential (unzoned)	Vacant 'Urban' Lots	Rural Residential	Total Lots
Barwon Heads Town	28	0	0	119	0	147
13 th Beach Resort	0	0	0	64	0	64
Barwon Heads	28	0	0	183	0	211

Source: Spatial Economics – Land Supply and Monitoring Tool 2015 and 2016 update

For the vacant Urban Lots this includes 28 lots that were under construction at the time of the assessment and seven lots for 13th Beach Resort that were under construction.

Table 12 – Timing of the release of residential supply

Suburb	Average Annual Lot Production 2006 to 2015	1-2 years	3-5 years	6-10 years	11+ years	No Timing	Total Zoned (lots)	Potential Residential (unzoned)	Total (lots)
Barwon H	43.9	0	0	0	28	0	28	0	28

Source: Spatial Economics – Land Supply and Monitoring Tool 2015

7.2.2 Future Growth Lot Supply

The previous section set out what supply of land is available for residential development. Two methods are used to forecast future lot supply capacity:

- Analysing historical lot construction trends (Table 13); and
- Analysing historical building approval rates (Table 14).

Table 13. Historical lot creation trends for Barwon Heads 2006 to 2015.

Year	2006/07	2007/08	2008/09	2009/10	2010/11
No. Approved	81	51	57	28	79
Year	2011/12	2012/13	2013/14	2014/15	TOTAL
No. Approved	3	10	52	15	376
Average No. lot construction/yr	41.7				

(Spatial Economics – Land Supply monitoring Tool June 2015)

In the nine years to 2014/15 there were 376 lots created for Barwon Heads, or 41.7 per year. This figure can fluctuate depending on when land may become available through a subdivision. In a non growth area township with a small population, such as Barwon Heads, there will not necessarily be a consistent supply of land being brought on through subdivision or stages of subdivision. This compares to a growth area town where there is likely to be a number of growth fronts and developments providing consistent lot supply on a yearly basis. In these areas lot construction will generally track faster than buildings approvals and is considered to reflect land supply more accurately.

Table 14 – Barwon Heads Residential Building Permit Activity 2006-15

Year	2006	2007	2008	2009	2010
Constructed	33	52	62	51	103
Net Dwellings	21	37	52	39	88
Year	2011	2012	2013	2014	2015
Constructed	42	47	15	59	49
Net Dwellings	38	27	14	49	41
Total Constructed	512				
Total Net Dwellings	406				
Average No. Dwellings/ yr	51.2				
Average Demolitions/ yr	10.6				
Total/ yr	40.6				

Spatial Economics Housing Development Data

Estimating demand based on building approval rates can present some methodology issues. Some new builds may occur on a site where the existing building is demolished. In the circumstance where the demolition only results in a replacement dwelling being constructed this is a net increase of zero. To address this, historical demolition building data has been assessed for where a replacement dwelling has been constructed. In the circumstance where more than one dwelling is constructed, this increases the dwelling supply, but not the number of lots (unless subdivided and would therefore be captured).

Table 14 shows that between 2005 and 2015 the average number of residential constructions was 41 dwellings per year, or a 2.0% change. This figure can vary quite considerably year on year.

7.2.3 Land supply based on growth scenarios

Table 15- Land Supply Based on Growth Rate Scenarios (2015)

Location	No. lots	Building permit activity @ 40.6 lots / yr
Broad Hectare Land	28	<1
Vacant urban land Barwon Heads Township	119	3
Vacant Urban Land 13 th Beach Resort	64	1.5
Future urban	0	0
Total Supply (years)		21

Note: Figures Rounded

There is limited land supply for Barwon Heads and in 2015 this was anticipated to contribute between four and five years supply. However, this is likely to be less now given that two years has past since the assessment was made and there were also 35 vacant lots that were under construction for both the Barwon Heads township and 13th Beach Resort. Further, the only broad hectare lots of 28 are timed as longer term development. How fast the land supply will be exhausted will depend on a number of factors and supply and demand economics, including the value of land and the potential pressure to develop infill. There could be increased pressure to develop the 28 lots due to an increase in land value.

Managing the impact of the infill development will occur through the introduction of two Design and Development Overlays for residential areas – see Section 3.2.2.

7.2.4 Planning Policy and Demand – Municipal Supply

The Greater Geelong Planning Scheme *Clause 11.02-1 Supply of urban land* seeks to ensure a sufficient supply of land is available for residential, commercial, retail, industrial, recreational, institutional and other community uses. To achieve this objective, it seeks to plan to accommodate projected population growth over at least a 15 year period and provide clear direction on locations where growth should occur. Residential land supply will be considered on a municipal basis, rather than a town-by-town basis.

An analysis of projected dwelling requirements and land supply within the municipality, including Geelong Urban and the Bellarine Peninsula is provided below. The summary below shows that the adequacy of land supply in the municipality is sufficient to accommodate the projected population demand.

The G21 Residential Land Supply Monitoring Report has considered the data published within the 'Victoria in Future 2014' (VIF 2014), the State Governments' population projections undertaken by the Department of Environment, Land, Water and Planning (DELWP) to determine future demand for dwellings within Greater Geelong. In addition to VIF2014, the report also considers population and dwelling projections undertaken by .id consulting (.id 2015) as an additional projection/scenario.

In Summary:

Greater Geelong Municipality

Projected dwelling requirements sourced from VIF 2014 indicate that from 2015 to 2031 there will be a total dwelling requirement of 35,004 (2,059 average per annum).

As measured from 2015 to 2031, the average annual projected demand by Region within the municipality of Geelong is:

- Geelong Urban: 1,377 dwellings per annum; and*
- Bellarine Peninsula: 682 dwelling per annum.*

The above dwelling requirements equate to an average annual 1.5% population growth rate and a 1.8% dwelling growth rate (measured from 2016 to 2031).

Projected dwelling requirements sourced from **.id 2015** indicate that from 2015 to 2031 there will be a total dwelling requirement of 35,890 (2,111 average per annum).

As measured from 2015 to 2031, the average annual projected demand by Region within the municipality of Geelong is:

- Geelong Urban: 1,412 dwellings per annum; and
- Bellarine Peninsula: 699 dwellings per annum

The above dwelling requirements equate to an average annual 1.6% population growth rate and a 1.8% dwelling growth requirement (measured from 2016 to 2031).

The difference in annual projected demand between VIF 2014 and **.id 2015** is minimal.

It is considered there is no need for additional broadhectare residential land stocks across the municipal area of Geelong, from a land supply and demand basis. Based on dwelling projections contained within VIF 2014 and **.id consulting 2015**, there is **24 to 25 years** of zoned broadhectare land supply. It is considered the broadhectare lot construction trend demand scenario considerably understates demand, due to historic broadhectare land supply constraints. This demand scenario equates to 33 years of zoned stocks.

In terms of the future broadhectare land supply stocks (PSP required and unzoned), based on the two dwelling projections contained in VIF 2014 and **.id consulting 2015**, there is an additional **13 years** supply to cater for projected demand across the municipality.

Geelong Urban Region

It is considered that there is no need for additional zoned broadhectare residential land stocks across the Geelong Urban Region of Geelong. Based on dwelling projections contained in VIF 2014 and **.id consulting 2015**, there is **29 to 30 years** of zoned broadhectare land supply.

In terms of the future broadhectare land supply stocks (PSP required and unzoned), based on the two dwelling projections contained in VIF 2014 and **.id consulting 2015**, there is an additional **14 years** of supply to cater for projected demand across the municipality.

Bellarine Peninsula Region

It is considered that there is no need for additional zoned broadhectare residential land stocks across the Bellarine Peninsula Region of Geelong. Based on dwelling projections contained in VIF 2014 and **.id consulting 2015**, there is **14 years** of zoned broadhectare land supply.

In terms of the future broadhectare land supply stocks (PSP required and unzoned), based on the two dwelling projections contained in VIF 2014 and **.id consulting 2015**, there is an additional **10 years** of supply to cater for projected demand across the municipality.

Note: The above assumptions exclude minor infill land figures and for the Bellarine.

7.2.5 Infill Development

Infill development was discussed in Section 3.2.2.

7.3 Village 'Town Centre' and Retail Provision

The Barwon Heads Centre is located along Hitchcock Avenue and Bridge Road. Barwon Heads is defined as a 'Town Centre' under the retail centre hierarchy for Greater Geelong – similar to other towns on the Bellarine. Council is currently undertaking a review of the 2006 Retail Strategy. The draft Retail Strategy is yet to be adopted by Council. In the draft Retail Strategy a Town Centre is defined as:

Major community shopping locations providing weekly grocery shopping for the local township in combination with specialty store shopping that also services visitors to the region.

The draft Retail Strategy notes that the centre serves the local area and there is no main anchor (see Figure 8). The largest retail outlet in the town is the small 430m² IGA supermarket. This is a convenience supermarket and residents need to travel outside of Barwon Heads to visit a major supermarket. A Planning Permit was issued in January 2017 to redevelop the supermarket. The proposal will more than double the retail floor area of the supermarket to around 1,000m² and construct four, two bedroom residential units above.

During the last Structure Plan review an area of land located to the north of the Town Centre was recommended to be rezoned from Residential 1 on the east and west sides of Hitchcock Avenue, between Ozone and Bridge Roads, to Mixed Use. The rezone of the land was completed through Planning Scheme Amendment C159. This Mixed Use Zone allows for a variety of different uses including single dwellings on large sites, home occupations and commercial businesses.

A floor space audit was undertaken for the draft Retail Strategy in 2014. The audit revealed that Barwon Heads has 9,800m² of available floorspace in 2014; including the Mixed Use Zone area. 1,100m² of the available floorspace is vacant. Based on population the available floorspace is in excess of what is required for Barwon Heads (7,200m²). Taking account of population projections to 2031 this available floorspace is still expected to be adequate to support the population (9,300m²; or an excess of 500m²).

The draft strategy notes that with little residential growth planned for Barwon Heads and a need to protect areas of environmental and indigenous heritage value within and surrounding the town, the current role of Barwon Heads as a local town is likely to be maintained into the future. Overall the town centre extent is considered appropriate for the duration of the Structure Plan, based on no extension to the settlement boundary.

In all retail centres, the provision of accommodation uses above ground floor level is promoted, subject to appropriate provision of parking and access requirements.

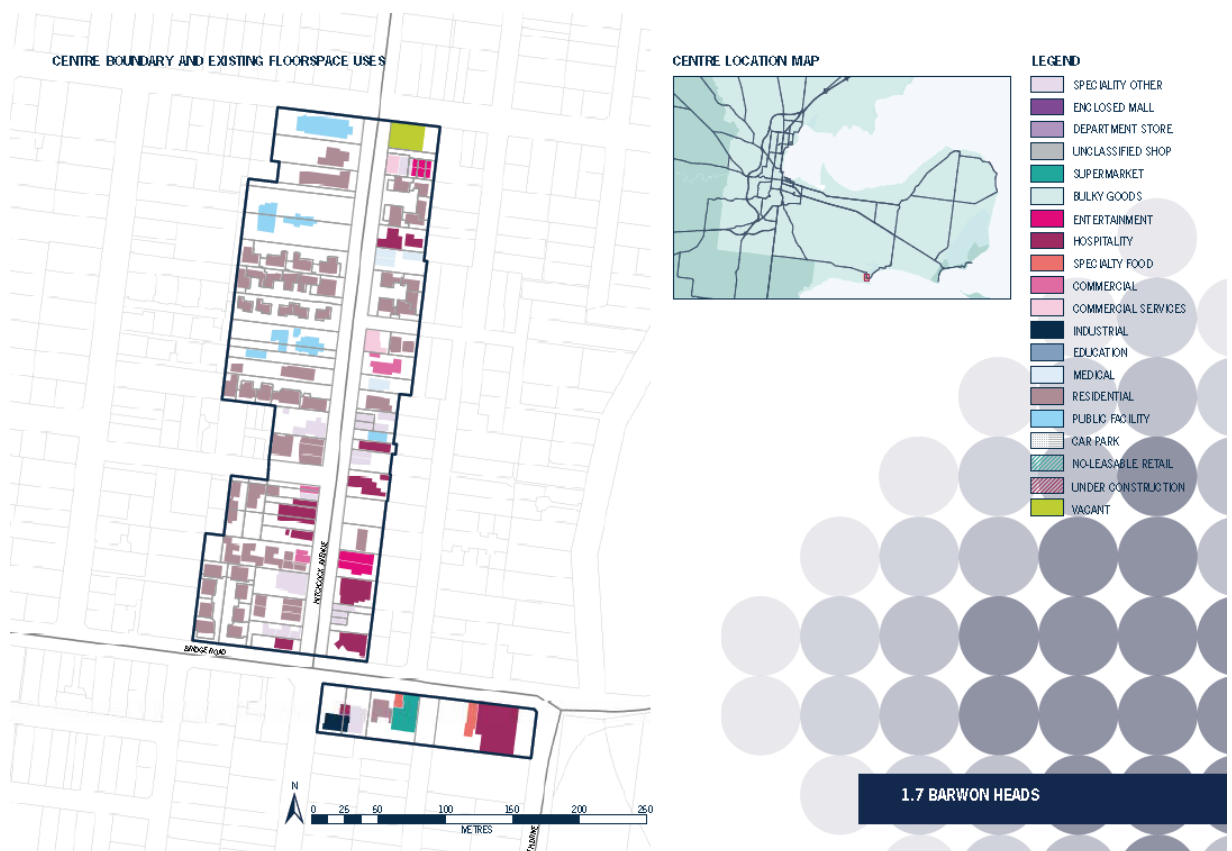


Figure 8. Types of uses located within Barwon Heads Town Centre

The sites on the southern side of Bridge Road, between Hitchcock Avenue and Golightly Street, present a significant opportunity for a landmark development within Barwon Heads at this important entrance to the town centre. Given the existing configuration of these sites, with longer depths to narrow frontage, a consolidated redevelopment of these sites is considered more appropriate than re-development of each individual site separately.

Secondary Centre: A small secondary centre is located on the corner of Barwon Heads Road and Golf Links Road and is zoned Mixed Use. An Apco service station is located on the site.

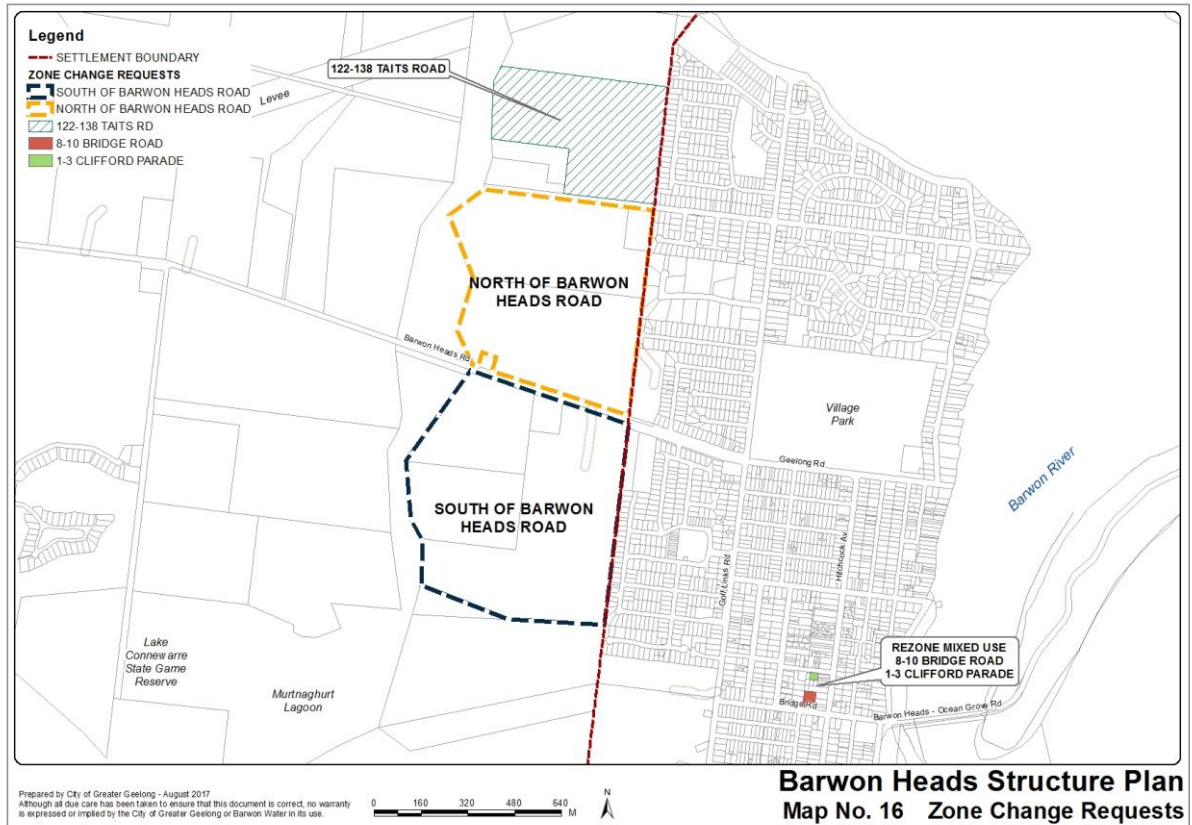
7.4 Further Development

7.4.1 Rezoning Requests and Interest

Three submissions have been received by Council requesting that Council consider land for urban development outside of the settlement boundary identified in the 2010 Structure Plan as shown in Table 16. A submission was also received by Council to rezone land within the town centre.

Table 16 - Rezoning Requests

Rezoning Request	Suggested lots (If known)
Residential Rezoning requests outside of the settlement boundary	
Land on the south side of Barwon Heads Road, west of existing Residential zone (1900 - 1920 Barwon Heads Road)	250 – 300
Rural land west of the existing settlement boundary on the north side of Barwon Heads Road to Taits Road (<i>representing owners of 135 Taits Road, 137 Taits Road and 1941 – 1949 Barwon Heads Road</i>)	Unknown
2 X submissions for land on the north side of Taits Road, west of existing Residential zone (122-138 Taits Road)	Unknown
Other rezoning requests	
Commercial 1 Zoned land: 1 – 3 Clifford Parade and 8 – 10 Bridge Road	N/A



7.4.2 Development of land outside of the settlement boundary

a) 1900 - 1920 Barwon Heads Road (south)

The land is located on higher ground than that on the north side of Barwon Heads Road. The land has an attractive outlook across to the Barwon Heads Golf Course, Murtnaghurt Lagoon and 13th Beach Golf Resort.

The subject site has a significant amount of planning history going back over ten years. In 2004 the land was subject to a request for rezoning 36 hectares of the existing 51 hectare site. This was subsequently deferred by Council pending the review of the Barwon Heads Structure Plan. Subsequent to the 2004 request for rezoning the development proposal was further refined by the proponents. The proposal that was considered under Planning Scheme Amendment Stage for C159 was to subdivide 23.5 hectares of land for residential purposes, with a significant area of public open space provided to abut the Murtnaghurt Lagoon. A total of 240 residential lots were proposed. The panel did not recommend that the Settlement Boundary be extended and the final structure plan that was gazetted into the Greater Geelong Planning Scheme retained the existing Settlement Boundary.

The current proposal is again seeking to develop the subject site for residential development and to extend the settlement boundary. It is proposed to provide for around 250-300 dwellings with a design that would be managed through strict design provisions, which would result in high quality, non-uniform and sustainable design outcomes. A concept plan is shown in Figure 9 and the development proposes:

- 13.88% for environmental buffer zone;
- 32.68% of land for unencumbered open space;
- 45.10% of land for residential (including retirement living/ aged care);
- 1.40% of land for arterial roads; and
- 20.82% of land for roads.

Key design outcomes proposed include:

- North oriented lots aligned with the existing built for layout of Barwon Heads.
- Site responsive design by retaining existing vegetation where possible.
- Balanced land supply including generous open space.
- Retaining and preserving the Murtnaghurt Lagoon and channel through sensitive design interfaces and environmental buffers.
- Tree lined buffers to the north, east and west to protect visual amenity.
- Linkages and connections through shared pathways to adjoining land south, east and north.
- A Design and Development Overlay is proposed to outline design controls and principles.

Arguments for the proposal as outlined in the submission include:

- Barwon Heads is a popular coastal town that is increasingly attracting more permanent residents, however there is limited land supply and the proposal will increase housing options and land supply and economic benefits.
- Murtnaghurt Lagoon, as an environmental asset, is the logical settlement boundary of Barwon Heads.
- The proposed scale of up to 250-300 dwellings (staged delivery) will not significantly impact on the character and amenity of Barwon Heads.
- There is the ability to increase community facilities including open spaces and a sporting oval, pedestrian linkages to Barwon Heads and possibly to Thirteenth Beach Surf Club, which support a net environmental benefit by providing new and improved facilities to the community.
- Development will support State and planning policies for a coastal settlement, including the State and Local Planning Policy Frameworks of the Greater Geelong Planning Scheme (GGPS), the Victorian Coastal Policy Statement and the Bellarine Peninsula Localised Planning Statement.
- Development can be designed to mitigate issues of development regarding concerns raised by Council for environmental impacts, flooding and climate change and specialist reports have been submitted to support this position. The land can potentially be delivered for sewer and a detailed traffic assessment would form part of the more detailed assessment.
- Amendment C159 generally supported the extension of the settlement boundary where a net environmental benefit could be demonstrated.
- Whilst consultation has been open to all members of the community, it is understood that many residents from Barwon Heads, the Bellarine and the wider Geelong have not lodged formal submissions in support of extending the settlement boundary for various reasons.

- It is selfish for the community to take a 'get in the loft and pull up the ladder' [*restrict any development*] approach.
- It would seem the last rezoning to the eastern boundary was an interim step.
- In terms of overburdening services there are several large shopping centres within 15 minutes of Barwon Heads with regular bus services.
- Given community concerns it would make sense to phase the rezoning over time.
- Options for a future review must be kept open.

Other less preferred options submitters have suggested include to rezone as Low Density Residential (LDZ), Rural Living (1ha minimum), or as Special Use similar to Yellow Gums in Ocean Grove or Warrenbeen in Barwon Heads. Not allowing LDZ is un-Australian as what happened to our rights to have space for big gardens.

Other submissions have been made regarding subdivision or development of the land under the Farming Zone. This is not relevant to the structure plan review process and would need to be undertaken through an appropriate planning permit application under the zone.

c) West of Settlement Boundary (north of Barwon Heads Road)

The submission represents a consortium of landowners with a total land area of around 40 hectares and seeks to include the area within an expanded settlement boundary:

- 135 Taits Road (1 hectare)
- 137 Taits Road (18 hectares)
- 1941-1949 Barwon Heads Road (20 hectares)

The reasons to support the submission are outlined below:

- The draft Structure Plan ignores the implications of limited housing supply. The Structure Plan relies too heavily on the need to consider land supply on a municipal basis over a 15 year period. Other strategies within Clause 11.02-1 require planning for urban growth to consider opportunities to consolidate, redevelop and intensify existing urban areas. If Council is not going to plan for intensification of Barwon Heads then they are obliged to manage an extension of the settlement boundary.
- The draft Structure Plan attempts to discount growth due to potential environmental impacts, but clearly states that studies on these impacts have not been provided.
- The Structure Plan is too reliant on the G21 Regional Growth Plan, which did not identify Barwon Heads as a town for growth. This is flawed since G21 was influenced by Council who at the time did not want growth to go to Barwon Heads.
- The draft Structure Plan is too over-reliant on community opposition and Council has obligation under objectives 1(g) of the Planning and Environment Act to "balance the present and future interests of all Victorians".
- An expansion of the western boundary could involve well-planned development with large separation distances to environmental values, plenty of parkland and vegetation, integrated water management, highly sustainable development outcomes and great linkages to the existing town.
- Development of the area would provide the additional demand to trigger community services.

7.4.3 Analysis of Proposed Further Development

The westward expansion to the settlement boundary is not supported for Barwon Heads. In the first instance it is considered that there is a lack of policy support 'in principle' to extend the settlement boundary. To support this position Council has received significant community opposition to development through two community engagement processes. Due to the lack of 'in-principle' support for development, Council has not undertaken a detailed feasibility assessment of individual sites. High level advice has been received from referral agencies on

aspects such as drainage, environment and climate change and other servicing requirements. The justification to not support the extension of the settlement boundary are again similar to those put forward by the Council during the last review of the Barwon Heads Structure Plan and Planning Scheme Amendment C159. It is considered that since the last Structure Plan review the arguments that Council made against the extension to the settlement boundary have not changed and in fact have been strengthened.

Urban development outside of the settlement boundary would irrevocably erode the “village” atmosphere of the town and undermine the vision of the town, which aspires to be a place, where human impact is managed to support the fragile natural surroundings.

These above issues are discussed in more detail below.

Policy basis.

Table 17 below summarises the key considerations for determining whether or not to change a settlement boundary relevant to Barwon Heads. More detailed summaries of the documents are set out in Section 2.2.

Table 17. Key documents and policy for determining whether or not to change the Barwon Heads Settlement Boundary.

Document	Key drivers/ policy
Implementing a Coastal Settlement Boundary. PPN (36). DELWP 2016.	<p>Settlement boundary to be considered through a strategic planning process and identify:</p> <ul style="list-style-type: none"> ▪ Desired future vision, role and function of a settlement. ▪ Constraints on development such as...native vegetation, rural land-use activity and areas of environmental or landscape significance and sensitivity. ▪ Areas susceptible to flooding and other hazards. ▪ Supply/ demand of land within a 10 year planning horizon and opportunities for future growth (if any). <p>A review may occur due to emerging information about environmental values of an area, increased infrastructure capacity or other strategic values and must consider the Victorian Coastal Strategy.</p>
Victorian Coastal Strategy (VCS) 2014 – Part of the State Planning Policy Framework	<p>There is hierarchy to guide decision making for coastal and marine environments and in the first instance there is a requirement for the protection of significant environmental and cultural values. Development will only be considered where located within existing, modified and resilient environments where the demand for development is evident and any impacts can be managed sustainably. In planning for coastal settlements (Principle 2.3):</p> <ul style="list-style-type: none"> ▪ Coastal settlements support the protection and enhancement of environmental, social and cultural and economic values of the coast. ▪ Non-urban breaks are maintained between coastal settlements to preserve the character of the coastline and coastal settlements. ▪ Settlement planning directs growth to areas suitable for accommodating sustainable growth. <p>There is also a requirement to maintain or improve the environmental condition of coastal wetlands and estuaries, including Ramsar sites (Principle 1.3).</p>
G21 Regional Growth Plan	<p>Barwon Heads is not identified as a town with a growth role under the plan. Barwon Heads is a coastal settlement that will experience modest growth and play an important tourism and agricultural role to surrounding areas. Growth is limited to identified structure plan settlement boundaries.</p>
Bellarine Peninsula Localised Planning Statement 2014.	<p>Confirms the G21 settlement strategy for growth. It also seeks:</p> <ul style="list-style-type: none"> ▪ To protect and enhance the rural and coastal environment on the Bellarine Peninsula and maintain non-urban breaks with open farmed landscapes between

	<p>settlements.</p> <ul style="list-style-type: none"> To preserve and maintain the ecology of the Bellarine Peninsula's environmentally significant coastal, wetland and vegetated areas. This includes a need to ensure appropriate stormwater measures are in place to avoid adverse impacts on marine waters, lakes, wetlands and waterways.
Rural Land Use Strategy	<p>Preserve and enhance the productive capacity of the land, the rural farmed landscape and environmental condition for rural areas. It also sets out a need to maintain a distinct separation between urban and rural areas. No further rural living nodes to be developed.</p>
The existing Greater Geelong Planning Scheme.	<p>State Planning Policy Statement Clause 11: Settlement Clause 11.05: Bellarine Peninsula Localised Planning Statement Clause 12: Environment & Landscape Values Clause 13: Environmental Risks</p> <p>Local Planning Policy Statement 21.05: Natural Environment 21.06: Settlement and Housing 21.14: Bellarine Peninsula</p>
Other documents	<ul style="list-style-type: none"> Murtnaghurt Lagoon, Barwon Heads, Flora and Fauna Assessment. Ecology Australia, prepared for Save Barwon Heads Alliance. 2009 (Ecology Study) Murtnaghurt Lagoon, Bellarine Peninsula & Related Landforms: Nature, Origin & Geoscience Significance. Neville Rosengren La Trobe University & Environment GeoSurveys Pty Ltd, prepared for Save Barwon Heads Alliance. 2009. The importance of the natural surroundings and maintaining a western boundary as set out in the Barwon Heads Urban Design Framework and the Bellarine Peninsula Strategic Plan 2006-2016 (and reaffirmed in the Barwon Heads Structure Plan 2010).

Contrary to State planning policies, including the VCS. In accordance with PPN36 a settlement boundary can be reviewed and must have regard to changed circumstances and other relevant matters. A key consideration is the VCS.

The VCS notes that growth should occur in areas that have been identified for growth. Where settlement boundaries are extended, this should be in areas where there will be little impact on the coast and abutting coast-sensitive land. Under the VCS, and other relevant strategies, Barwon Heads is not identified as an area for major growth/ 'promote' or medium growth/ 'support'.

Since 2010 the State Planning Policy Framework for the Bellarine Peninsula has been strengthened by the State Government through the introduction of the Bellarine Peninsula Localised Planning Statement. This reinforces the importance of the ecology of the Bellarine Peninsula and to protect from inappropriate urban encroachment.

Clause 12 of the SPPF also requires that Council adopt the 'precautionary principle' and that public and private decisions should be guided by careful evaluation to avoid, wherever practical, serious or irreversible damage to the environment. There is also a requirement to consider the cumulative impacts of land and development and to consider impacts of any change in land-use or development that may affect biodiversity value.

The City of Greater Geelong's LPPF provides direction about how towns within the municipality are to be planned, the overriding objectives being to maintain compact urban forms and, particularly on the Bellarine, provide for distinct settlements separated by non-urban breaks. The LPPF designates Ocean Grove, Drysdale/Clifton Springs and Leopold as the towns suitable for further growth on the Bellarine Peninsula.

Demand for housing. As was set out earlier in Section 7.0 there is limited supply of housing for Barwon Heads. State and Local policy directs that housing supply should be considered on a Municipal, rather than a town by

town basis – where there is more than adequate supply of housing over the next 15 years. However, this does not automatically result in no growth whatsoever for a town not identified for growth. On the contrary the G21 plan notes that modest growth can occur, but this must be considered in the context of other policies, such as 21.06 which primarily directs growth to the growth area locations and at the same time promotes urban consolidation in line with the Housing Diversity Strategy. Ultimately, modest growth does not necessarily mean outward expansion and Barwon Heads should be considered in terms of its locational context. PPN36 is also relevant in that we must consider constraints in determining what type of modest growth is appropriate.

For Barwon Heads the need for growth must be considered in a broader context. There are substantial amounts of growth occurring in the growth area locations of Armstrong Creek and the northern area of Ocean Grove. Clearly Barwon Heads cannot be looked at in isolation and Ocean Grove, which is located only 5km from Barwon Heads, is directly linked as a housing market. A housing market can consider key functional linkages between places where people live and work and is not necessarily defined by one township only. This is relevant for Barwon Heads in that as a standalone suburb the town does not have the range of services available to make it self sufficient. A high school and other larger community and health facilities need to be accessed at Ocean Grove. This is also the case for employment where a significant number of people need to travel to Geelong and Ocean Grove for employment. A growth argument is therefore not to be considered for Barwon Heads in isolation.

A second part to the argument for increased lot supply is focused around increasing the supply to create a more affordable housing market. Arguments for this revolve around the premise that fringe housing is “entry level” housing, therefore if supply at the fringe is restricted, prices increase. Other influences on housing affordability which have been identified by various bodies are the sustained period of low interest rates, a boom in financial speculation inflating asset prices, and various new government incentives to spend up big on real estate. As noted above the market for properties is larger than just Barwon Heads. Plus it is debateable that for a small town, new land is going to be priced at a lower point than what is the current market price for Barwon Heads. Across Victoria land in new development areas is often released in a limited or phased manner to keep prices higher.

An argument is put forward that the development of the area will form a natural boundary and PPN36 provides some support for this. There is some merit in this argument when considered in isolation, however, it does not justify further development in the overall context of arguments against development.

Conflicting land uses. The State Game Reserve, of which Murtnaghurt Lagoon makes up a part of, is a permitted duck hunting area. As such there is potential for conflict between increasing development and hunting. This has been identified as an issue for Armstrong Creek where it adjoins Hospital Swamps. There also have been complaints from residents at The Thirteenth Beach Resort adjacent to Murtnaghurt Lagoon, which highlight the impacts that additional nearby housing could create.

It is noted that it is an offence in Victoria to carry or use a loaded firearm in a town, populous place or on any thoroughfare or place open to or used by the public for passage for vehicles.

The Jirrahlinga Koala and Wildlife Sanctuary also provides pet boarding for a range of pets. The Environmental Protection Agency sets out noise control guidance for boarding kennels for dogs. The guidelines recommend that kennels should be located at least 500m from residential areas as well as recommending other design and management requirements.

Undesirable precedent. It is likely that there will be an argument put forward that certain portions of land should be considered for development. It is Council’s contention that for the reasons provided above it is not appropriate to extend the settlement boundary in any location. However, any consideration for some of the land to develop would create a clear precedent for further land to be considered west of the settlement boundary. There is clear policy and community support to retain the current settlement boundary as well as a number of significant constraints. Any development that was to go west of the settlement boundary would seriously affect the ability to hold this policy position for the entire area west of the settlement boundary.

Community opposition

The development of land to the west of the Settlement Boundary has been subject to strong opposition during previous Structure Plan reviews. An August 2007 version of the Structure Plan was exhibited for consultation that included the land south of Barwon Heads Road within the Settlement Boundary. This generated a large number of submissions: 873, of which 771 were opposed to the change to the settlement boundary.

In December 2007 Council adopted an amended version of the Structure Plan based on the opposition that was received. That version of the Structure Plan was subsequently exhibited as Planning Scheme Amendment 159. In the Planning Panel decision of January 2010 the Panel, while not recommended a change to the settlement boundary, encouraged the Council (and the Barwon Heads community) to reconsider its opposition to the development of this land in the context of environmental benefits that could be accrued. The panel was clear that this is to be determined by the Council and the Barwon Heads Community. Further, the opposition by the community is not something that the Panel considered it was able to dismiss.

The current Structure Plan update process has shown through two community engagement processes that the significant opposition by the community remains. There was in fact only limited support for development. This included the Help Shape the Place engagement in October and November 2016 where Council received over 130 submissions and around 120 people who attended engagement sessions. Engagement on the draft Structure Plan during May and June 2017 resulted in Council receiving 1,050 submissions. The key concerns of the community remains the need to retain the village feel of the township, by not expanding the boundary, protecting the natural environment and biodiversity and the context of the river, beaches and significant wetlands.

The proposed development for 1900 Barwon Heads Road is also more substantial in terms of the number of houses and land area proposed for residential uses under the 2010 Structure Plan. It is therefore not considered that the scale of development proposed constitutes 'limited' development.

Potential community benefit

The Proposal for 1900 to 1920 Barwon Heads Road notes that the proposal will provide community benefits. As was outlined in Section 5.2.2 the need for expanded community services and land would essentially be driven by the population growth that would result from an expanded settlement boundary. Potential pedestrian connections would have a benefit for the community. Aged care facilities are not supported outside of the settlement boundary.

Detailed land development and constraints

As noted earlier there is no policy support for the development of land outside of the Settlement Boundary therefore a detailed assessment of land development feasibility has not been undertaken.

The proponents for 1900 Barwon Heads Road have submitted reports that were used during preparation of the 2010 Structure Plan that they consider support the development of land outside of the Settlement Boundary. This includes a Drainage and Services Report (2009), a Coastal Vulnerability, Flooding and Stormwater Assessment (2009) and updated biodiversity advice (June 2017). The reports provided are not detailed assessments and are high level at this stage. No similar information has been provided from the landowners north of Barwon Heads Road. Referral advice from internal and external experts that has been provided to Council does not support the western expansion of development outside of the settlement boundary.

Environmental Constraints and stormwater. As is set out in Section 3.0, the environmental surroundings to Barwon Heads form an intrinsic part of the town's identity, both the biodiversity and landscape setting. This includes the internationally recognised Ramsar wetlands and overflow channel that connects Murtnaghurt Lagoon to the Barwon River Estuary and Lake Connewarre; as well as State and national ecological values of significance. The quality and importance of these areas are well established through numerous studies and reports. Impacts of development are not restricted to the Ramsar wetlands themselves and also from off site impacts of development, such as through the development process and subsequent stormwater drainage; or indirect impacts from residential growth, such as an increase of domestic animals.

Council's Environmental Planning and Waterways Unit do not support the extension of the settlement boundary due to the potential resulting impact on significant environmental values, which is likely to result in the direct and

indirect loss of this biodiversity. The Department for Environment Land Water and Planning (DELWP) have also raised concerns regarding a change to the settlement boundary and lack of policy support in the context of environmental sensitivities and constraints surrounding the township. Of the greatest concern is the impact to the internationally recognised Ramsar Wetlands at Murtnaghurt Lagoon and overflow channel that connects the lagoon to Lake Connewarre via the Barwon River. A change in land use to allow urban development would need to consider implications for the ecological character of the Ramsar site due to stormwater runoff (volumes, timing and frequency) and other implications such as sedimentation, pollution and nutrient loads from an urbanising environment. Experience from other developments in the City highlights that Council needs to adopt the 'precautionary principle' as outlined in Clause 12 of the GGPS. DELWP have advised that experience from Armstrong Creek development has identified that increasing freshwater inflows into a saline wetland system can lead to degradation of the wetland by changing the vegetation community and not allowing the system to dry out as it would occur in the natural system.

Council's Engineering Services does not support the expansion of the settlement boundary to allow further residential development. Detail around stormwater is outlined in Section 6.0. The key areas of concern are:

- Council does not support the use of pumped main drainage systems in greenfield development. Multiple pump stations would likely be required to service the area, and Council would not accept these in this area due to the significant ongoing operational and maintenance costs resulting from the low lying nature of the land and salinity levels from groundwater.
- Any alteration of the township boundary to the west would need to be informed by a detailed risk assessment, including structural assessment of the levee and imposition of appropriate buffers in accordance with the Victorian Floodplain Management Strategy (2016).
- There are already issues with the stormwater drainage in the existing Barwon Heads township. Additional development could exacerbate these impacts – particularly through the increase of pervious surfaces. Retarding basins and wetlands can be used to limit peak flow rates to pre-existing conditions, but do little to mitigate the increase in accumulative runoff volume. This could adversely impact on the ecological character of the receiving water bodies.
- A detailed study would be required to demonstrate an understanding of groundwater conditions and geology to ensure no adverse impact, particularly a demonstration of no new uncontrolled groundwater discharge to adjoining wetlands.
- An Environmental Effects Statement and/or Environmental Protection and Biodiversity Act approval may be required to assess impacts of development on the Ramsar wetlands.

The protection of environmental values of the lagoon and overflow channel can best be achieved by retaining the land outside of the settlement boundary in its current Farming Zone and rural land use.

Flooding and climate change constraints. As was noted in Section 6.3, Barwon Heads has low lying land that is subject to potential flooding. The Corangamite Catchment Management Authority have noted that approximately 11% of the land south of Barwon Heads Road would be subject to inundation from the expected backwater flooding from Murtnaghurt Lagoon – in the event of a 1% AEP flood under current climatic conditions. For the land north of Barwon Heads Road approximately 15% of the land would be subject to inundation from Murtnaghurt Lagoon and a localised wetland along the eastern boundary. Any consideration for development would need to consider the following:

- Flood storage would need to be preserved and increased inundation would be expected with increased urban development. Flood modelling would be required and would need to consider the impacts of climate change.
- Potential amendment of the Land Subject to Inundation Overlay to reflect the current best estimate for flooding.
- No development should be considered on the land north of the levee bank.

- Any proposal would need an Environmental Management Plan for Murtnaghurt Lagoon to protect key values as outlined in the Corangamite Water Strategy 2014-2022. *See also Pg 186 of Part C of the strategy.*
- A Cultural Heritage Management Plan would be needed to determine indigenous cultural heritage sensitivities.

Water and sewer Infrastructure

As was noted in Section 6.1 and 6.2 there would be a need for additional water and sewer infrastructure, however, this would not be a constraint to development.

Consideration for Rural Living Zone or Low Density Residential Zone

The Rural Land Use Strategy 2007 and Local Planning Policy Framework of the Planning Scheme do not support new Rural Living zone areas. The City of Greater Geelong already has a significant amount of this type of land and does not seek to provide any more. This land can be unsustainable to service and as noted in the State Planning Policy Framework can compromise future development at high densities.

Essentially, once this has been developed for Rural Living, there is an expectation that the land could then be sequenced for future residential.

The Low Density Residential Zone is generally applied to the fringes of existing townships that are constrained for residential development and generally provides un-serviced lots at a minimum 0.4ha or serviced lots at 0.2ha. This zone is a residential zone and even though the lots being created are larger these would still change the character of the area from being rural to residential. Plus there would still need to be the same consideration over the impact of residential development. This type of zone is also an inefficient way to create allotments and if residential development was seen as an appropriate zone change for the area, Council would promote normal housing development at 15 dwellings per hectare to ensure the sustainable use of land.

Individual sites

Cost of maintenance and removal of vegetation on land is not a valid planning consideration as an assessment is made on the planning merits of an proposal.

Further development of the entire western edge of town is considered in the context of the relevant State and Local guidelines and strategies and in the context of community benefit.

7.4.4 Other rezoning requests.

Commercial 1 Zoned land: 1 – 3 Clifford Parade and 8 – 10 Bridge Road.

Request to rezone the subject land to Mixed Use Zone. Reasons given to support the rezone include:

- The Issues Paper acknowledges that Barwon Heads currently has an excess of the retail area required to service the project size of the town in 2031.
- The paper fails to identify the excess land zoned as commercial 1, but currently used for residential west of the town centre between Clifford Parade and Bridge Road. The current Commercial 1 zoning of this land is arguably inappropriate.
- Clifford Parade does not greatly lend itself to retail/ commercial development as it is narrow and has been made a one-way street to overcome traffic bottlenecks.

A rezone of this area to Mixed Use Zone is not supported by Council. The projections provided in the draft Retail Strategy are not an absolute figure and an excess of 500m² is considered to be insignificant. Further the two areas of land that have been requested for rezoning total 3,645m² and could accommodate retail floor space that is significantly higher than the projected excess in the draft Retail Strategy. Residential development is not precluded from being developed on these sites, provided that is undertaken above ground floor level.

The site located along Bridge Road is a single storey residential development and is unlikely to be redeveloped due to all the individual ownership of each of the units. However, should redevelopment of the site be promoted,

due to this site being a key entrance to the town, it is a prime location for activated ground floor uses. The two sites along Clifford Parade are located next to community facilities and commercial development at the ground floor level would provide appropriate connectivity along Clifford Parade, which has been changed to a one way street.

7.5 Other expressions of interest

Stage C of Thirteenth Beach Golf Resort

There is a significant amount of planning history associated with the 13th Beach Resort. The key aspects of the planning history include (full history of the site in C54 & C159):

- Amendment R45 (1994), which rezoned the land at 1662-1770 Barwon Heads Road (13th Beach Resort) to part Tomara Resort Zone and part Rural Natural Features Zone. Development then was required to be undertaken in accordance with the Tomara Concept Plan, which showed the land in three stages – A, B and C. This Concept Plan showed the Stage B land as being set aside for ‘Agriculture-Model Farm’ with ‘Proposed Golf Course and Future Recreation Areas’ with the land known as Stage C, east of Lings Road, being the same.
- Both zones remained in place until the introduction of the new format Greater Geelong Planning Scheme, where on the 27th July 2000 the whole of the resort land was included in the Comprehensive Development Zone - Schedule 1 - Tomara Resort. The Tomara Resort Comprehensive Development Plan (CDP) 2000, replaced the 1993 Plan and became an Incorporated Document at Clause 81 of the Scheme. The 2000 CDP did not show any development proposed in the Stage B or Stage C area. Therefore a Planning Scheme Amendment was required to facilitate the future development of Stage B (C54).
- In approving Amendment C54 the Minister for Planning stated that he agreed with Council that strict limitations were necessary to manage future use and development of Stage C, to maintain the green break to the Barwon Heads township. In determining this position the Minister ‘urged Council to reflect this outcome in the new Barwon Heads Structure Plan’.
- During the preparation of the 2010 Structure Plan Council sought to rezone the Stage C land as Rural Conservation Land. The Panel’s report on the subsequent Planning Scheme Amendment C159 supported the retention of the Comprehensive Development Zone given its ability to provide the greatest level of control over future site outcomes and the potential to deliver net environmental benefits to Murtnaghut Lagoon.
- The panel noted however that the zoning of the land would not necessarily be retained in perpetuity if not acted on. If a suitable development proposal is not advanced in the short term (perhaps 2 years) it would be reasonable for Council to revisit the zoning of the land and potentially remove the CDZ1. The panel supported the Farming Zone as the potential zone, rather than the Rural Conservation Zone.

Council could revisit the zoning of the land as a part of this Structure Plan update. No formal proposal has been lodged by the tourist operator since the Structure Plan was adopted in the Planning Scheme in 2010; however, there has been informal discussions. During engagement for the Issues and Options for the Barwon Heads Structure Plan in October and November 2017 a question was asked in the Issues Paper as to whether there would be support for a change of zone back to Farming Zone. Overall it is considered that the Comprehensive Planning Zone should remain for the following reasons:

- The appropriateness of the zone has previously been tested through a Panel. It is not considered to be good planning practice to rezone simply for the fact that no development has occurred in a short time period. There must be a determination made as to what is the best zone for the land having regard to all relevant considerations and policy. It is understood that due to a change in economic conditions the resort has not been able to pursue to further development.
- There was no strong support for rezoning of the land through consultation. This proposal was strongly opposed by the 13th Beach Resort.

- The Golf Course is recognised in the Tourism Greater Geelong and the Bellarine Tourism Development Strategy 2016 as an important attraction for the Bellarine South sub-region.
- The development will still be required to provide a net environmental benefit for the Murtnaghurt Lagoon and channel, which will be of a benefit to the broader community. Stage C does not allow for any residential development and this policy position should be strongly maintained.
- A golf course, while a human altered landscape, is largely undeveloped parkland and can provide a scenic visual amenity that at the same time is a form of an undeveloped break . This would not necessarily be a justification for the development of land as a golf course, however, 13th Beach is a high end golf course that is well maintained and already established in the area.
- More development is allowed for through a permit application in the Farming Zone through changes made by the State under VC103 that could potentially lead to demand for a much wider range of land uses on the site. It is noted that Council has amended its Planning Scheme through C347 to manage the impacts of this change.
- Council could again pursue a Rural Conservation Zone, however, this was not support by the Panel in 2010. It may also be hard to justify as no other directly adjacent areas of land in the area is zoned RCZ, nor has any strategic work been undertaken to justify any specific objectives for the zone.

65 – 105 Lings Road, Connewarre

The land is surrounded by the Comprehensive Development Zone (CDZ1) and abuts the Lake Connewarre State Game Reserve and Murtnaghurt Lagoon to the south. The Barwon Heads Structure Plan review provides an opportunity to recognise the tourism potential of the land, linked to a broader regional tourism setting – recognising the proposed *Clause 22.06 tourism, Accommodation and Function Centre Development in Rural Areas*.

The site is located within the Farming Zone and as noted above Clause 22.06 is appropriate to be considered for this area. It is not considered necessary to specifically recognise this in the Structure Plan and no proposal has been put forward by the submitter.

44 River Parade and 14 Eddystone Court

A submission was received regarding the development potential of farming zoned land to the north of Barwon Heads at 44 River Parade and 14 Eddystone Court. These areas are located within the settlement boundary, however, are included in the Farming Zone. Further investigations have indicated that this is an anomaly. The two parcels of land were originally linked to the area of land associated by a historical Section 173 agreement. Each parcel is associated with a larger parcel of farming land to the west that is outside of the settlement boundary. The site is also a triangle of land wedged between the Moonah Park at the edge of the settlement boundary. 44 River Parade is also identified as Flood Prone Land. Overall the land is likely to be constrained and it is recommended that the settlement boundary be changed to exclude the land from the settlement area (see Map 2).

Jirrahlinga Koala and wildlife Sanctuary

A general submission was received requesting to rezone the Jirrahlinga Koala and Wildlife Sanctuary to Special Use Zone to uphold the environmental and land use values. The submission was not received from the landowner of the site. The sanctuary is located within the Farming Zone and has existing use rights to operate. Further the land use is privately owned and the submission has not come from the landowners. A rezone is not considered necessary and the use is buffered from residential uses by virtue of being located in the Farming Zone.

7.6 Key Influences

- The size of Barwon Heads Town Centre is appropriate to cater for growth to 2031;
- Pressure to expand western edge of township to convert rural land to residential use;
- No policy support for a expansion to the western end of the township, which includes:
 - More than significant land supply is available at both the Municipal and Bellarine Peninsula regions within Greater Geelong.
 - House prices are an issue in Barwon Heads, however, there is significant housing growth is occurring in the surrounding growth area locations of Armstrong Creek and Ocean Grove.
 - There are significant constraints for a western expansion, including impacts on environmental and coastal areas, flooding/ climate change and issues around stormwater discharge.
- Potential for some community benefit by way of expanded community services through the rezoning of land on the western edge;
- Opportunity for Stage C of 13th Beach Golf Resort to be redeveloped with a net environmental benefit to the broader community, with no further residential development.