



# Local Rural Planning **Strategy**



2006



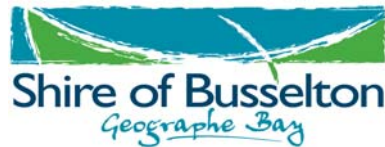
# Local Rural Planning **Strategy**

Prepared by

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Adopted by Council pursuant to  
Clause 103 of District Town Planning  
Scheme No. 20 on **13 December 2006**

Endorsed by the WAPC as a framework  
for future land use, zoning, subdivision  
and development on **16 November 2007**



# Local Rural Planning Strategy

	<b>PAGE</b>
<b>1. INTRODUCTION</b>	
1.1 Background .....	1
1.2 Objectives of the Review .....	2
1.3 Study Area.....	3
1.4 Vision for the Rural Areas of the Shire .....	4
1.5 Methodology.....	5
<b>2. RURAL ENVIRONMENT</b>	
2.1 Land Systems.....	6
2.2 Biodiversity .....	13
2.3 Wetlands, Waterways and Groundwater.....	18
2.4 Climate .....	21
2.5 Minerals and Basic Raw Materials .....	21
2.6 Conservation Reserves .....	22
2.7 Rural Landscape .....	22
2.8 Land Capability.....	23
<b>3. SOCIAL AND ECONOMIC ASPECTS</b>	
3.1 Introduction.....	27
3.2 Heritage.....	27
3.3 Population .....	29
3.4 Employment .....	33
3.5 Economic Sectors .....	34
3.6 Tourism .....	36
3.7 Rural Settlement.....	38
3.8 Infrastructure .....	39
3.9 Development Profile.....	42
<b>4. REGIONAL AND LOCAL PLANNING</b>	
4.1 Introduction.....	44
4.2 State Sustainability Strategy .....	44
4.3 State Planning Strategy.....	45
4.4 Regional Development Policy .....	45
4.5 Leeuwin-Naturaliste Ridge State Planning Policy .....	46
4.6 Agricultural and Rural Land Use State Planning Policy .....	47
4.7 Other State Government Policies and Guidelines.....	49
4.8 Local Government Planning Instruments .....	50
4.9 Community and Industry Guidelines .....	53

## **5. RURAL ISSUES**

5.1	Agricultural Viability and Rural Subdivision .....	54
5.2	Land Use Conflict and Competition .....	57
5.3	Environmental Issues .....	59
5.4	Landscape and Character .....	62
5.5	Settlement Hierarchy .....	62
5.6	Fire Management .....	63

## **6. COMMUNITY CONSULTATION**

6.1	Vision Workshop - 2004 .....	65
6.2	Stakeholder Consultation - 2004 .....	67
6.3	Community Survey - 2004 .....	67
6.4	Submissions from the Public .....	71
6.5	Reference Group Meetings .....	72
6.6	Formal Consultation - 2006 .....	72
6.7	Stakeholder Consultation - 2006 .....	73

## **7. RURAL STRATEGY PROVISIONS**

7.1	Precinct 1: Primary Rural .....	76
7.2	Precinct 2: Rural Wetlands .....	81
7.3	Precinct 3: Whicher Range .....	84
7.4	Precinct 4: Western Rural .....	87
7.5	Precinct 5: Central Rural .....	92
7.6	Precinct 6: Commonage .....	97
7.7	Precinct 7: Naturaliste .....	101
7.8	Precinct 8: Western Coastal .....	106
7.9	Subdivision and Development .....	112

## **8. IMPLEMENTATION**

8.1	Context .....	114
8.2	Implementation Mechanism .....	114

<b>ACKNOWLEDGEMENTS</b> .....	115
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<b>REFERENCES</b> .....	116
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## **FIGURES**

Figure 1: Study Area .....	3
Figure 2: Primary Land Systems .....	7
Figure 3: Digital Elevation Model .....	16
Figure 4: Vegetation Density .....	17
Figure 5: LandSat Image .....	20
Figure 6: Current Zones and Reserves .....	52
Figure 7: Topo-cadastre Base .....	64
Figure 8: Local Rural Planning Strategy Precincts .....	111

<b>APPENDICES</b> .....	118
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# 1. INTRODUCTION

## 1.1 BACKGROUND

The Shire of Busselton has experienced one of the highest ongoing rates of population growth in regional Australia - over 4% average annual growth since 1981. The preliminary estimated resident population of the Shire in June 2006 was 26,638 according to the Australian Bureau of Statistics (ABS). In conjunction with increasing complexity in the planning process this rate of growth requires a high priority to be placed on strategic planning if the Shire's decision-making is to be consistent with community needs and expectations.

It is clear that the rate of demographic change and development in the Shire and in the region will not diminish in the short term and that many of the Shire's policies and strategies will require review or replacement on an ongoing basis in order to remain valid and useful.

One of the Shire's roles is to formulate and review planning statute and policy to provide for more sustainable development outcomes and reflect the Shire's Strategic Plan. This requires analysis of community needs and the formulation of policy and town planning scheme outcomes that guide land use and the form of development over strategic time frames (5-50 years). It requires a balance between retention of the character and lifestyle values of the Shire and management of the high rate of demographic change.

This is a significant initiative involving formulation of a 'Local Planning Strategy' leading to a review of the District Town Planning Scheme, with the Local Rural Planning Strategy comprising an important component of this.

The Local Planning Strategy will involve the formulation of a number of strategic and policy outcomes that will inform the Scheme review. These will include strategies relating to settlement and housing, transport, commerce, tourism, environment, heritage and rural land use.

The Shire of Busselton adopted a Rural Strategy in 1993 to guide land use and development in the rural areas of the Shire. Since that time there has been significant population growth and development in the Shire that has resulted in the take-up of some of the development opportunities provided in the Rural Strategy; and an increase in the pressure to subdivide rural land for a range of agricultural and non-agricultural land uses.

The Shire of Busselton is one of the most productive agricultural areas in Western Australia. Some of the more intensive agricultural uses include viticulture and horticulture such as vegetables and olives. Other uses increasing the competition for land in rural areas include tourist and lifestyle uses. Much of the land use pressure and conflict is more evident in the western parts of the Shire close to the coast, Leeuwin-Naturaliste National Park and the viticultural areas. There have also been subdivision and development pressures on the remaining predominantly broad-acre farming areas of the Shire.

Since 1993 there have been a number of planning changes to the planning framework of the Shire. The preparation of the Leeuwin-Naturaliste Ridge State Planning Policy in 1998 (amended in 2003) identified a range of land uses and policy designations for land in the western part of the Shire. District Town Planning Scheme No. 20, 1999 (the Scheme) provides a detailed statutory planning basis for the consideration of land use and development within the rural zones in the Shire. The provisions in the Scheme and the policy framework supersede many of the 1993 Rural Strategy provisions.

In March 2002, the Western Australian Planning Commission (WAPC) released its Agricultural and Rural Land Use Planning Policy. This Policy was established to reinforce the long-term protection and support for agriculture in the State. It aims to protect the agricultural land resources in WA as well as address related uses such as land use compatibility, settlement planning, natural resource management and environmental considerations. The provisions contained in the Shire's Strategy are required to be consistent with all State Planning Policies.

In order to ensure that rural land use planning policy remains current and useful, the Shire has decided to update and review the Rural Strategy. Accordingly, Council adopted this Local Rural Planning Strategy in December 2006 to guide sustainable rural planning in the Shire. It supersedes and replaces the 1993 Rural Strategy and comprises an important component of the Local Planning Strategy for the Shire, leading to review of the district town planning scheme.

## **1.2 OBJECTIVES OF THE REVIEW**

The main outcome of the Local Rural Planning Strategy is to provide an updated policy framework that promotes the following objectives:

- To protect the commercial and agricultural viability of rural land and rural land use in the Shire.
- To minimise the potential for conflict between agricultural and non-agricultural uses in the rural areas.
- To maintain the rural and natural landscape character values of the Shire.
- To ensure consistency with the objectives and intent of the Agricultural and Rural Land Use Planning Policy, Leeuwin-Naturaliste Ridge Planning Policy and other State Planning Policies.
- To protect and manage the natural resources of the rural areas of the Shire.
- To identify and establish a sustainable and compatible role for non-agricultural uses, particularly appropriate tourist uses within the rural areas of the Shire.
- To confine existing settlement areas in and adjoining the rural areas of the Shire.
- To achieve consistency in local and regional decision making through incorporation of strategic outcomes into the Shire's Local Planning Strategy and town planning scheme review.
- To provide a guide for future land use, zoning, structure planning, subdivision and development in the rural areas of the Shire.

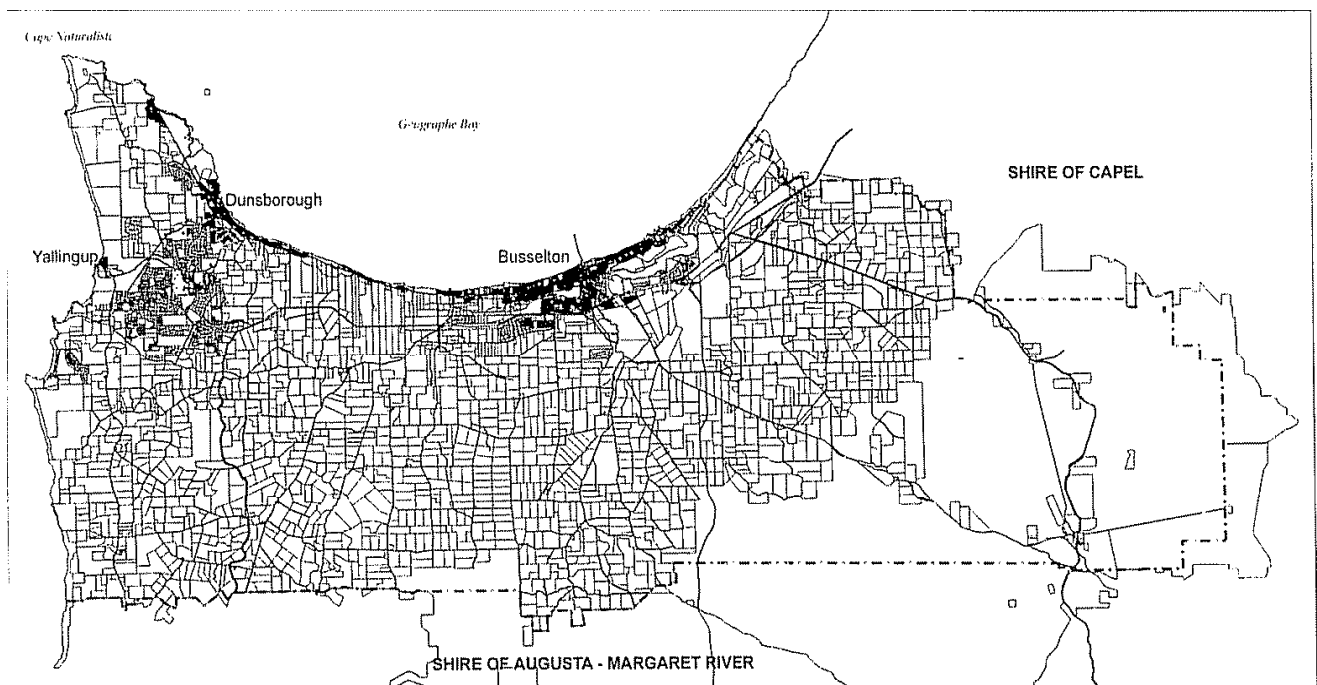
### 1.3 STUDY AREA

The study area for the review of the Shire's Rural Strategy includes the rural areas of the Shire excluding land identified for urban investigation adjacent to Busselton and Dunsborough. The identification of these urban investigation areas does not necessarily indicate that urban development is appropriate throughout that precinct. Some of the area has been included as 'urban' as it is subject to urban influence or environmental constraints and is required for green belt, rural buffer, conservation and other purposes within the urban fabric. Figure 1 illustrates the study area.

The Shire is well known for its wide range of natural attributes, with areas of high conservation value important to both heritage and tourism. Its soils and climate have been demonstrated to be suitable for viticulture and an important wine making industry has developed.

The Shire comprises an area of approximately 1,450km<sup>2</sup> of which approximately 1,300km<sup>2</sup> is considered to be rural and agricultural in nature, including areas of State forest, wetlands and National Parks.

The 1993 Rural Strategy divided the Shire into eight policy areas. Four of these areas were subdivided into fifteen sub-policy areas. This approach tended to make the document more complex to administer. Accordingly, the Strategy simplifies the policy areas without totally discarding the previous precinct approach by identifying eight precincts as illustrated in Figure 8.



**Figure 1 Study Area - Shire of Busselton**

## 1.4 VISION FOR THE RURAL AREAS OF THE SHIRE

Representatives from the community, industry and Government met in 2000 and developed a vision for agriculture in the region (Department of Agriculture, 2002) as follows:

"A prosperous rural community with a diversity of pursuits where sustainable agricultural practices are carried out under industry driven codes of practice and the retention and protection of the natural environment is of great importance".

The community also identified a number of values that need to be maintained into the future. These are:

- Diversity in natural and rural landscapes and in human activity.
- Preservation of the rural mosaic.
- Protection of land suitable for agriculture. Other uses such as tourism to be secondary to agriculture.
- Sustainable use of land and water resources.
- Maintenance of the natural environment including remnant vegetation and wetlands.
- Responsibly managed agricultural industries that operate under locally developed codes of practice.
- A consultative approach to planning and conflict management.

A vision workshop was held on 5 October 2004 as part of the review of the 1993 Rural Strategy. The community group involved in the workshop was drawn from a broad range of farmers, landowners, community representatives and other stakeholders. The visions expressed by this group tended to be broader in scope as follows:

- Integration of land uses such as settlements and villages surrounded by agricultural uses.
- Diversification of the economic base to include employment opportunities with government incentives to locate in the area.
- Retention of the youth demographic in the Shire.
- Preservation of the character and appeal of the area.
- A harmonious relationship between agriculture, tourism and the environment.
- Improve the infrastructure.
- Good planning for future developments
- Focus on agricultural based education.
- Clear boundaries between future urban and rural development
- Small clusters of appropriate development where there is no impact on agricultural use.
- Diversity of land uses.



- Incentives or compensation for landowners who are protecting values for community benefit.
- Improve the community fabric in rural areas.
- Support smaller businesses in rural areas including viticulture.
- Create a mosaic of land uses and a high degree of visual and landscape amenity.
- Access to port facilities for agricultural industry.

## **1.5 METHODOLOGY**

The methodology used in the formulation of the Strategy is broadly based on the Guidance on the Format of Local Planning Strategies published by the Western Australian Planning Commission (WAPC).

Briefly, the process is as follows:

- Assessment of the physical environment.
- Assessment of the social and economic aspects.
- Identification of planning precincts based on land capability assessment.
- Consultation with the community.
- Preparation of local rural planning strategies and provisions.

The task of the update/review was to update the basic information, to adopt sustainability objectives and to ensure that the revised Strategy is consistent with the latest policies of the Western Australian Planning Commission.



## **2.0 RURAL ENVIRONMENT**

The topography of the Shire of Busselton consists of a broad low lying coastal plain backed by the Whicher Range scarp in the south east, the Leeuwin-Naturaliste Ridge in the west and the Margaret River Plateau to the south.

Land use in the Shire is predominantly rural and agricultural, with significant areas of State Forest and National Park. Local industry includes tourism, manufacturing, dairying, beef production, vegetable production and viticulture for wine production. It is notable that over 50% of wine producing members of the Margaret River Wine Industry Association are located in the Shire of Busselton.

The Shire has a diverse agricultural sector that makes a considerable, and often understated, contribution to the State's economy.

### **2.1 LAND SYSTEMS**

The Shire of Busselton comprises four primary land systems as indicated on Figure 2 and described below. Figure 3 illustrates the topography of the study area.

#### **Swan Coastal Plain**

This system is generally located north of the Whicher Scarp, wrapping around Geographe

Bay and ending at the Dunsborough fault and commencement of the Leeuwin-Naturaliste Ridge in the west. It forms part of the broader coastal plain. This system comprises the Quindalup, Vasse, Ludlow Plain (Spearwood), Bassendean and Abba Plain systems and is level to gently undulating and predominantly sandy in nature.

#### **Leeuwin-Naturaliste Coast**

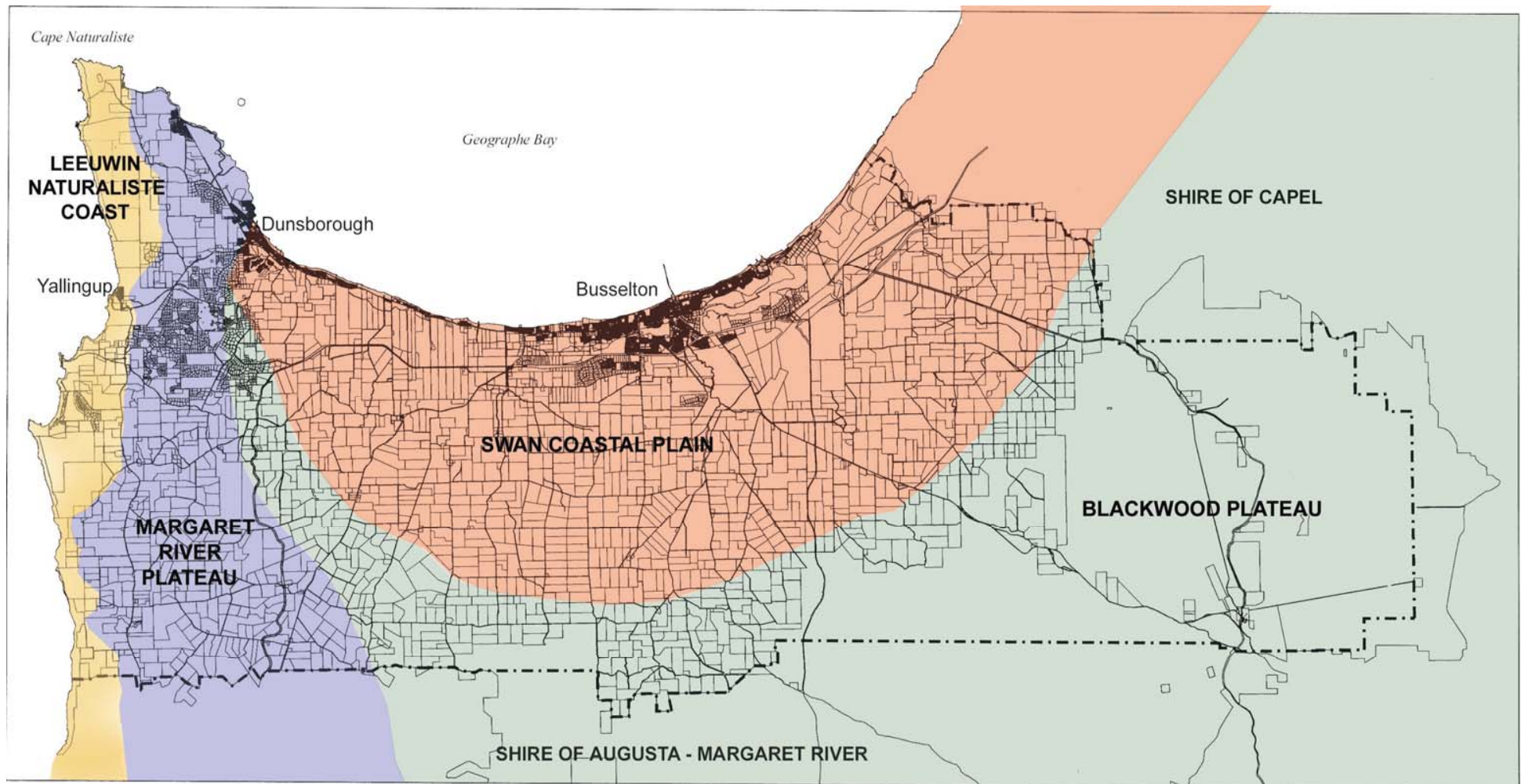
This system is located along the western coast of the Shire, being a narrow discontinuous limestone ridge extending from Cape Naturaliste south. This system comprises the Gracetown Ridge and Kilcarnup Dune sub-systems.

#### **Margaret River Plateau**

This system generally lies in the west of the Shire between the Leeuwin-Naturaliste Coast and Blackwood Plateau and Swan Coastal Plain Systems traversing south from Dunsborough. It is a gently undulating system dissected by a series of valley systems that comprise the sub-systems of Cowaramup Uplands, Metricup Scarp and Wilyabrup Valley Systems.

#### **Blackwood Plateau**

This system lies to the south of the Swan Coastal Plain. It is a gently undulating plateau that rises in the south to form rolling hills, these forming the Whicher Scarp. The major sub-systems comprise the Treeton Hills and Whicher Scarp.



**Figure 2 Primary Land Systems**

### **2.1.1 Land systems of the Swan Coastal Plain**

#### Quindalup and Vasse Coast land systems

These systems are located on the edge of the Swan Coastal Plain along Geographe Bay forming a narrow strip 1-2kms wide. To the south they adjoin the Ludlow Plain land system. The Quindalup coast is less than a few metres above sea level.

It is a continuous beach, backed by a very low fore dune system of calcareous sand along the coastline. Behind this is a series of low, very gently inclined beach ridges and flats supporting a WA peppermint woodland which has been partly cleared for urban and tourist development as well as previous clearing for agriculture.

Behind the beach ridges and flats is a long narrow depression. The main channel, which includes the Vasse, Wonnerup and Broadwater estuaries, is inundated for much of the year. It is flanked on either side by slightly raised terraces, which are poorly drained in winter. Vegetation ranges from samphire flats to paperbark and tea-tree communities.

Urban and tourist developments are located along the Geographe Bay coastline and dominate land use in this system. Many areas that were previously used for grazing now accommodate the expanding Busselton urban area. This system does not normally support good pasture because of low fertility and poor moisture availability. The slightly raised terraces, which surround the estuaries, are used for grazing. Some areas become severely waterlogged, suffer occasional flooding and are usually saline.

On this land system some areas are prone to salinity because of salt-water intrusion from the ocean. The Vasse land system comprises the Vasse-Wonnerup and Broadwater Wetlands which are the subject of the Busselton Wetlands Conservation Strategy, published in October 2005.

#### Ludlow Plain (Spearwood) land system

The Ludlow Plain occurs as a narrow strip, 1-4kms wide running parallel to, and about 2 km inland from the coast of Geographe Bay. It separates the Quindalup Coast land system from the Abba Plain land system. The Ludlow Plain is a level to gently undulating plain between 5 and 15 metres above sea level.

To the east of the Sabina River the deep brownish yellow Spearwood Sands are mainly well drained throughout the year and support tuart forest. West of the river there are areas where some subsoil waterlogging occurs in winter and the natural vegetation is comprised of flooded gum and peppermint woodland with patches of jarrah-marri forest.

On the northern edge of the plain, east of Busselton, there is a narrow strip of land with shallow sands, which is poorly drained in winter.

The southern portion of the plain consists of a low-lying depression with clay soils. This depression is poorly drained in winter and some areas are saline. It supported a paperbark woodland which has been largely cleared.

Much of the better drained Ludlow Plain is within State Forest and National Park, comprising both tuarts and pine plantations, mainly radiata pine. Sands on the Ludlow Plain are also mined for minerals. Areas of the Spearwood Sands provide less than average quality grazing country because the soils have low moisture availability. Stock water is obtained from shallow bores. The potential for soaks is limited because of the deep sands and porous limestone.

These areas have a high capability for market gardening as they are well drained. However, heavy chemical and fertilizer use on these porous soils has potential to result in pollution of groundwater and the adjacent wetlands. The low-lying clay flats are marginal for grazing and unsuited to horticulture, forestry or housing because of waterlogging.

#### Abba Plain land system (and Bassendean)

The Abba Plain occupies the major portion of the Swan Coastal Plain within the Shire. It extends about 10kms inland from the southern edge of the Ludlow Plain land system to the edge of the Blackwood Plateau and the commencement of the Whicher Scarp. A small area of Bassendean system is located in the northern part of the Abba Plain system generally parallel to Geographe Bay. This system comprises extensive mineral sands.

The Abba Plain is a level to gently undulating plain lying between 10-40 metres above sea level and containing extensive areas which are poorly drained. The dominant landform pattern of the Abba Plain is an intricate patchwork of slight depressions and rises. The depressions tend to become waterlogged in winter while the rises tend to suffer subsoil waterlogging. The soils are generally sandy grey brown gradational and duplex soils.

Superimposed on this general pattern are a variety of areas including the following:

- depressions and flats, which experience even greater winter waterlogging than the remainder of the plain - some have clay soils displaying patches of salinity in summer and some have shallow soils overlying sheet laterite;
- low rises and dunes of deep bleached Bassendean Sands which are especially common on the northern edge of the plain where they form a discontinuous band from Carburnup River eastwards; and
- well drained flats with sandy grey-brown gradational soils and red-brown sandy and loamy Marybrook soils.

The dominant vegetation complexes of the Abba Plain were marri and marri/jarra forest and peppermint woodland. However, these have been extensively cleared for agriculture. Banksia woodlands occur on the low rises with deep bleached sands. As a result of this clearing the Abba system contains a number of declared rare flora (DRF) and other endangered plant species.

The Abba Plain is predominantly used for grazing with the depressions being slightly less suitable than the better drained areas. Smaller areas and winter wet, clayey flats are poor for grazing. There are some indications that salinity may be spreading in low lying areas and the areas that are marginal for grazing may increase.

Soaks capable of watering stock can be built in many locations on the Abba Plains land system. Elsewhere bore water is usually available at shallow depths.

The exception to land use in this system is the well drained Busselton sands and Marybrook soils at Marybrook, Jindong and Acton Park which are used extensively for market gardening and more recently larger-scale viticultural operations, and are considered some of the most valuable soils for agriculture in the region.

The deep bleached sands common on the northern edge of the Plain east of Carburnup River are traditionally considered to have a very low agricultural potential. They are, however, often underlain by good groundwater and it has been demonstrated in the Perth area that, with suitable management, similar soils are capable of producing good vegetable crops. There is, however, a risk of groundwater pollution from these rapidly leached soils.

Poor drainage and increasingly limited groundwater availability are the major constraints to more intensive forms of agriculture on most of the remainder of the Abba Plain.

### **2.1.2 Land systems of the Leeuwin-Naturaliste Coast**

#### Gracetown Ridge land system

The Gracetown Ridge is the dominant feature of the Leeuwin-Naturaliste coast. It forms a discontinuous strip, 1-4kms wide, running south from Cape Naturaliste. The Gracetown Ridge occurs in a number of sections 5-10km long lying parallel to the coast, rising from sea level to a height of between 140-210 metres above sea level.

The Ridge has a gently undulating crest and moderately inclined side slopes. The western facing slopes of the Ridge are exposed to strong winds from the Indian Ocean. The east facing slopes are sheltered from the prevailing winds.

Although the Ridge rises directly from the ocean or granitic coastline, much of the western slopes are overlain by the more recent Kilcarnup Dunes land system. The majority of this land system remains uncleared. Acacia and WA peppermint woodland cover the exposed western slopes and ridge crest while WA peppermint and jarrah/marri woodland grows on the sheltered eastern slopes with areas of karri forest on the foot slopes in the more southern areas.

The Leeuwin-Naturaliste National Park covers a large portion of the Gracetown Ridge, although much of the area is privately owned and used for mainly for large lifestyle lots. Most of this area is uncleared because of its traditionally poor grazing potential and high conservation and landscape values. The importance of this land system is also reflected in the level of protection provided under the LNRSP and

District Town Planning Scheme No. 20 where much of the private land in this system is zoned 'Conservation' and protected under restrictive covenants.

While there are a number of physical limitations to agricultural use of this land system including wind, soil and water erosion, poor moisture availability, low fertility and very limited surface and ground water availability the high conservation and landscape values contained in the system preclude any major form of viable agricultural industry. These values have been considered to be of significance to the whole state and are recognised under the LNRSP.

#### Kilcarnup Dunes land system

The Kilcarnup Dunes are distributed along the western edge of the Leeuwin-Naturaliste Coast south from Cape Naturaliste to Cape Leeuwin. They occur mainly as a series of discontinuous areas of land, overlying the western slopes of the Gracetown Ridge land system. The Kilcarnup Dunes are often steeply inclined and usually rise from sea level to a height of 100 metres, but can be as high as 200 metres above sea level. They are usually exposed to strong winds off the ocean. The more recently formed dunes are sparsely vegetated. The older dunes tend to be more densely vegetated and 'blow-outs' are sometimes present. The Kilcarnup Dunes remain largely uncleared. The vegetation consists primarily of acacia and peppermint scrubland. In view of the good vegetation and the coastal location the system has high conservation, landscape and social values.

Combined with poor soil, steep slopes and exposure to strong, salt laden winds and extremely limited water supply, this land system is not suitable for any form of agriculture or forestry. The National Park and coastal reserves are common uses within this system.

### **2.1.3 Land systems of the Margaret River Plateau**

#### Cowaramup Upland land system

The Cowaramup Upland, on the Margaret River Plateau, extends from Cape Naturaliste southwards. The Upland is 5-15kms wide, but is not continuous as it is dissected in a number of places by the Wilyabrup Valleys land system.

The Cowaramup Upland is a gently undulating to undulating plain, with an elevation ranging from 80-140 metres above sea level in the north. The major portion of the Cowaramup Upland consists of flats and gentle slopes with yellow-brown gravelly duplex and pale grey mottled soils. There is an extensive network of shallow incised drainage depressions, commonly having broad, poorly drained floors. The predominant natural vegetation of jarrah/marri forest has been extensively cleared for agriculture, although some patches still remain.

This land system is used for a combination of sheep and beef grazing, dairy cattle and more recently some viticulture and olive production. Pasture growth is good on most areas. This land system is generally unsuitable for intensive horticulture because of poor water availability. Much of the area is poorly drained, with subsoil water-logging during winter and early spring. Areas with some slope are better

drained and suitable for grape growing. Strong winds can damage crops, trees and vines but most of the area is suitable for forestry.

Much of this land system in proximity to Dunsborough has been developed or identified for urban or rural residential purposes, with the Commonage rural residential precinct being the major component of the latter. Further south, a concentration of tourism uses has occurred in this system over the past 10 years in view of its location adjoining the viticultural areas of the Wilyabrup Valley system, and central location between Margaret River, Dunsborough and Busselton.

#### Metricup Scarp land system

The Metricup Scarp forms the eastern edge of the Margaret River Plateau between Yelverton and Dunsborough. It is 1-2km wide and lies between the Yelverton Shelf land system and the Cowaramup Upland land system. The Metricup Scarp forms rolling low hills as it rises from an elevation of between 40-140 metres above sea level. The Scarp has a relatively even, moderate slope, which has been heavily dissected by small deep valleys. The dominant soils on the slopes of the Scarp and the valley side slopes are yellow-brown gravely duplex soils.

The Metricup Scarp has been partially cleared for grazing although jarrah/marri forest remains on most of the rocky slopes and valleys. Some of this system has been developed for rural residential purposes. While much of the Scarp is good grazing country, the rocky slopes and valleys are marginal for grazing. These areas also have a low capability for horticulture because of the shallow stony soils and erosion hazard. The slopes and valleys in the southern portion of the Scarp have a good capability for vineyards and orchards. Limited surface and groundwater supplies also exist.

#### Wilyabrup Valleys land system

The Wilyabrup Valleys are scattered throughout the Margaret River Plateau. The Wilyabrup Valleys form undulating to rolling low hills lying below the surrounding Cowaramup Upland land system. Generally they are incised from an elevation of between 80-100 metres above sea level down to a level between 20-40 metres. The side-slopes of the valleys commonly have yellow brown gravely duplex and red-brown gravely gradational soils. The slopes range from gentle to moderate inclination and in the Cape area are exposed to strong winds.

Marri/jarrah forests grew over much of the Wilyabrup Valleys. Much of this has been cleared for agriculture though a reasonable mix of the modified and natural environment exists. While the Wilyabrup Valleys were traditionally used for grazing (most of the area is highly suitable for this land use) viticulture is now the dominant land use with this system considered one of the most valuable in the State. The gentle slopes are preferred for viticulture because on the steeper slopes there is a greater risk of water erosion. East and north facing slopes are preferred to reduce wind damage and maximise solar orientation. These slopes are also suitable for orchard crops and forestry. The availability of water for irrigation is a limitation, with groundwater virtually unobtainable.



## **2.1.4 Land systems of the Blackwood Plateau**

Whicher Scarp land system (previously Yelverton Shelf)

This system is located on the northern edge of the Blackwood Plateau. It occurs as a band 5-6km wide in the west, tapering to 1km wide in the east. It lies between the Swan Coastal Plain and the Treeton Hills land system. This system appears to be the remnant of an ancient plain or plateau. Gently inclined slopes rise from the Swan Coastal Plain at an elevation of about 40 metres above sea level, leading to a gently undulating plain sitting at a height of between 60-80 metres. On the plain there are poorly drained depressions, some of which have ironstone close to the surface. The plain has been dissected by a number of small valleys, some of which have broad swampy floors. The dominant soil types are yellow brown gravely duplex soils and pale grey mottled soils.

The natural vegetation of jarrah/marri forest has been extensively cleared. Much of this land system is good for grazing. Some of the better-drained soils on slopes are suitable for vineyards while some of the flatter areas, mainly located east of the Carburnup River, are good for market gardening or vineyards though drainage can be problematic. Over most of the system, stock water is readily available from soaks. These soaks rarely yield enough water to irrigate a market garden or vineyard.

Treeton Hills land system

The Treeton Hills occupy a large portion of Blackwood Plateau. It extends eastwards from the edge of the Margaret River Plateau into the State Forest and Whicher Scarp. It adjoins the Yelverton Shelf land system to the north. The Treeton Hills comprises undulating rises to rolling low hills. The elevation ranges from 80-120 metres above sea level in the north. The dominant landform pattern is gently inclined ridges and hill crests with gently to moderately inclined side slopes down to valley floors. These are commonly broad and poorly drained.

Outside of the State Forest much of this land system has been cleared, but remnants of jarrah/marri forest are still present. Most of the private land in this system is used for grazing, which is a compatible land use with more intensive agriculture and hobby farming activities becoming more prevalent in recent years. Water availability is not as limited as other land systems in the Shire.

## **2.2 BIODIVERSITY**

The Shire of Busselton, as part of the South-West botanical district, is recognized as one of the world's biodiversity 'hot spots' due to the range of rare plants, diversity of vegetation complexes (over 50 types), and presence of rare fauna and level of current pressure on these values. Biodiversity can generally be defined as encompassing the variety of all life forms: the different plants, animals and micro-organisms, their genes and the ecosystems of which they are a part. Important aspects of biodiversity are species, genetic and ecosystem diversity (Environment Australia, 2000). The biodiversity values of the Shire can be summarised below.

### 2.2.1 Vegetation and Flora

Remnant vegetation and flora are considered the most critical factors in ensuring a high level of biodiversity is retained within the environment. Significant investigation and analysis has been undertaken within the Shire of Busselton on the extent and quality of remnant vegetation. Figure 4 provides an indication of the vegetation cover and range of vegetation complexes occurring in the Shire.

The vegetation within the Shire varies greatly in its composition and structure with forests of marri (*Eucalyptus calophylla*) mixed with jarrah (*Eucalyptus marginata*) and blackbutt (*Eucalyptus patens*) through western and southern parts with peppermint woodland (*Agonis flexuosa*) more prolific in coastal areas and on the Swan Coastal Plain. Watercourses and wetlands mostly comprise flooded gum (*Eucalyptus rudis*) and swamp paperbark (*Melaleuca raphiophylla*). The following points represent key statistics in describing the level of importance and impact of native vegetation and flora in the Shire.

- 696 km<sup>2</sup> (or 48%) of the Shire has native vegetation cover;
- Approximately 253km<sup>2</sup> (or 40% of the remaining native vegetation in the Shire) is located in State forest areas and National Parks managed by the DEC;
- Approximately 360 km<sup>2</sup> (or 56% of the remaining native vegetation in the Shire) is located on privately owned land;
- Approximately 20 km<sup>2</sup> (or 4% of the remaining native vegetation in the Shire) is located on reserves and land managed by the Shire of Busselton;
- One-quarter of the vegetation complexes present in the Shire are considered to be poorly represented (i.e. with less than 30% of original cover);
- There are thirteen (13) Threatened Ecological Communities (TECs) and 163 priority listed flora species in the Shire; and
- Thirteen (13) of the forty-two (42) declared rare flora (DRF) within the Shire are critically endangered.

Rural and agricultural land use activities in the Shire have significantly contributed to the above biodiversity condition. This has primarily resulted from:

- clearing of vegetation for development and agriculture;
- fragmentation and change to bushland associated with the provision of infrastructure and the presence of human activity in rural residential areas;
- pollution impacting upon species composition, ecosystem health and regeneration capabilities of the natural environment (land degradation, point and non-point-source pollution, nutrient export resulting in eutrophication within receiving water bodies);
- increased feral animal populations, exotic flora species (weeds) and the spread of pathogens;
- inappropriate use of bushland reserves; and
- native vegetation clearing and fragmentation across a range of landscapes and land tenures.

The impact of these pressures is likely to result in a continued reduction in the spatial extent and condition of remnant vegetation and a loss of biodiversity values in the Shire unless there is some form of active intervention and management.

### **2.2.2 Fauna**

The extensive and varied flora values found within the Shire support a number of notable fauna values. The geomorphology of the area provides a range of habitats for fauna species. The coastal heath systems of the Leeuwin-Naturaliste National Park, the jarrah and marri woodlands of the Naturaliste Ridge, the coastal peppermint forests surrounding Geographe Bay and the extensive wetland chains of the Broadwater and Vasse-Wonnerup Wetland systems all provide important habitat for a range of fauna species.

As a result of the range of pressures outlined in 2.2.1 above, and the subsequent impact on vegetation, approximately thirty (30) vulnerable and threatened fauna species exist in the Shire. Of particular note is the endangered Western Ringtail Possum (*Pseudocheirus occidentalis*). This species is relatively common in the WA peppermint woodlands surrounding Busselton and Dunsborough however the range of this species has been severely restricted by loss of habitat and now occupies its last stronghold within the Busselton Shire. Preservation of WA peppermint woodland habitat is critical to the long-term survival of this species.

Other fauna species of conservation significance include the Quenda (*Isodon obesulus fusciventer*) or Southern Brown Bandicoot which is listed as a 'Conservation Dependent Taxa' and the Chuditch (*Dasyurus geoffroli*) which is listed as a 'Vulnerable' species.

### **2.2.3 Pests and Weeds**

There are thirteen environmental and agricultural declared weed species in the Shire occurring throughout the rural areas. Aggressively invasive weeds such as arum lily, bridal creeper and watsonia are a particular problem and one which requires substantial time and financial resources from land holders to control effectively. These weeds out-compete native species in slightly disturbed native bushland and wetland areas resulting in severe impacts and localised loss of species.

Feral cats and foxes are also a significant problem, though an increasing number of land holders are choosing to use baits on their properties to reduce fox numbers. Even with intensive trapping and baiting and application of legislation such as the Shire of Busselton Cat Local Law, the complete eradication of these feral animals is highly unlikely.

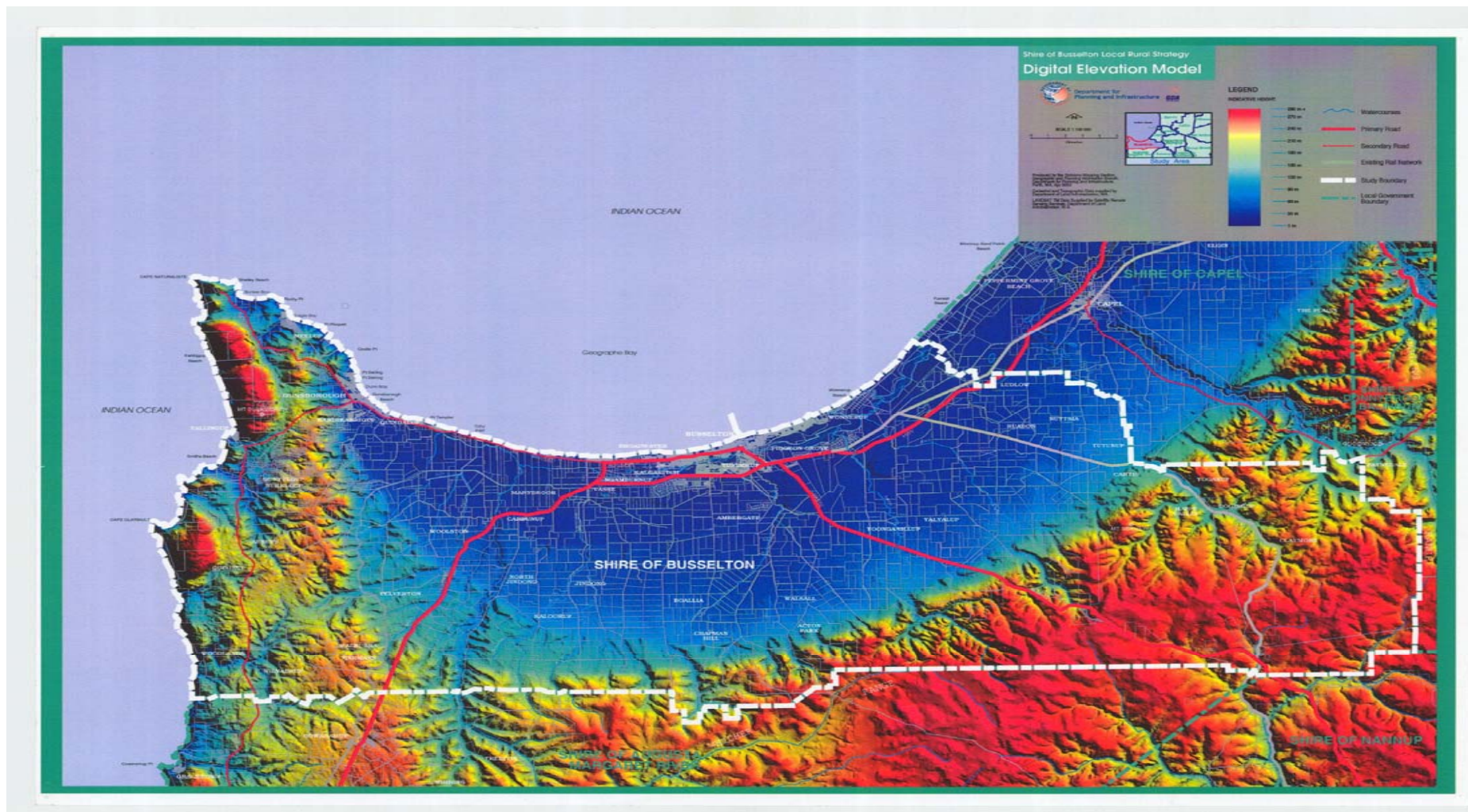


Figure 3 Digital Elevation Model



Figure 4 Vegetation Density

## **2.3 WETLANDS, WATERWAYS AND GROUNDWATER**

### **2.3.1 Wetlands**

The Shire contains the extensive and highly valuable Vasse-Wonnerup and Broadwater Wetland systems. These are a chain of coastal wetlands in the Busselton urban area and extending east and west from Busselton. The wetlands have local, regional and international significance for waterbirds. This is reflected by the listing of a large portion of the Vasse-Wonnerup Wetland system under the Ramsar Convention. The Convention on Wetlands (adopted in the Iranian city of Ramsar in 1971) is an international treaty aimed at conserving wetlands of international importance and the wise use of wetlands generally.

As the Vasse-Wonnerup and Broadwater Wetlands generally border rural land with long established farming operations, issues related to future land management are critical. The fact that these Wetlands are the subject of the 'Busselton Wetlands Conservation Strategy' prepared by the WA Planning Commission (published in October 2005) is significant and needs to be acknowledged in the Rural Strategy.

The wetland system extending along the coastal plain between Busselton and Dunsborough is also an important consideration in future land use planning.

### **2.3.2 Waterways**

The Shire is divided into two surface water catchments, with the majority being within the Geographe Bay catchment and that area generally along the Leeuwin-Naturaliste Ridge in the west of the Shire being within the Cape-to-Cape catchment which flows into the Indian Ocean. These catchments, and particularly the Geographe Bay catchment, have a number of tributaries comprising rivers and creeks, all of which traverse the rural areas of the Shire. In addition to these natural systems a series of artificial watercourses and drains traverse the rural areas and play an important role in agriculture and flood mitigation for urban areas.

The use of surface waters for agricultural pursuits, including the modification of watercourses to construct dams, has increased significantly in the past ten years. The Viticulture and Tourism zoned area pursuant to the Scheme includes more than 180 dams (or approximately 10% of all dams in the Shire) even though the total zoned area is only 65km<sup>2</sup> (or 4% of the total Shire area).

Surface water use, through the establishment of dams or direct abstraction, should ideally be proportional to the size of properties or water requirements for produce. Water requirements for the majority of crops, stock and pasture in the Shire have been identified by the Department of Agriculture.

The long term sustainability of surface water use in the Shire is a significant concern in view of the ongoing demand for this resource, the diminishing water supply (particularly in the west of the Shire) and the general trend towards a drier and warmer climate.

### 2.3.3 Groundwater

The Shire of Busselton lies above the Southern Perth Basin and is terminated at the western edge by the Dunsborough fault. Two main groundwater systems exist in the Shire. These comprise the unconfined aquifer (superficial), being a near surface formation, and the confined aquifer which is a significantly deeper formation with water held within rock layers.

The Leederville formation is the most important to the area providing potable water supplies for Busselton (partly), Dunsborough and Yallingup. The thickness of this aquifer ranges from 50 metres in the west around Dunsborough to approximately 500 metres in the east past Busselton with the quality for consumption purposes increasing with depth. This formation is mainly sourced from groundwater flow from the Whicher Scarp.

Beneath the Leederville are a number of formations including the Yarragadee formation which is sourced from between the Blackwood plateau and the coast. This was the subject of investigation by the State government for increased extraction of water to alleviate water shortages in Perth and some regional towns. The government has since decided not to proceed with this proposal but the Yarragadee will remain a significant resource for the South West region.

Some agricultural operations utilise deeper confined groundwater aquifers for horticulture and pasture irrigation with this also used partly for public water supply.

#### Groundwater Allocation/Availability

The Department of Environment and Conservation Groundwater Section has an Aquifer Allocation Report that is continually updated. The report has three sub-areas that cover the Shire i.e. Broadwater/Jindong, Busselton/Chapman Hill and Quindalup/Vasse.

In September 2005 in the Broadwater/Jindong sub-area it was evident that the upper aquifers had some spare capacity but the Upper Leederville was over allocated. There had been no allocation from the Yarragadee at that time. In the Busselton/Chapman Hill area there was a similar over allocation of the Upper Leederville and a high percentage of the Yarragadee. In the Quindalup/Vasse the Upper Leederville was over allocated. It may generally be concluded that groundwater is a finite resource that needs to be carefully managed. There is not unlimited groundwater for allocation in the future.

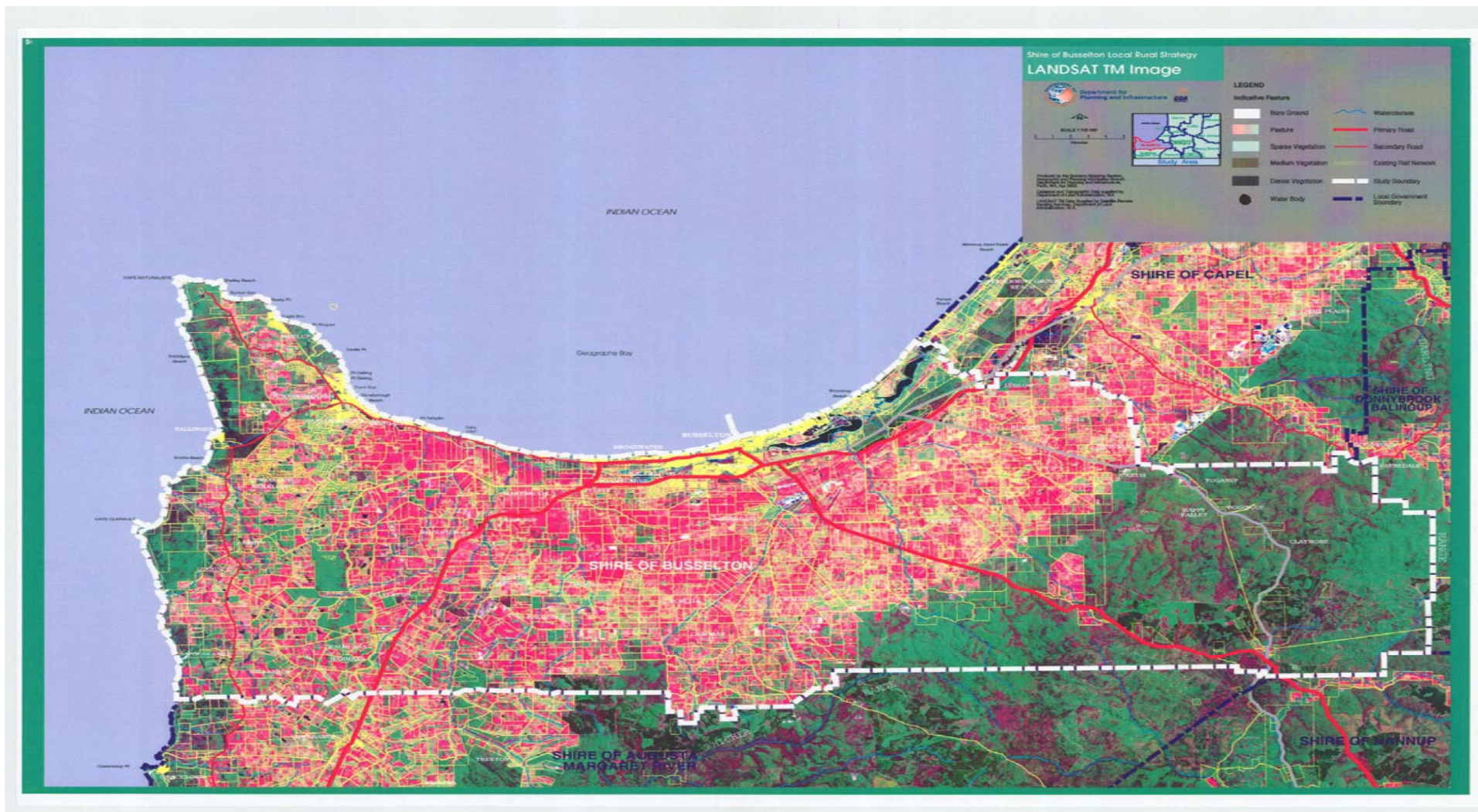


Figure 5 LandSat Image



## **2.4 CLIMATE**

The Shire of Busselton has a 'Mediterranean' climate with warm to hot dry summers and mild, wet winters. The rainfall is generally higher and more reliable than more inland areas of the South West Region and ranges between 850mm to over 1,000mm per annum throughout the Shire. Most rain falls between April and October with heaviest falls during the winter months. As the Shire is bordered on two sides by ocean, there is a moderating effect on temperature with a generally milder climate experienced than other south west areas.

Possible climatic change as a result of global warming may result in lower rainfall, varying rainfall patterns and higher temperatures. While these trends have appeared to develop in the past several years, longer term observation is still required to determine the full level and extent of such change. In view of the reliance of the agricultural sector and natural systems on the rainfall and 'mildness' of the climate any major change in this may have a long term impact on agricultural land use patterns and viability.

## **2.5 MINERALS AND BASIC RAW MATERIALS**

The South West Region including the Shire of Busselton has significant mineral and basic raw material resources. Extensive mineral sands deposits exist within the Shire in essentially two broad east/west bands in the coastal plain. The eastern sections of these bands have been partly mined for mineral sands though the viability of mining remaining deposits is limited at present. This may change in the longer term with resources values rising and improvements in mining technology.

Significant coal deposits exist in a broad north/south belt between the Busselton and Dunsborough faults in widths ranging from 300-700 metres. While of a high quality, these deposits are generally constrained due to environmental and land use factors as they are in proximity to areas of remnant vegetation, popular tourism areas and residential and rural residential areas.

Significant gas deposits have also recently been discovered in the Whicher Range (State Forest) in the southern portion of the Shire. Substantial investigation is still required to determine the extent and viability of extracting the gas though it potentially could provide a major economic benefit to the area in the longer term.

The rural areas of the Shire also contain extensive sand and gravel deposits, which are critical to the ongoing development of the Shire from a housing and road construction perspective. The Shire's Extractive Industry Policy identifies priority areas for gravel and sand and sets policy measures as appropriate based on the range of land use, environmental, amenity and other factors. For this reason many of the gravel deposits in the west of the Shire are sterilised by surrounding land use. Sand deposits are generally unconstrained with many being in the primarily rural central and eastern parts of the Shire.

## **2.6 CONSERVATION RESERVES**

Significant areas of the Shire are protected within conservation reserves, and are managed by a combination of local and State government authorities. The most significant of these is the Leeuwin-Naturaliste National Park which covers the coastal areas south of Cape Naturaliste mainly to the west of Caves Road and Cape Naturaliste Road. Other significant conservation areas are the Ramsar protected Vasse-Wonnerup wetland system east of the Busselton townsite and the Yelverton National Park in the south west. These reserves contain significant conservation values and are managed by DEC who also manages the State Forest in the south of the Shire along the Whicher Scarp.

The Shire of Busselton also manages significant reserves with high conservation values including Meelup Reserve northwest of Dunsborough, A-class Reserve 46 in Quindalup, east of Dunsborough and Ambergate reserve south of Busselton.

In addition to these areas and other minor reserves, significant conservation values are retained on private land in the Shire. Much of this is concentrated in the west of the Shire where extensive remnant vegetation remains.

A high proportion of Threatened Ecological Communities, Declared Rare Flora and significant wetlands are contained within private properties in the central and eastern parts of the Shire. The Shire of Busselton and WAPC have introduced a number of strategies (LNRSP, Biodiversity Incentives Strategy and Busselton Wetlands Conservation Strategy) that aim to protect these values in the long term in exchange for rate rebates, and subdivision/development incentives.

## **2.7 RURAL LANDSCAPE**

The Shire comprises a unique rural landscape in view of the variety of topographical features ranging from escarpments and limestone ridges to coastal plains and undulating hills. In addition, the Shire's location in proximity to Geographe Bay and the Indian Ocean ensures it is unique to most other rural areas within the State.

This location and range of land systems has contributed to a variety of land uses being established in the rural areas with traditional grazing and dairying activities, expanding viticulture and other intensive agriculture, tourist development, rural and cottage industries and numerous other land uses.

Combined with the vast natural resources comprising remnant vegetation, wetlands, rivers and creeks, beaches and coastline and geography in general, the Shire has varied landscapes with significantly high landscape values.

These landscape values play a significant role in the economic and social prosperity of the Shire, as they are one of the major reasons why people visit (as tourists), or move to the area to live. It is important to acknowledge the link between the increasing importance of the tourism industry to the Shire's economy.

The Shire of Busselton and the State Government have acknowledged these landscape values to a large degree. This has been done through designations in the Scheme (Landscape Value areas, Conservation zones, Rural Landscape zones) in areas of natural landscapes (ridges, remnant vegetation, wetlands) and the LNRSP, which identifies areas west of Caves Road primarily along the Leeuwin-Naturaliste Ridge and the coast as having landscape values important to the State.

In addition, a number of key transport corridors have also been identified in the LNRSP as being important tourist routes where protection of landscape values is a primary consideration. These include Caves Road, Vasse-Yallingup Siding Road, Cape Naturaliste Road and Wildwood Road, and reflect the generally higher landscape values of the western area of the Shire due mainly to the topography and vegetation in the area.

The Shire has also adopted a Caves Road Visual Management Policy which aims to ensure visually sensitive development along the key tourist route of Caves Road.

The long term protection of these values is therefore significant and needs to be reflected in planning for the future of rural areas. Additional consideration should also be given to areas which have not been considered for a high level of landscape protection to date such as Bussell Highway where ongoing development and the high volume of traffic place pressure on the need for planning that promotes the values of the area.

## **2.8 LAND CAPABILITY**

The detailed land resource information contained within the Department of Agriculture AGMAPS Land Profiler (2003) predicts the capability of the land systems of the Shire of Busselton (and Shires of Augusta-Margaret River and Capel) to be developed and used for a particular land use without causing land degradation. These land uses comprise:

- Annual Horticulture
- Perennial Horticulture
- Grazing
- Cropping
- Septic Tanks
- Urban Development

Land capability relating to agriculture also provides assessment for 'grape vines'. The assessment utilises the information on sub-units in each land system and evaluates these against a range of land qualities to enable a capability rating. A range of land qualities are considered based on topography, soil type, drainage, climate, flood and erosion hazards, water supply, salinity, water logging and various other factors that may influence viable and sustainable agricultural land use and development.

Five capability classes are used to assess each land use as follows:

Table 2.2 - Land Capability Classes

Capability Class	General Description
1 – Very High	Very few physical limitations present and are easily overcome. Risk of land degradation is negligible.
2 – High	Some physical limitations affecting either productive land use or risk of land degradation. Limitations overcome by careful planning.
3 – Fair	Moderate physical limitations significantly affecting productive land use or risk of land use degradation. Careful planning and conservation measures required.
4 – Low	High degree of physical limitations not easily overcome by standard development techniques and/or resulting in a high risk of land degradation. Extensive conservation requirements.
5 – Very Low	Severity of physical limitations is such that its use is usually prohibitive in terms of either development costs or the associated risk of land degradation.

The following section will provide a correlation and assessment of the above land capability classes as they relate to the agricultural uses outlined in relation to the Shire of Busselton. It is not proposed to give a critique on the detailed reasons for the land capability assessment provided by the Department of Agriculture.

Land capability mapping for grazing, cropping, annual horticulture, perennial horticulture and vines is included at Appendix 1.

### 2.8.1 Grazing

It is clear that a significant portion of the Shire has a very high to high capability for grazing. The more highly capable areas are situated throughout the Abba Plain System and particularly where adjoining or in proximity to the Whicher Scarp and Metricup Scarp systems, with these also generally having highly to very highly capable land for grazing. The balance of the Shire varies in rating from fair to very high with this dependent on the individual locational characteristics and land management practices, though the general occurrence of class 1 and 2 capability ratings in these areas is lower than those previously outlined. Refer to capability mapping at Appendix 1.

The occurrence of land that has generally low to very low capability for grazing activities are the Quindalup, Bassendean and Ludlow Systems adjacent to Geographe Bay and the Kilcarnup and Gracetown Systems.

The western half of the Shire, which is suitable for grazing, is also capable of sustaining more intensive agricultural activities that, by reason of higher returns, will progressively replace grazing as the dominant activity.

## **2.8.2 Annual Horticulture**

Annual horticulture involves the growing, irrigating and fertilising of crops of annual fruits, vegetables, turf farming and floriculture. The principal areas of the Shire with a higher probability of highly or very highly capable land for annual horticulture are:

- The Ludlow Plain System;
- The western edge of the Abba Plains and particularly two regions comprising the Marybrook sandy loam soils; and
- The sandy loam or alluvial soils of the Whicher Scarp.

Of these areas, the western edge of the Abba Plains comprising the Marybrook soils rates most highly and is presently substantially utilised for market gardening and other intensive horticultural pursuits. The expansion of the Vasse village has resulted in a small area of this soil type being identified and soon to be developed for urban purposes. This outcome is a concern and future urban expansion will need to ensure protection of valuable soils.

The most constrained of the more highly capable areas are those of the Ludlow Plain where high winter water tables limit the productive capacity of the area to summer cropping. The location of the Ludlow lands adjacent to the Busselton urban area further limits its suitability for reasons of:

- Nutrient enrichment of superficial groundwater feeding towards the Vasse/Broadwater estuarine system;
- The risk of artificial lowering of water in the estuarine system through intensive irrigation; and
- Incompatibility between intensive urban and rural activities, particularly the application of pesticides and herbicides.

The balance of the Shire has a fair to low capability for annual horticulture with limited capability for accommodating such use.

## **2.8.3 Viticulture/Grape Vines**

While viticulture is a form of perennial horticulture, the extent of the land use in the South West region and the varying characteristics has resulted in a separate land use classification. Areas in the west of the Shire are the most capable of supporting viticulture.

These areas generally comprise:

- the well drained loamy sands of the Metricup and Whicher Scarps;
- the western edge of the Abba Plains and particularly two regions comprising the Marybrook sandy loam soils; and
- the well drained loamy sands of the Wilyabrup valleys including the Gunyulgup valleys and extending along the eastern facing side of Cape Naturaliste.

As identified previously, the bulk of viticultural activity has traditionally concentrated in the Wilyabrup locality and the Abbey Farm/Yallingup areas partly due to the availability of surface water supplies. More recently, and consistent with the capability ratings, viticulture has expanded significantly to areas along the Whicher and Metricup Scarps with the use of groundwater for irrigation in the former area a major factor in viability, noting that this is now generally constrained.

#### **2.8.4 Perennial Horticulture**

Perennial horticulture primarily involves the growing of orchard based produce. Land within the Shire highly capable of supporting this use is generally limited to:

- the western edge of the Abba Flats comprising the Marybrook soils; and
- the Metricup and Whicher Scarp systems.

While these areas are similar to those capable of supporting annual horticulture, they are generally less prevalent. The limitations on water supply are a major constraint in this regard.

#### **2.8.5 Cropping**

These are very limited areas of highly or very highly capable land for viable cropping in the Shire of Busselton. The only land system capable of supporting such uses to a high degree are areas of the Cowaramup Uplands which, in view of their high capability for more intensive forms of agriculture, and fragmented landholdings are unlikely to be utilised for dry land cropping.



## **3. SOCIAL AND ECONOMIC ISSUES**

### **3.1 INTRODUCTION**

The purpose of examining the social and economic aspects of the Shire's rural areas is to obtain a comprehensive understanding of how the community operates in the area in order to help guide future development in a desirable manner. Community belief systems, visions and aspirations are important elements to be considered in determining preferred strategic planning outcomes. Existing and future human use patterns and needs will be examined in this section.

### **3.2 HERITAGE**

#### **3.2.1 Indigenous Heritage**

Busselton has been occupied by indigenous people for thousands of years. Archaeological investigations near the foreshore at Dunsborough date Aboriginal occupation sites to 12,000 years ago (Dortch and Dortch, 1997), while other studies at Devil's Lair, near Cape Leeuwin 100 km to the south, show that people lived there at least 47,000 years ago.

These studies also suggest that indigenous subsistence and occupation patterns were broadly similar for millennia, until the British colonised Western Australia in 1829 (Dortch, 1984). By this time the indigenous people of the south-west comprised a distinctive socio-cultural bloc extending from Jurien Bay to Esperance (Bates, 1985, Berndt, 1979, Tindale, 1974). The thirteen groups within this bloc shared similarities in language and customs, which differentiated them from their neighbours to the east and north. These groups are now collectively known as Nyungar, meaning "man" or "person".

The Busselton area is part of the traditional territory of the Wardandi group, whose range included the coast between Bunbury and Cape Leeuwin and inland to Nannup (Bussell, 1941, Tindale, 1974). The Wardandi moved through their territory in nuclear families and larger bands, coming together for social and ceremonial purposes. They practiced elaborate oral traditions and maintained complex social arrangements and spiritual beliefs.

A larger part of the Wardandi's subsistence economy was based around Geographe Bay. The wetlands behind the foreshore provided wildfowl, turtles, frogs, crayfish and edible rhizomes (reed roots) while the calm, shallow, inshore marine waters and the small estuarine channels entering Geographe Bay offered marine fish (Dortch, 1997). The remains of indigenous fish traps, or mungas, have been recorded along the Geographe Bay foreshore (Marchant, 1982) and there are accounts from early explorers and settlers of Busselton that mention indigenous people fishing and hunting in and around Geographe Bay (Bussell, 1834, Marchant, 1982). The foreshore and hinterland may have had a ceremonial focus also, as suggested by a semi-circular earthwork seen near Wonnerup by Francois Peron, a member of the 1801 Baudin expedition from France (Marchant, 1982).

Expansion of the British settlements at Wonnerup and Busselton led to increasing use of resources and land, resulting in the displacement of indigenous people and eventually, from c.1900, their relocation to missions and fringe-camps (Haebich 1988). Despite these upheavals, indigenous people have maintained their cultural, spiritual, and familial connections with the Busselton area throughout the 20<sup>th</sup> century and into the 21<sup>st</sup> century. Many indigenous people are now involved in the identification and management of Aboriginal heritage sites, native title claims and community research and education in the Geographe Bay area.

The Department of Indigenous Affairs Website contains 97 known Aboriginal Sites in the Shire. The distribution of sites is very broad, however many are found in coastal areas, wetland areas and along streams. These generally relate to camping places near available food sources and burial grounds. Others relate to places that have been developed and where detailed surveys have been undertaken.

The Wardan Aboriginal Centre in Injidup (Yallingup locality) recognises the occupation of the area by the Wardandi people, and their cultural heritage. The Centre has the dual aims of education and protection of local Aboriginal heritage and seeks to increase understanding and reconciliation within the wider community.

### **3.2.2 Settler Heritage**

European settlement of the region began in 1831 when John Bussell was engaged in a search for more suitable agricultural land and found it on "the Vasse". He was granted land in July 1832 and later established "Cattlechosen" on the banks of the Vasse River. Other early settlers were the Dawson, Layman and Chapman families who settled in the area in 1834 along with the Bussells, and the Molloy family in 1839. The town-site for Busselton was surveyed in 1839 and had a population of over 100 persons by 1842 when a post office was opened.

The flourishing whaling activity was a stimulus for the development of Busselton in the early years. During the 1840s the whalers bartered iron, flour and clothing for fresh meat, butter and vegetables and took on fresh water and fuel from a number of locations in Geographe Bay. Timber was cut and exported from the Vasse and Quindalup and rail lines established to transport the timber to the mills and jetties.

Settlement in the region was accelerated by various Government programmes, including the Estates Settlement Scheme in the 1820s and 1830s; the construction of the road and rail network between 1889 and 1918, the Group Settlement and Returned Soldiers Scheme in the 1920s and 1930s and the establishment of irrigation and drainage facilities under Government works programmes. These programmes opened up previously unused land and provided incentives to establish community and servicing infrastructure, thus enabling urban growth around the established towns.

Many physical remains of the phases of settlement can be found. The Busselton Jetty was initially built in 1865 but the structure was extended several times with the most recent being in 1911. At present, the jetty structure is approximately 1.8 kilometres in length. A lighthouse was built in 1873 near the end of Queen Street



and operated until its demolition in 1933. Wonnerup House, Westbrook and Cattlechosen are examples of 19th century farm houses.

Within the region the inshore and estuarine fishing industry was one of the first industries to become established. In the mid-1960s more emphasis was provided to more urban rather than rural primary production. Resource development projects increased in the region and tourism expanded in the coastal areas. As a result the population of the Shire increased. The Shire also considered the option of building a boat harbour to cater for small craft. Today the region comprises people from many ethnic backgrounds including Aboriginal descendants and immigrants from Europe and other countries. Aboriginal sites, together with buildings and sites from the early years of European settlement form an important part of the character and human settlement history of the region (Resource Assessment Commission, 1994).

There are records of extreme weather activity in the study area including two major sea invasions during the 20<sup>th</sup> Century. The first occurred in the late 1930s and the second during the 1960s (Gutteridge, Haskins and Davey, 1989). Cyclone Alby, a dissipating tropical cyclone, swept the Western Australian coast in 1978 causing extensive damage to sandy coastlines and the Busselton Jetty,

### **3.3 POPULATION**

#### **3.3.1 Estimated Resident Population**

According to the Australian Bureau of Statistics (ABS) the Shire's preliminary estimated resident population was 26,638 in June 2006, with average annual growth rates of 4.9% between 1996 and 2001 and 2.9% between 2001 and 2006. The Shire has experienced high rates of growth since the early 1980s with between 4 and 5% growth rates between 1981 and 2001. This indicates that the Shire is one of the fastest growing non-metropolitan Local Government areas in Western Australia. The average annual growth rate for WA between 1996 and 2006 was 1.5%.

The 2006 Census of Population and Housing indicates a slight reduction in the percentage of younger age groups and an increase in the percentage of the 45-64 age group, while the 65+ age group demonstrated no change from 1996.

Approximately 67% of the Shire's population in 2006 was located in the urban area of Busselton and 14% in Dunsborough. The rural population comprised approximately 18% of the Shire's population.

The above population figures do not include the high tourist numbers arriving during peak holiday periods. It is estimated that during peak periods when tourists and non-resident land owners visit the Shire the population on any day may be as high as 60-70,000.

#### **3.3.2 Selected Statistics**

The following table contains selected data from the 2006 Census.

**Table 3.1 Selected Statistics - Shire of Busselton 2006**

Resident Population - Females - Males	50.7% 49.3%
Persons of indigenous origin	1.5%
Median Age	38 years
Average size of occupied households	2.79 persons
Occupied dwellings owned or being purchased	62%
Occupied dwellings being rented	31%

Source: Australian Bureau of Statistics.

### 3.3.3 Population Growth

The following table sets out the growth of the population over the past 30 years:

**Table 3.2 Estimated Resident Population 1976 - 2006**

Shire of Busselton

	1976	1981	1986	1991	1996	2001	2006
Resident Population	7,897	9,369	11,933	14,592	18,158	23,099	26,638
Increase on previous Census	471 (6.3%)	1,472 (18.6%)	2,564 (27.4%)	2,659 (22.3%)	3,566 (24.4%)	4,951 (27.2%)	3,539 (15.3%)
Average Annual Growth Rate	1.23%	3.48%	4.95%	4.1%	4.5%	4.9%	2.9%

Source: Australian Bureau of Statistics 2007

### 3.3.4 Urban and Rural Populations

Although the population in the rural areas of the Shire increased between 1996 and 2006 the percentage of people in the rural areas fell from 22% to 18%.

**Table 3.3 Estimated Resident Population 2001 - 2006**

	2001	2006
Busselton	15,300	17,890
Dunsborough	2,980	3,690
Yallingup (hamlet)	139	156
Eagle Bay (hamlet)	60	63
Vasse village	70	75
Carbunup River (hamlet)	40	46
<b>Total Urban</b>	<b>18,589</b>	<b>21,920</b>
<b>Total Rural</b>	<b>4,510</b>	<b>4,718</b>
<b>TOTAL</b>	<b>23,099</b>	<b>26,638</b>

Source: Australian Bureau of Statistics and Shire of Busselton

### 3.3.5 Age Profiles

The over 55 age group peaked in 1991 and has since declined. The 0-4 age group has changed in the same way. The 5-19 and 20-54 age groups have increased between 1986 and 2001.

The aging of 'baby-boomers' has led to some migration to the more desirable coastal towns. Over the next 10 to 15 years this increased migration both from within Western Australia and from the eastern States may impact on the rate of demographic change and will require monitoring. Recent indications are that Western Australia is being regarded as an ideal retirement destination by people from the eastern States for a number of reasons including lower population density and pristine environments. This may have implications for the long-term provision of housing for self-funded retirees in the Shire e.g. 'lifestyle' developments.

**Table 3.4 Age Profiles 1986 - 2006**

<b>Age</b>	<b>1986</b>	<b>1991</b>	<b>1996</b>	<b>2001</b>	<b>2006</b>
0-4	7.9	9.3%	7.4%	6.9%	6.6%
5-19	22.3	20.6%	22.8%	23.1%	21.9%
20-54	42.3	44.6%	45.4%	46.5%	45.1%
55+	27.4	29.1%	24.4%	23.5%	26.4%
<b>Total</b>	<b>11,933</b>	<b>14,592</b>	<b>18,158</b>	<b>23,099</b>	<b>26,638</b>

Source: ABS

### 3.3.6 POPULATION PROJECTIONS

**Table 3.5a Population Projections 2006 - 2011**

	<b>2006</b>	<b>2011</b>
Busselton	17,890	20,200 <sup>1</sup>
Dunsborough	3,690	4,450 <sup>2</sup>
Yallingup (hamlet)	156	170 <sup>3</sup>
Eagle Bay (hamlet)	63	80 <sup>3</sup>
Vasse village	75	1,000 <sup>4</sup>
Carbunup River (hamlet)	46	50 <sup>5</sup>
Rural Total	4,718	5,100 <sup>6</sup>
<b>Shire Total</b>	<b>26,638</b>	<b>31,200</b>

Assumptions: 1. Based on Average Annual Growth Rate (AAGR) of 2.5%.

2. Based on AAGR of 3.8%.

3. Based on low occupancy of dwellings.

4. Vasse village may have an ultimate population of approximately 5,000.

5. No new development in medium term - up to 500 pop. in longer term.

6. Based on AAGR of approximately 1.6%.

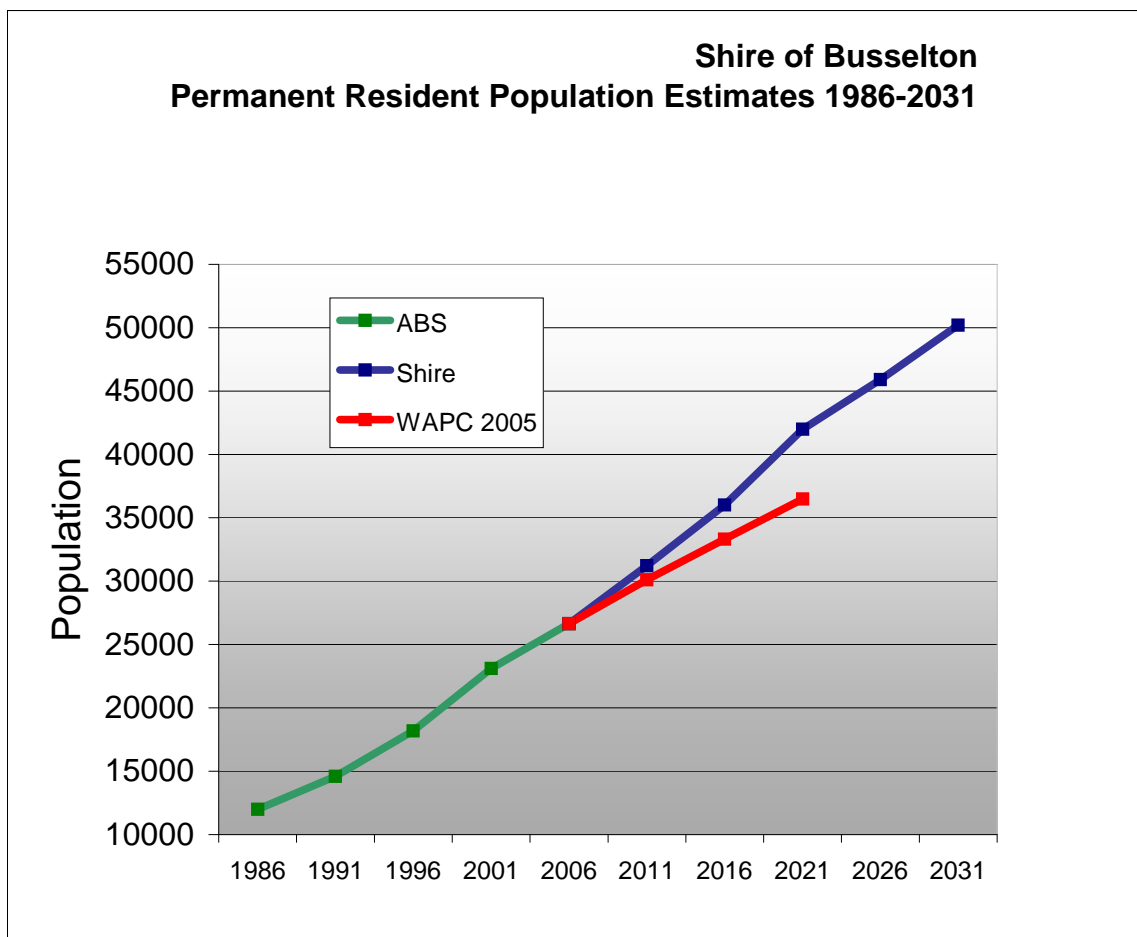
Source: Australian Bureau of Statistics - Regional Population Growth 2005-2006 and 2006 Census of Population and Housing  
Shire of Busselton

The WA Planning Commission has prepared population projections for the Shire in their 2005 Population Report No. 6, "Western Australia Tomorrow" and the Shire has also prepared resident population projections to 2021. The WAPC projections were accurate for 2006. The Shire expects growth to continue at a lower rate than that between 1996 and 2006, at around 3% average per annum.

**Table 3.5b Population Projections 2006 - 2021**

ASSUMPTION	2006	2011	2016	2021
WAPC Projections (WA Tomorrow 2005)	26,800	30,100	33,300	36,500
Shire Projections (AAGR of 3.2% to 2011 and 3% to 2021)	26,638 <sup>1</sup>	31,200	36,000	42,000

Note: 1 - preliminary estimated resident population 2006, ABS 2007  
AAGR = Average Annual Growth Rate



### 3.4 EMPLOYMENT

At the time of the 2001 Census there were 9,499 people employed in the Shire, permanent and part time. This represented 43% of the total resident population. There were 693 people unemployed. Together the work force totalled 10,192 people, 46% of the population. This is higher than the percentage during the 1980s of approximately 40%.

The level of unemployment has declined steadily during the 1990s into the new century i.e. 1991 (12.1%), 1996 (8.1%) and 2001 (6.8%) and is even lower in 2006.

The following table provides an overview of employment in the different sectors of the economy based on the 1996 and 2001 Census data.

**Table 3.6 Industry of Employment**

	<b>1996</b>	<b>%</b>	<b>2001</b>	<b>%</b>
Agriculture, Forestry & Fishing	710	9.9	861	9.1
Mining	199	2.8	164	1.7
Manufacturing	734	10.3	919	9.7
Electricity, Gas & Water	36	0.5	59	0.6
Construction	765	10.7	1,087	11.4
Wholesale Trade	245	3.4	310	3.3
Retail Trade	1,021	14.3	1,587	16.7
Accommodation, Café & Restaurant	556	7.8	849	8.9
Transport & Storage	179	2.5	272	2.9
Communication Services	98	1.4	94	1.0
Finance & Insurance	159	2.2	194	2.0
Property & Business	582	8.2	791	8.3
Government Administration & Defence	213	3.0	253	2.7
Education	446	6.2	553	5.8
Health & Community Services	622	8.7	795	8.4
Culture & Recreation	84	1.2	143	1.5
Personal & Other	240	3.4	347	3.7
Non Classifiable	90	1.3	55	0.6
Not Stated	160	2.2	168	1.8
<b>Total</b>	<b>7,139</b>	<b>100</b>	<b>9,501</b>	<b>100</b>

Between 1996 and 2001 there was a growth of 2,362 jobs. The agriculture, fishing and forestry sector grew by 151 jobs over the 5 year period however this growth was at a lower rate than the overall growth in employment, which declined from 9.9% in 1996 to 9.1% in 2001.

The retail trade sector grew strongly by 566 jobs during the 1996 to 2001 period. It increased from 14.3% of the employment in the Shire to 16.7% of the employment. The mining sector declined during the same period from 199 jobs to 164 jobs. The communication services had steady employment at around 100 jobs. Employment in the Shire appears to have grown consistently in conjunction with the high population growth rates.

## 3.5 ECONOMIC SECTORS

### 3.5.1 Agriculture

The importance of agriculture to the Busselton economy was highlighted in a report prepared by the Department of Agriculture in 1997, 'Atlas of Western Australian Agricultural Statistics 1994/95'. The report rated the Shire of Busselton as the tenth highest earning Shire in Western Australia with a gross agricultural product of \$77,493,622. This equates to \$707 per hectare as the average return for the Shire.

The following were the major agricultural products for the Shire:

- Milk \$18.7 million (rated 3<sup>rd</sup> in WA)
- Cattle and sheep meat \$13.4 million (rated 7<sup>th</sup> in WA)
- Cattle and calf meat \$12.9 million (rated 5<sup>th</sup> in WA)
- Horticulture \$11.8 million (rated 9<sup>th</sup> in WA)
- Crops and pastures for hay \$8.9 million (rated 1<sup>st</sup> in WA)
- Vegetables \$8.8 million (rated 7<sup>th</sup> in WA)
- Grapes for wine and distillation \$2.2 million (rated 1<sup>st</sup> in WA)
- Table grapes/dry \$0.2 million (rated 4<sup>th</sup> in WA)
- Stud horses 256 (rated 5<sup>th</sup> in WA)
- Lime/dolomite used 5,510 tonnes (rated 5<sup>th</sup> in WA)

A more recent study by the Department of Agriculture in 2002, 'Agriculture in the Shires of Busselton and Augusta-Margaret River (draft)' highlights value-adding to agricultural products. The following table provides the gross value of agricultural production (GVAP), the total value added (TVA) and the percentage of value adding.

**Table 3.7 Gross Value of Agricultural Production - 2002**

Commodity	GVAP \$m	TVA \$m.	Percentage Adding
Milk	20	47	235%
Meat	6.8	15.3	225%
Hay	6.8	15.3	225%
Grapes	11.7	97.7	835%
Nurseries	0.3	0.7	233%
Wool	0.6	1.4	233%
Fruit & Vegetables	5.7	11.4	200%
<b>All commodities</b>	<b>62.2</b>	<b>202.6</b>	<b>325%</b>

The high levels of value adding to the agricultural commodities in the Shire is a feature of the region. Most of the products have greater than a doubling of value except for grapes that have an approximate 8 times factor in value adding when made into wine. The value adding is a major economic feature in the Shire and is a major employment factor.

The value of production per agricultural hectare varies considerably from uses such as grapes and vegetables to cattle and dairy grazing. The following table compares the productivity per unit area of four major uses. It is evident that the highest returns are achieved from perennial and annual irrigated horticulture.

**Table 3.8 Productivity per Unit Area of Major Land Uses**

<b>Commodity</b>	<b>Area used ha</b>	<b>GVAP \$/ha</b>	<b>TVA \$/ha</b>
Milk	51,000	\$820	\$1,800
Beef Cattle	58,000	\$345	\$650
Grapes	2,559	\$7,437	\$62,100
Fruit and Veg	500	\$13,000	\$26,000

The following table provides an indication of the areas used for irrigated agricultural production.

**Table 3.9 Areas used for Irrigated Agriculture 1996/97**

<b>Description</b>	<b>Busselton (ha)</b>
Potatoes	495
Onions	34
Brassicas	24
Cucurbits	43
Sweet corn	4
Celery	2
Other vegetables	8
<b>Vegetable total</b>	<b>612</b>
Deciduous fruit	2
Sub-tropical soup	7
Tropical fruit	6
Nuts and olives	7
Berries	1
<b>Total Fruit</b>	<b>23</b>
<b>Total Grapes</b>	<b>727</b>
Vegetable seed	81
Nurseries	3
Cut Flowers	127
Cultivated turf	7
<b>Total - Other Crops</b>	<b>218</b>

The Department of Agriculture report suggests that growth in intensive agriculture may be expected in the next 15 years. The highest expectation is that viticulture may quadruple from 1,340ha to approximately 6,000ha. Fruit and Vegetable production is expected to expand from 680ha to 1,000ha. Meat production is expected to decrease from 58,000ha to 22,000ha. Milk production is expected to rise from 51,000ha to 72,000ha.

### 3.5.2 Other Sectors of the Economy

The dominant economic activity in the rural areas of the Shire is agriculture however there are a number of other economic activities that contribute to the Gross Geographic Product (ABS 2001). These will be examined below.

#### Fishing

Fisheries production has trebled over the past 5 years with the returns estimated to be in the order of \$3.2m in 2001/2002. This has grown from an estimated \$1m in 1996/97.

#### Forestry

The quantity of CALM log production has varied considerably over the past 5 years.

**Table 3.10 Quantity of Log Production 1997 - 2003**

	1997/98	1998/99	1999/2000	2000/01	2001/02	2002/03
Quantity - m <sup>3</sup>	47,584	3,708	14,155	27,654.8	49,930.6	3,674.2
Value - \$'000	26,025	1,622.4	657.3	2,003.3	2,264.3	184

#### Tourism

The 20 major tourist establishments in the Shire received takings of \$20.5 in 2001/02. It should be assumed that the majority of these takings were from the urban areas of the Shire. The returns from wineries, restaurants, galleries, commercial enterprises, hotels, chalet businesses, bed and breakfasts and caravan parks/camping places in the rural areas are not known but can be assumed to be substantial.

### 3.6 TOURISM

The Shire is one of the State's most popular tourist and holiday destinations due to its mild climate, attractive coastline, country lifestyle and world-class wine and surf.

The Shire contains a large number of tourist attractions. The primary focus of tourism includes the coastal areas and the Geographe Bay beaches in particular. Other attractions include surfing on the Indian Ocean coast, diving on the wreck of the HMAS Swan and reefs, fishing around the coast and boating, yachting and beach activities.

The Shire also attracts tourism to farms, wineries, restaurants, breweries and other attractions in the rural areas. Much of the tourist accommodation is small-scale and visitor details are not recorded by the ABS which bases its data on establishments of 15 or more rooms/units.

The following table provides estimates of tourist accommodation available in the Shire in 2004. Many of the chalets are located in the rural areas of the Shire.



**Table 3.11 Tourist Accommodation**

	<b>Number of Establishments</b>	<b>Hotel/Guest Rooms</b>	<b>Holiday Units</b>	<b>Caravan Sites</b>
Bed & Breakfasts	30	60	-	-
Guesthouses	28	210	-	-
Hotels	6	90	150	-
Motels	7	170	-	-
Chalets	59	-	380	-
Resorts	9	-	450	-
Caravan Parks	17	-	-	2,100 approx.
Holiday Units	-	-	350	-
<b>Total</b>	<b>155</b>	<b>530</b>	<b>1,330</b>	<b>2,100 approx.</b>

The following table shows the rate of tourist accommodation development from 1995 to 2002, indicating a substantial increase in tourist accommodation and a major boost to the Shire's economy.

**Table 3.12 Tourist Development Approvals 1995 - 2002**

<b>Year</b>	<b>Chalets</b>	<b>Guesthouse Rooms</b>	<b>Apartments Units</b>	<b>Caravan Sites</b>
1995	10	10	168	52
1996	34	21	67	-
1997	13	34	25	16
1998	6	31	207	2
1999	2	47	154	114
2000	18	38	26	26
2001	19	8	38	-
2002	33	14	4	140
<b>Totals</b>	<b>141</b>	<b>203</b>	<b>689</b>	<b>350</b>

Source: Shire of Busselton estimates based on planning approvals

The rapid growth in the tourism and recreation sectors has had many benefits for the Shire. It has however, also resulted in a number of planning impacts in terms of the scale of development, disruption to existing communities and high levels of home vacancy. These issues led to the preparation of a Ministerial Taskforce report in 2003 by the Western Australian Planning Commission, 'Investigation of the Impact of Combining Tourist and Permanent Residential Accommodation on Tourist Zoned Land and the Impact of Strata Titling'.

Data from Tourism Western Australia (2004) indicates that Busselton had a total of 459,000 overnight visitors in 2002. Of these 93.7% were domestic and 6.3% were international. In total the visitors stayed 1,671,850 nights and paid an average of \$128 per night. It was noted that the average length of stay was 3.6 nights and that the occupancy was 47.3%. Tourism WA's data is based on 24 establishments containing 1,095 rooms.

An analysis of the rural areas of the Shire in 2005 indicated the following statistics.

Wineries	58
Cellar Doors	33
Restaurants in rural areas	19
Galleries	22
Commercial, partly tourist oriented businesses	12

In addition, over fifty specific tourist attractions were identified in the rural areas of the Shire, including beaches, surfing spots, picnic areas, walk trails, scenic lookouts and other places of tourist interest.

There are a substantial number of tourist accommodation establishments in the rural areas of the Shire that may be described as lower order however there are some more intensive establishments including hotels, chalet developments and caravan parks.

It is probable that the total returns from the tourism industry are equal to or higher than the returns from agriculture. In 2001/02 the ABS estimated that tourism takings totaled over \$20.5 million, 5.4% of the State's total.

### 3.7 RURAL SETTLEMENT

Settlement planning in the Shire is guided by the Leeuwin-Naturaliste Ridge State Planning Policy and the Busselton Urban Growth Strategy. The LNRSP describes the following settlement hierarchy.

**Dunsborough** is classified as a Principal Centre (2-20,000 population subject to local planning outcomes) and the Dunsborough Structure Plan envisages that it may accommodate up to 12,000 persons ultimately. It is anticipated that it will have local and district level commercial services, and reticulated water, sewerage and power.

**Vasse** is classified as a village and it is expected that it will ultimately have a population of up to 5,000 people. It will have local level commercial and community services, and will achieve high levels of employment generation in areas such as education, medicine, research, light industry and administration. It will also have reticulated water, sewerage and power.

**Carbunup River and Metricup** are classified as hamlets and they may have a maximum population of 500 people in the future. They are expected to offer convenience services and have a community focus. It is also expected that they will have innovative alternatives to conventional servicing. The potential of Metricup may be constrained due to the presence of mineral deposits.

**Eagle Bay and Yallingup** are classified as coastal nodes. They too are expected to grow to a total of 500 people in each node in the future. In view of the sensitive environment these coastal nodes are expected to be provided with reticulated water, sewerage and power unless proponents can demonstrate suitable alternative technologies that meet standards set by the responsible authorities.

**Bunker Bay, Caves House and Smiths Beach** are classified as tourist nodes. They are intended for short stay accommodation only of less than 500 people each. Tourist nodes are expected to have convenience and tourist facilities and Smiths Beach a hotel, convenience and tourist facilities.

The tourist nodes are expected to be fully serviced unless acceptable alternatives can be demonstrated that will achieve standards established by the servicing authorities. The LNRSP indicates that land use on the Smiths Beach tourist site is to be 30% residential and 70% tourist.

### **3.8 INFRASTRUCTURE**

#### **3.8.1 Water, Wastewater and Drainage**

The Department of Environment and Conservation and the Office of Water Policy regulate control and conserve Western Australia's water resources. There are two licensed areas in the Shire of Busselton. The first covers a 23 kilometre radius that covers the whole of Busselton and the Vasse village as well as some of the rural areas to the south of Busselton. The second covers Dunsborough, Yallingup and all the remainder of Cape Naturaliste. The Water Corporation is licensed to provide for the reticulation and treatment of wastewater within both the Busselton and Dunsborough urban areas. The licensed operator within the Water Operating Area covering Busselton is the Busselton Water Board and the Dunsborough townsite is licensed to the Water Corporation (WAPC 2000).

The actual water and wastewater service areas and headwork fronts as provided by these operators include an area on the western coastal fringe of Busselton, an area south of Busselton (rural residential) and rural, south east of Dunsborough, north west of Dunsborough and two areas west of Dunsborough. The service areas represent those areas within which the service provider will not require the developer to pre-fund water and wastewater headworks. Development outside these areas usually requires additional infrastructure.

In the rural areas, outside of the Scheme water areas, water is provided via roof catchment to rain water tanks, creeks or groundwater bores. The use of groundwater bores and harvesting of water from creeks is controlled by the Department of Environment and Conservation (DEC). Approval is required from DEC to draw water or interfere with stream beds or banks. Generally, any harvesting of water for commercial purposes requires the submission of an application to DEC. The Department will then assess the proposal on the basis of availability and environmental impacts. The Shire of Busselton has a Dams Policy to provide guidance in relation to applications for dams. The main purpose of the policy is to minimise environmental impacts that may arise from removal of riparian vegetation and alteration of flow regimes associated with dam construction.

### **3.8.2 Solid Waste**

The collection and disposal of solid waste is undertaken by the Shire. There are two licensed disposal sites in the rural areas of the Shire.

- The Busselton site is located south of the intersection of Queen Elizabeth Avenue and Rendezvous Road (this site has limited capacity and another site will be needed in the near future).
- The Dunsborough site is located east of Vidler Road.

A waste recycling programme is managed by the Shire and operated under contract by a private business. The recycling programme is operated from the Shire's depots. Annually 740 tonnes of waste is recycled and diverted from landfill.

### **3.8.3 Energy Services**

#### Electricity

Electricity is supplied from the State power grid through high voltage power lines and supply to the Busselton and Dunsborough urban areas is channelled through Busselton substation located on Lot 1 Rendezvous Road, Vasse. From here electricity is supplied throughout the Shire and serves the power needs of land development within Busselton and Dunsborough. The reticulation of electricity to individual developments is subject to agreement between the developers and Western Power.

#### Natural Gas

The natural gas pipeline was extended to Busselton in 1998. The natural gas supply area is limited to the existing urban area of Busselton. In view of the location of the gas main in Bussell Highway, there is a potential supply area in the rural area to the south east of Busselton.

### **3.8.4 Roads**

The main roads in the Shire are the responsibility of the Department of Main Roads and the local roads are managed by the Shire. There have been some major road projects proposed and completed over the past few years that are anticipated to result in significant improvements to the road network, including:

- Sabina River to Busselton Bypass, dual carriageway - 4.6 km
- Busselton to Caves Road, second carriageway - 4.4 km
- Busselton Bypass, single carriageway - 12 km
- Vasse to Margaret River, widen and construct four overtaking lanes - 37 km
- Vasse to Dunsborough route, construct single carriageway - 15.7 km (route to be determined).

### **3.8.5 Community Services**

The high rates of demographic change in the Shire over the past 20 years have resulted in the need to review the provision of services and identify the requirements in a timely manner. 'Demographics and the Inventory of Government Services and Infrastructure in the Vasse Region' was prepared in 1998 on behalf of the Shire. This report identified a number of service gaps including the need for additional specialist medical services, hospital and nursing home beds, palliative care, public housing, primary schools, policing, local bus services, funding for State Emergency Services and volunteer fire services, youth welfare, family violence support, parenting support and child day-care services.

#### Health Services

The Vasse-Leeuwin Health Service operates a number of services in the Shire. The majority of these services are located in Busselton.

- Busselton District Hospital
- Kevin Cullen Community Health and Development Centre
- Child Health Clinic
- Mental Health Clinic
- St. John Ambulance Australia

#### Education Services

Education services are provided by the Education Department of Western Australia and by private educational institutions. The Education Department provides five primary schools and one high school, with a middle school under construction in Vasse. The private sector provides five primary schools and two high schools. All of the schools are in the urban areas of the Shire except for the Steiner school in Caves Road, Yallingup.

#### Public Transport

The public transport system in the Shire moves approximately 25,000 people per week or 1.3 million people per annum. Local people and visitors move between Perth and Busselton, Bunbury and Busselton and elsewhere within the South West Region.

South West Coach Lines, Bunbury City Transit employs a staff of over 80 persons and operates a fleet of 70 buses and coaches.

Bus services include school buses, Busselton-Dunsborough inter-town, inter-school and between other towns in the Shire. Services from Eagle Bay to Dunsborough have recently been introduced.

### 3.8.6 Communication

Standard telephone services are provided in the urban areas and most of the rural areas. Mobile phone services are available and there is generally a good coverage throughout the rural areas. Television coverage is also good throughout the rural areas of the Shire.

## 3.9 DEVELOPMENT PROFILE

### 3.9.1 Building Summary

**Table 3.13 Summary of Building Licenses Issued**

Year	Dwelling Units	Industrial/ commercial Units	Tourist Accom. Units	Total Value
1994/95	562	23	52	\$65.6m
1995/96	411	17	60	\$59.8m
1996/97	462	21	177	\$87.1m
1997/98	518	35	30	\$83.2m
1998/99	584	34	35	\$89.6m
1999/00	604	21	138	\$104.5m
2000/01	370	20	191	\$107.2m
2001/02	456	24	8	\$93.3m
2002/03	527	21	3	\$105.9m
2003/04	646	27	19	\$127.1m
2004/05	797	30	30	\$198.3m
2005/06	632	16	25	\$218.8m

**Table 3.14 Summary of Dwelling Units**

Year	Dwelling Units
1971	2,846
1976	-
1981	4,139
1986	5,277
1991	6,699
1996	8,597
2001	10,938
<b>2006</b>	<b>12,863</b>

\* Includes grouped dwellings

Source: Australian Bureau of Statistics

**Table 3.15 Proportion of Grouped Dwellings to Single Dwellings of all Building Licenses issued for Dwelling Units**

<b>Years</b>	<b>Percentage</b>
2001/02	13.3%
2002/03	18.4%
2003/04	17.1%
2004/05	26.7%
2005/06	19.3%

**Table 3.16 Building Licenses by Location - Dwellings**

	<b>2000/01</b>	<b>2001/02</b>	<b>2002/03</b>	<b>2003/04</b>	<b>2004/05</b>	<b>2005/06</b>
Busselton	141	210	211	297	349	310
Central Rural	14	5	11	8	8	8
Dunsborough/Quind.	83	105	123	132	133	116
Eagle Bay	7	6	6	5	4	4
East Rural	2	1	6	2	3	1
Siesta Pk/Marybrook	3	4	3	5	5	1
West Rural	67	61	66	82	76	62
Yallingup	2	5	1	2	6	4
<b>TOTAL</b>	<b>319</b>	<b>397</b>	<b>427</b>	<b>534</b>	<b>584</b>	<b>506</b>

Note: Includes grouped dwelling units.

## 4. REGIONAL AND LOCAL PLANNING

### 4.1 INTRODUCTION

A large number of State and Local Government policies are relevant to the rural areas of the Shire and need to be taken into account in addressing key issues. There is a need to identify the relevant policies and highlight where they complement the rural issues and desired outcomes and to identify where there may be potential conflicts. It is the role of the Strategy to assess the apparent conflicts and to draw out a specific strategy that best resolves the matter without compromising the intent or objectives of the policies. In this section an overview of the major State, regional and local policies will be provided, including how they will need to be considered in the future planning of the Shire's rural areas.

### 4.2 STATE SUSTAINABILITY STRATEGY

Following considerable public consultation, the State Government released its concept for sustainability in September 2003. The document 'The Western Australian State Sustainability Strategy' defined sustainability as follows:

*"...meeting the needs of current and future generations through an integration of environmental protection, social advancement and economic prosperity".*

The sustainability framework consists of:

- seven foundation principles that reflect the core values of sustainability;
- six visions for Western Australia's sustainability; and
- six goals for government and 42 priority areas for action.

The six goals are:

- Sustainability and governance
- Contributing to global sustainability
- Sustainable use of natural resources
- Sustainability and settlements
- Sustainability and community
- Sustainability and business

Some of the main priority areas for action relevant to the Strategy include:

- Maintaining our biodiversity
- Sustainable agriculture
- Sustainable forestry and plantations
- Sustainable tourism
- Sustainable coastal and marine environments.



### **4.3 STATE PLANNING STRATEGY**

The Western Australian Planning Commission published the State Planning Strategy in 1996. The vision as set out in the Strategy is:

*"The State Planning Strategy will significantly contribute to the quality of the life of all Western Australians in the years to 2029, by using the land use planning system to facilitate and contribute to regional wealth; the conservation and enhancement of the environment; and the building of dynamic and safe communities which nurture human activity."*

Under the broad objective of 'Securing a High Quality Environment', the following four key strategies are underpinned by a number of supporting actions for implementation:

- Prevent further loss in biodiversity,
- Ensure that water resources are conserved and their quality be protected,
- Ensure that land and soil are conserved and that degradation does not occur, &
- Promote planning, management and protection of resources.

Specifically for the Southwest Region, the following supporting actions were specified:

- Protect natural resources from incompatible development;
- Implement land care programmes such as Integrated Catchment Management to reduce soil and river salinity and pollution of water resources (including to maintain and enhance riparian vegetation);
- Protect sensitive environmental areas and cultural heritage; and
- Promote opportunities for economic growth.

### **4.4 REGIONAL DEVELOPMENT POLICY**

The regional policy statement 'Regional Western Australia – A better Place to Live', published by the Department of Local Government and Regional Development in 2003, complements the State Planning Strategy. Its vision is:

*"Western Australian regional communities will be healthy, safe and enjoyable places to live and work, offering expanded and improved educational and employment opportunities for their residents and a high standard of services."*

*Regions will have robust, vibrant economies based on the sustainable use of economic, social and environmental resources and a strong partnership approach within and between regional communities, industry and Government."*

It lists the following four regional development policy goals, which are supported by a range of strategies and targets:

- Governance – understanding, partnering and delivering better outcomes for regions,
- Economic – growing a diversified economy,
- Social – educated, healthy, safe and supportive communities, and
- Environmental – valuing and protecting the environment.

#### **4.5 LEEUWIN-NATURALISTE RIDGE SPP No. 6.1**

The Leeuwin-Naturaliste Ridge State Planning Policy (LNRSP) was gazetted in 1998 and reviewed in relation to the Smiths Beach Tourist Node in 2003. The SPP is a State Planning Policy that must be given due regard by the Shire as part of its town planning determinations pursuant to the Planning and Development Act 2005.

The vision of the Policy is to achieve *"...creative, vital and sustainable communities living in balance with economic development and the unique landscape and environmental values of the Leeuwin-Naturaliste Ridge Policy Area"*.

The purpose of the LNRSP is to provide the strategic planning framework for the policy area for the next 30 years by providing greater vision, guidance and certainty of land use. It promotes sustainable development, conservation, and land and resource management. It seeks to provide assistance to those managing land use change, enable greater consistency between the two local governments, give clear regional-level advice to proponents of development, and provide a reference to guide development and conservation by improving the information available to the community. In some areas the LNRSP provides incentives to rural landowners to voluntarily enhance conservation outcomes.

The overall objectives of the LNRSP are to:

- Conserve and enhance the special benefits arising from the landscape elements that form the fabric of the region;
- Respect and conserve its outstanding natural and cultural heritage and environmental values;
- Cater for population growth consistent with the objectives of the LNRSP and provide a range of settlement options located to enhance the economic, social and environmental functions, while promoting quality and innovation in urban design and built form;
- Protect agricultural land for its economic, landscape, tourism, and social values;
- Encourage a mix of compatible land uses while separating conflicting land uses;
- Facilitate a robust, diverse and sustainable economy;
- Foster a sense of community and creativity;
- Protect known mineral resources; and
- These objectives are for the benefit of all residents and visitors and for future generations.

The main outcomes that the LNRSP promotes are:

- Protection of the natural character of the Leeuwin-Naturaliste Ridge and the maintenance of the mosaic of land uses;
- A clearly defined settlement hierarchy to cater for the expected increase in population. Urban living will be in designated nodes. Alternative clustered living options will be provided in a settlement pattern involving the hierarchy of villages, hamlets and enclaves;
- Maintenance of the character and identity of the existing settlements to ensure improved lifestyle opportunities for residents and visitors;
- Choices in rural lifestyle opportunities by enhancing the design of existing and approved rural residential developments;
- Enhancement of a diverse and sustainable tourism base;
- Greater opportunities for tourism activities and recreation experiences that innovatively respond to the natural environment, and are integrated with local communities;
- Reinforcement of the function of the Leeuwin-Naturaliste National Park.
- Establishment of strategic environmental corridors to enhance ecological and landscape values;
- Encouragement and support for greater landowner responsibility to manage natural values;
- Management of water quality through land use controls to protect both surface and groundwater systems of streams, wetlands, damp lands and caves; associated plant and animal habitats; and landscape amenity; and
- Protection of the economic and social value of prime agricultural land through careful screening of incompatible uses, control of subdivision and facilitating incentives for landowner responsibility.

The LNRSP is the Government's and community's response to the challenges of coordinating development along the Leeuwin-Naturaliste Ridge with a view to maintaining the visual attractiveness and environmental values of the ridge for future generations to enjoy.

The Local Rural Planning Strategy responds to and complements the LNRSP by providing greater understanding of agricultural land use and practice, and land capability; and by providing planning guidelines to assist decision making in relation to land use allocation.

#### **4.6 AGRICULTURAL AND RURAL LAND USE SPP No. 2.5**

As a result of increasing concern about planning, development and land management pressures in rural areas, the Government reviewed its past policies and produced a new policy, 'State Planning Policy No. 2.5 – Agricultural and Rural Land Use Planning'. The Planning and Development Act requires that Local Government must have due regard to this Policy in the preparation or amendment of town planning schemes, strategies and policies and when providing comment and advice on planning applications that deal with rural land. In conjunction with this

Policy the WAPC's Development Control Policy No. DC 3.4 – Subdivision of Rural Land was also reviewed and upgraded to provide the framework for the subdivision of rural land to achieve the four key objectives of the Statement of Planning Policy.

In its background and purpose section, it makes the following statement:

*"The Western Australia Government considers that productive agricultural land is a finite National and State resource that must be conserved and managed for the longer term.*

*As a general objective, the exercise of planning powers should be used to protect such land from those developments, activities or influences that lead to alienation or diminished productivity, while always accepting the need for land for expanding urban areas and other uses of State significance".*

The four key objectives of the Policy are:

1. Protect agricultural land resources whenever possible by:
  - Discouraging land uses unrelated to agriculture from locating on agricultural land;
  - Minimising the 'ad hoc' fragmentation of rural land; and
  - Improving resources and investment security for agricultural and allied industry production.
2. Plan and provide for rural settlement where it can:
  - Benefit and support existing communities; and
  - Have access to appropriate community services and infrastructure.
3. Minimise the potential for land use conflict by:
  - Providing adequate separation distance between potential conflicting land uses;
  - Introducing management requirements that protect existing agricultural land uses;
  - Identifying areas that are suitable and capable for intensive agricultural pursuits as agricultural priority areas; and
  - Avoiding the location of new rural settlements in areas that are likely to create conflict with established or proposed agricultural priority areas.
4. Carefully manage natural resources by:
  - Discouraging development and/or subdivision that may result in land or environmental degradation.
  - Integrating land, catchment and water resource management requirements with land use planning controls.

- Assisting in the wise use of resources including energy, minerals and basic raw materials.
- Preventing land and environmental degradation during the extraction of minerals and basic raw materials; and
- Incorporating land management standards and sequential land use change in the land use planning and development process.

#### **4.7 OTHER STATE GOVERNMENT POLICIES AND GUIDELINES**

In addition to above State Government Strategies and Policies there are a large number of statutory policies, development control policies, guidelines and Planning Bulletins that need to be considered by planners at the different levels of planning.

##### **4.7.1 Statements of Planning Policy and other State Planning Documents**

- State Planning Framework Policy (SPP 1)
- Environment and Natural Resource Policy (SPP 2)
- Basic Raw Materials Policy (SPP 2.4)
- State Coastal Planning Policy (SPP 2.6)
- Public Drinking Water Source Policy (SPP 2.7)
- State Industrial Buffer Policy (SPP 4.1)
- Poultry Farm Policy (SPP 4.3)
- Telecommunications Policy (SPP 5.2)

##### **4.7.2 Development Control Policies**

There are also WA Planning Commission Development Control Policies that need to be taken into consideration. The following are some of the relevant ones to be considered in rural planning:

- DC 1.1 Subdivision of Land
- DC 3.4 Subdivision of Rural Land
- DC 3.7 Fire Planning (Planning for Bush Fire Protection)
- DC 4.2 Planning for Hazards and Safety.

##### **4.7.3 Planning Bulletins**

There are a large number of Planning Bulletins that apply to the rural areas of the Shire. Some of the more important include:

Bulletin No. 26 - Water Source requirements relating to the Assessment of Subdivision Applications for Intensive Agriculture

Bulletin No. 49 - Caravan Parks

Bulletin No. 56 - Farm Forestry Policy

Bulletin No. 64 - Acid Sulphate Soils.

#### **4.7.4 Policies and Guidelines for Other State Authorities**

Other policies related to other Government agencies include:

- Draft Country Sewerage Policy (undated) - Health WA
- Environmental Protection Policies including vegetation protection, clearing controls and buffers (2002) - Department of Agriculture
- Land Use Compatibility in Public Drinking Water Source Areas - Water and Rivers Commission Water Quality Protection Note (undated).

### **4.8 LOCAL GOVERNMENT PLANNING INSTRUMENTS**

#### **4.8.1 District Town Planning Scheme No. 20**

District Town Planning Scheme No. 20 comprises a Scheme text and map. Figure 6 provides an indication of the zones and reservations in the Shire. The Scheme is due for review and a Local Planning Strategy is required to be prepared as a component of the review. The purpose of the Local Planning Strategy is to profile the district, set the future direction and outline the rationale for the Scheme zonings and provisions.

#### **4.8.2 Shire Strategies**

The Shire also has a number of strategic and guideline documents, including:

Busselton Urban Growth Strategy (1999 - endorsed by WAPC in 2006)

In view of the high population growth and rate of development in the Shire, the Shire decided to identify which areas in Busselton would be suitable for development in the future and which areas would not be suitable. The Strategy identified short, medium and long term development areas totaling approximately 2,500ha of potential development land.

Busselton Wetlands Conservation Strategy (2005)

The purpose of this Strategy is to provide a framework to guide sustainable land use, protect and enhance biodiversity and wise management of the environmental values of the Busselton Wetlands and to provide a framework for management planning of the publicly owned wetlands area. The Strategy provides guidelines in land management, wildlife management, vegetation management, drainage management and feral animal management. Parts of these wetland areas are within the rural sector of the Shire.

Geographe Bay Foreshore Management Plan (2000)

The main objective of this study is to provide direction to the Shire of Busselton, land developers and community groups by developing a framework for the future management, protection and preservation of the foreshore of Geographe Bay, both reserve and private areas.

## Biodiversity Incentive Strategy for Private Land in Busselton Shire (2002)

The vision of this Strategy is to achieve the voluntary conservation of private land with high conservation values by offering a range of incentives in exchange for conservation covenants and inclusion in an appropriate zone within the Shire's Town Planning Scheme to further protect these values.

## Environment Strategy

The Environment Strategy is aimed at providing Council with a strategic framework to undertake environmental management activities pursuant to eight themes that include biodiversity, coastal management, wetlands, agricultural land use, community awareness, fire management, funding and waste management.

### **4.8.3 Local Planning Policies**

The Shire of Busselton has a number of planning policies that it uses on an ongoing basis to guide and manage land use and development in the Shire, including:

- Extractive Industry Policy (1999)
- Caves Road Visual Management Policy (1999)
- Commonage Area Implementation Policy (1999)
- Dams Policy (2001)
- Floodplain Development and Management Policy (1994)
- Heritage Conservation Policy (2000)
- Rural Tourist Accommodation Policy (1994 - updated 1999)
- Viticulture Subdivision Policy (2003)

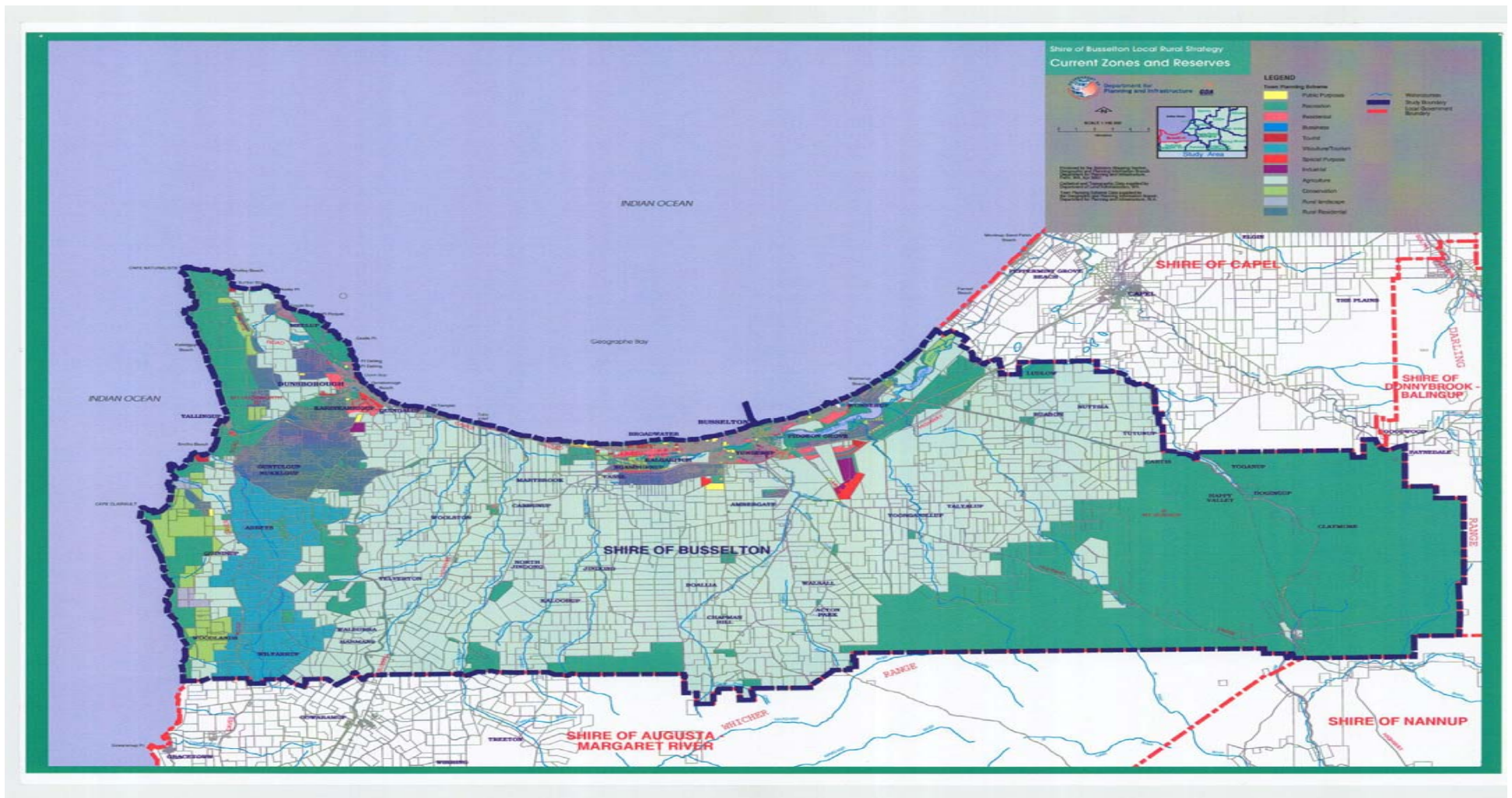


Figure 6 Current Zones and Reserves



#### **4.9 COMMUNITY AND INDUSTRY GUIDELINES**

A number of useful guidelines have been prepared in the Capes area, including:

- Environmental Management Guidelines for Vineyards (2002)

This document was prepared by the Wine Industry Association of WA and the Grape Growers Association of WA in conjunction with staff from the Department of Environmental Protection and the Water and Rivers Commission. The document sets out a broad range of management guidelines for landowners who are involved with grape growing and viticulture.

- Cape to Cape Landcare Companion (2004)

The Cape to Cape Catchment Group has prepared a practical guide to land care and sustainable property management for residents of the Cape Naturaliste/Cape Leeuwin catchments.

- DairyCatch Guidelines.
- Geographe Catchment Companion.
- GeoCatch River Action Plans for the Vasse, Sabina, Abba, Ludlow, Carburnup Rivers, and Yallingup/Cape Naturaliste streams.

## **5.0 RURAL ISSUES**

The following section relates to issues that not only affect agriculture and those living and working in rural areas but also the range of matters that are inherent and connected to the rural areas of the Shire, encapsulating economic, environmental, social and character issues.

### **5.1 AGRICULTURAL VIABILITY AND RURAL SUBDIVISION**

The issue of continued viable and sustainable agricultural development and enterprise in the Shire is significant as agriculture has traditionally provided, and continues to provide, the economic foundation for the area and the increasing population. Similarly the role of planning policies and other instruments in facilitating viable and sustainable agricultural land use is also important in view of these parameters, and controls can often be critical in supporting or undermining sustainability within the agricultural sector.

#### **5.1.1 Population and Market**

The broad viability of the agricultural sector in the Shire of Busselton has a strong outlook for a number of reasons:

- The relative proximity to the Perth metropolitan region and growing regional and local populations ensures a significant catchment and economic base for the agricultural sector to service.
- An increasing international market for various agricultural industries and particularly viticulture provides market diversity, which is crucial to ongoing viability.

#### **5.1.2 Physical Factors**

As outlined in previous sections the range of physical factors that make up the natural environment in the Shire are also heavily linked to the viability of agricultural land use. The most significant matter in this regard is the availability or otherwise of water (ground and surface), with other issues such as soil capability, acid sulphate soils, land degradation, pests and weeds also posing potential constraints to agriculture in the area.

Discussions with the DEC indicate that there is likely to be limited groundwater availability in the majority of the area in the longer term with similar constraints to surface water. This is likely to impact on the establishment of agriculture types that are dependent on irrigated water supply in the long term.

From a land use planning perspective it will be critical to ensure these physical characteristics are addressed as a component of subdivision, development and land use proposals to ensure that uses can be sustainably established. Additionally, strategic land use planning for rural areas will need to reflect the opportunities and constraints in this respect.

### 5.1.3 Rural Subdivision and Lot Sizes

The most obvious example of the link between sustainability of agriculture and land use planning controls in the Shire of Busselton and the South West region generally is the need for the determination of appropriate lot sizes in agricultural areas to support existing and ongoing agricultural uses. Since initial creation of agricultural and group settlement lots in the Shire, there has been ongoing fragmentation of agricultural land. The demand for and occurrence of fragmentation has continued to increase over the last 10-15 years for a number of reasons, including:

- Demand for 'lifestyle' lots as a residential alternative and for investment - with the ongoing popularity of the Shire as a 'lifestyle' and holiday destination the demand and consumption of lots for non-agricultural purposes has increased significantly, and has sterilised some areas from commercial agricultural practices.
- Increasing land values resulting from the ongoing demand for lifestyle and investment property has created a higher demand to subdivide and sell portions of larger landholdings.
- Continued expansion and development of rural land for urban and rural residential purposes has impacted on land use in some areas and reduced the availability of agricultural land.
- A steady change in agricultural land use patterns with traditional dairy and beef farming, which require larger landholdings, competing with more intensive forms of agriculture such as viticulture and horticulture that require smaller landholdings.

These factors combine to form a fragmented rural area within the Shire, with continued demand for further subdivision for a range of reasons. DTSP No. 20 outlines a range of lot size minimums applicable to the rural zoned land in the Shire with 40ha minimum for general agricultural purposes, 30ha for viticulture and 20ha for horticulture. These are subject to various policies of the Shire and WAPC, which require environmental, land capability, water supply and other viability justification prior to approval.

The rationale for the proposed lot sizes in the rural areas of the Shire as stated in Section 7 is based on the following investigation.

- Discussions with the Department of Agriculture have indicated that it is their preference that lot sizes in the range of 100 to 200 hectares are required to ensure long term economic viability and sustainable environmental management.
- The Department for Planning and Infrastructure has indicated that their preferred approach on this issue should follow the model set out in the Warren-Blackwood Rural Strategy. The approach of this Strategy relates to the Agricultural and Rural Land Use Policy and refers to Priority and General Agricultural zones that do not exist in the Shire at this point. That Strategy indicates a default rural lot size of 80ha but provides for reduction to 40ha subject to 30ha of productive agricultural land (class 1 or 2 soils) where expert reports on agronomy and hydrology support closer subdivision.

In view of the investigation and consultation process completed, the Shire's Strategy requires 40ha of arable land for broad-acre agriculture subdivision and 30ha of arable land for horticulture/viticulture subdivision subject to proposals being substantiated by reports from agronomists and hydrologists to indicate that the proposed subdivision retains the productive potential of the land for agriculture and is environmentally sustainable.

The minimum lot areas for horticulture, viticulture and broad acre agriculture refer to minimum useable (arable) areas of land i.e. excluding land that does not have class I or II soil capability pursuant to the Land Capability Study prepared by the Department of Agriculture (AgMaps Land Profiler); and/or contains remnant vegetation considered valuable for conservation, and/or streams, wetlands, dams, steep terrain, rocky outcrops, land use/development setbacks and environmental buffers.

#### Strata Title Subdivision of Tourist Accommodation

In agricultural areas outside the 'Viticulture and Tourism' zone strata titling of tourist accommodation is not supported because strata titling of tourist accommodation largely separates the rural and tourist use/ownership relationship which is undesirable in general rural areas. The intention of less intensive tourist accommodation in agricultural areas is to provide for farm income to be supplemented. Strata subdivision of tourist accommodation units on farms/rural properties outside the Viticulture and Tourism zone would separate the tourist use from the rural use and the intended supplementation of income over time would not be realised. Preventing strata subdivision in these circumstances ensures that rural land use continues to be the primary land use and the tourist accommodation can supplement income.

#### **5.1.4 Agricultural Trade (Tied) Lots**

Under the Planning and Development Act 2005, provisions have been introduced to allow for the creation of agricultural 'tied' lots (lots with no dwelling potential and tied to a parent agricultural lot through the title). These provisions will not become effective until associated regulations dealing with criteria are prepared.

In providing for farm 'build-up' and larger holdings to improve agricultural viability, the creation of an agricultural trade lot may be supported in the Agriculture zone where:

- Appropriate regulations have been gazetted which provide effect to the 'tied lot' provisions of the Planning and Development Act 2005;
- The proposed lot is a minimum of 30ha;
- The proposed lot does not contain an existing dwelling;
- There is a statutory restriction imposed that prohibits the development of a dwelling on the lot;
- The lot is to be used for agricultural purposes together with the principal farm lot and is 'tied' by title to the principal lot as an agricultural trade lot;
- The future use of the lot for agricultural purposes would not require the clearing of poorly represented vegetation or other vegetation considered by the Shire to be worthy of conservation; and

- The remaining lot comprises an agricultural trade lot or is otherwise created as a viable agricultural lot consistent with the provisions of the relevant policy e.g. a viable farm lot with a minimum 40ha of usable agricultural land, or a minimum usable area of 30ha in the case of viticulture/horticulture.

## **5.2 LAND USE CONFLICT AND COMPETITION**

As the Shire continues to grow at a rapid rate the competition for rural land will continue to intensify. This growth has resulted in a number of land use conflicts whereby existing and new rural land use practices have been impacted by the introduction of new land uses such as residential and tourist.

### **5.2.1 Competing Land Uses**

#### Urban Expansion

One of the threats to rural land is the ongoing urban expansion of the towns in the Shire. Urban expansion, particularly of Busselton over the past 10-15 years has resulted in land that has traditionally been used for productive agricultural purposes being removed from agricultural use and used to accommodate the increasing population. This change in land use is continuing with the development of the Vasse, Airport North and Ambergate North precincts being the most significant in terms of impact on agricultural sustainability in view of their location within productive areas.

Consideration of future expansion of urban areas needs to occur in recognition of the value of relevant agricultural land, with the Busselton Urban Growth Strategy and Dunsborough Structure Plan addressing this issue to a large degree. The issue will also need to be considered in determining the appropriateness of any future expansion of Dunsborough, noting that rural land surrounding Dunsborough is generally less capable than that surrounding Busselton and other settlements in the Shire, but has high landscape and environmental values. The associated land use conflict between the expanding urban fronts and adjoining rural land use and broader rural landscape issues are examined in the next section.

#### Rural Residential Development

The 1993 Rural Strategy identified substantial areas for rural residential development in proximity to Dunsborough (Commonage and Meelup Hill) and Busselton (Dunbarton/Vasse). Much of this land has been subdivided and developed and has removed significant areas of highly capable land from agricultural use. Accordingly, in view of the relatively inefficient use of land for these purposes, high associated infrastructure and servicing costs, the current policy framework and the current availability of undeveloped lots and un-subdivided land, additional or expanded rural residential areas is not supported.

The following table indicates that approximately 500 lots were vacant in rural residential areas in 2005, and an estimated 880 additional lots were zoned but not subdivided.

**Table 4.1 Rural Residential Development - 2005**

<b>RURAL RESIDENTIAL AREA</b>	<b>EXISTING LOTS</b>	<b>EXISTING DWELLINGS</b>	<b>ESTIMATED ADDITIONAL LOTS</b>
Ambergate (incl. St Andrews Lane)	78	25	75
Yungarra	135	126	0
Commonage	875	572	350
Dunbarton/Vasse	263	240	190
Eagle Bay & Ridgeland	30	16	120
Injidup	66	20	0
Meelup Hill/Meelup Ridge	95	75	80
Reinscourt/Wonnerup	108	86	65
<b>TOTAL</b>	<b>1,650</b>	<b>1,160</b>	<b>880</b>

Source: Estimates based on land use survey carried out in May 2004 adjusted by subsequent subdivision, building activity and survey work.

A future investigation of the consolidation of existing rural residential areas could be considered at the appropriate time, subject to assessment of impacts and achievement of an adequate level of landowner consensus for the approach, leading to eventual revision of the relevant structure plans and/or development guide plans. If generally supported by the community and relevant land owners, this is likely to generate an ongoing supply of rural residential lots to the market in addition to the estimated 1,370 undeveloped lots identified in Table 4.1.

#### Other Non-Agricultural Uses

Competition for rural land from a range of other commercial and non-commercial agricultural uses continues to occur in the Shire. These include a variety of tourist developments (restaurants, accommodation) in addition to the use of land for lifestyle and holiday purposes. These uses while often not altering the physical ability of the land to accommodate rural uses (unlike urban development) sterilise land for rural use with the economic base of the land often not attached to any commercial agricultural use. The impact of this issue (particularly subdivision for lifestyle lots) has increased significantly with the popularity of the area for investment and holiday purposes, and is more prevalent in the western portions of the Shire where there is better access to wineries, beaches and other tourist attractions.

#### 5.2.2 Conflicting Land Use

The majority of land uses identified in the preceding section as 'competing' land uses can often also be considered as 'conflicting' with agricultural land use. This is most apparent on the rural-urban fringe adjoining the towns and in the broader rural areas where tourist development is located. In these areas there would be an obvious potential conflict between agricultural operations and the expected level of amenity of adjoining or nearby land uses. Impacts such as spray drift, dust, odour, noise and traffic are accepted to a degree in rural areas as they are an expected characteristic of agricultural operations but are not always considered appropriate in an urban or tourist related setting. The management and minimisation of this issue is significant from a longer term perspective in terms of land use allocation and determination.

In addition to these uses, there is a growing conflict between the land management practices of non-commercial rural landowners and agricultural operations.

- In view of the nature of the occupation, rural properties used for lifestyle purposes are often poorly managed and result in problems that impact on the surrounding rural area. These include the proliferation of weeds, increase in fire hazard from poor management, increase in feral animals and fencing disputes. Mismanagement often has a significant impact on surrounding farming operations.
- Non-commercial and absentee landowners often have a higher level of expectation in terms of amenity and services and therefore often consider the nature of some agricultural activity to be incompatible. These expectations also generate pressure for provision of services that are not sustainable at low densities of development and may affect rate increases to rural land owners.

The above potentially culminates in agricultural enterprises not being able to operate as efficiently as possible and being constrained at certain times from undertaking various practices relevant to productive farming. This gradually undermines the viability of the rural sector and is an increasing issue in the Shire.

### **5.3 ENVIRONMENTAL ISSUES**

Environmental issues as they relate to the rural areas of the Shire can be broken down into two categories: those which impact on the rural and agricultural productivity and those which impact on other economic, environmental and social values of the Shire.

#### **5.3.1 Agricultural Issues**

One of the most significant emerging issues in the rural areas of the Shire from an agricultural perspective is the ongoing sustainability of natural resources to support agriculture.

These issues can be summarised as follows:

- Ground and Surface Water

The most serious matter is surface and ground water availability. The continued damming of watercourses and extraction of groundwater from aquifers combined with increasing demand for water supply for agricultural and non-agricultural uses has led to concern as to the sustainable level and type of agricultural land uses to be permitted in the Shire. The seriousness of this matter has been emphasised recently by the following factors:

- The change from grazing and dairying to viticulture over the past 10-20 years has resulted in an increased need for water in view of the nature of commercial grape production. This has resulted in an increase in the size and number of dams in rural areas particularly west of Bussell Highway where there is limited groundwater supply. In addition a large increase in the

extraction of groundwater (mainly east of Bussell Highway) has occurred to service the larger viticultural activities.

- The general shortage of water in the South-west of WA and particularly the Perth metropolitan region has resulted in pressure to increase extraction of water from the Yarragadee aquifer. This has potentially major implications to the environment and local agricultural land use from a water supply perspective.
- Continued below average rainfall, experienced in the South-west of the State will result in reduced surface water availability and tighter controls on ground water extraction licenses. In addition, land use patterns will be affected.

The reduced availability of water has led to restrictions on ground water extraction in parts of the Shire and severely limits surface water supply in others. The need to fully grasp the long-term extent and impact of this issue, including how it relates to land use planning, is critical and requires detailed analysis and combined strategic direction involving all stakeholders, government and industry.

The provision of minimum water requirements as a basis for assessing hydrological reports should be investigated with the relevant agencies. It is considered that this data needs to be assessed on a regional basis to ensure consistency, rather than each Shire attempting to determine relevant requirements. While water availability varies between localities, the requirements for agriculture should not vary greatly within the South West. Consideration should also be given to requiring demonstration of access to water resources as well as requiring a water licence as a prerequisite to subdivision.

- Acid Sulphate Soils

The emergence of knowledge and recognition of acid sulphate soils has increased over the past 2-3 years with significant work and policy development being undertaken by the DEC and DPI. This issue has the greatest potential for impact on agriculture in the eastern and central parts of the Shire where extraction and disturbance of existing and previous wetland areas is more prevalent. While planning and environmental processes have been established to adequately manage these issues the threat still remains with serious but isolated examples of acid sulphate soil contamination in adjoining Shires on the Swan Coastal Plain. Refer to WAPC Planning Bulletin No. 64 - Acid Sulfate Soils for guidance on matters that should be taken into account.

- Pests and Weeds

The ongoing increase in pests and environmental weeds in the Shire poses a threat to agriculture and the natural environment generally. While many of the issues have been discussed in previous sections it is apparent that the problem is growing in view of the increasing numbers of pests and weeds being noted in the Shire on public and private land.



### 5.3.2 Natural Environmental Issues

As outlined in Section 2 of this report, the Shire of Busselton has a diverse and unique natural environment and exhibits one of the highest levels of biodiversity in Australia. The majority of these values are outside of the urban and settled areas in the rural parts of the Shire. The protection and management of these values is the subject of a range of policies, planning and legislative instruments and State and local strategies. There is, however, still significant pressure and ongoing impact on natural resources. The most significant of these are as follows:

- Biodiversity - Remnant Vegetation and Flora

As part of the South-west of Western Australia, the Shire of Busselton is recognised as a global “biodiversity hotspot”. Vegetation clearing associated with historic agricultural practices, more recent changes in land use, residential development and tourism development are placing pressure on biodiversity values in the Shire.

Approximately 696km<sup>2</sup> (or 48%) of the Shire contains native vegetation, of which approximately 40% is located in State Forest and National Parks and 56% on private land. There are 13 Threatened Ecological Communities (TECs), 42 Declared Rare Flora (DRF) species, 163 priority listed flora species and 30 vulnerable and threatened fauna species in the Shire.

The loss of remnant vegetation and flora as a result of land clearing represents the single most significant biodiversity issue. The loss of key vegetation types such as *Agonis flexuosa* (WA peppermint) woodland (the habitat of the ‘vulnerable’ listed Western Ringtail Possum) impacts on fauna. The loss of declared rare flora and poorly represented vegetation complexes in addition to more common native species found throughout the Shire adds to the loss of habitat. The present situation is that a significant proportion of the Shire that is not comprised within National Park or State Forest is already cleared of vegetation.

- Wetlands and Waterways

Human use including agricultural activity has had a major impact on wetlands and waterways through vegetation clearing, pollution, water usage and development. The wetlands occur on the Swan Coastal Plain and have been harmfully affected by agricultural land use over time. There are five Conservation Category wetlands in the Shire, including the Vasse-Wonnerup system (which is recognised internationally as a RAMSAR listed wetland). There are 1,754 known dams in the Shire, 12% of these are classified as large dams (>2,000m<sup>2</sup> surface area) and about one quarter of these are in viticultural areas.

The Shire of Busselton Environment Strategy recommends a number of actions for wetlands and waterways. These include the following:

- identify conservation category wetlands most at risk of development,
- review of the Shire’s Dams Policy,
- encourage landowners to fence and rehabilitate wetlands,

- investigate opportunities to secure funding for wetland management,
- identify high priority wetland and river restoration sites, and
- investigate proclaiming key water catchments to achieve greater control on land use activities.

The importance of these areas to the natural and hydrological fabric of the Shire is significant and consideration with land use planning critical.

#### **5.4 LANDSCAPE AND CHARACTER**

The rural areas of the Shire of Busselton comprise some of the most attractive and diverse landscapes in the South-west of Western Australia. This is one of the major factors in the area being a popular tourist destination. The combination of rural land uses, scenic rural and coastal landscapes and the picturesque settlements create a unique character. This character is important from a social and an economic perspective in view of the values and benefits of both.

Population growth, demographic change and the resulting increase in development has resulted in the rural landscape being generally modified and degraded in isolated areas with a higher level of commercial activities. This includes buildings, signage, parking and other built form and clearing of vegetation associated with development for a range of uses including intensification of agriculture, tourist development, agricultural processing, subdivision and tourist accommodation. Some of this development is associated with the agricultural use of the land with viticulture enterprises often having tourist-based facilities such as cellar door sales, restaurants, galleries and other tourist uses linked to them.

In the future, it will be extremely important to retain the landscape character of the rural areas to achieve the correct balance between development and rural landscape quality, particularly in the west coastal areas.

#### **5.5 SETTLEMENT HIERARCHY**

While the issue of land use conflict and competition between rural and expanding urban and rural residential development has been discussed in previous sections, the broader issue of settlement hierarchy is as significant to the long term sustainability of the rural areas of the Shire. Population growth in the Shire is proposed to be accommodated in a planned manner based on strategic planning documents including the LNRSP, Dunsborough Structure Plan and Busselton Urban Growth Strategy. While accommodating growth, these instruments are similarly established to provide a level of protection and certainty to rural areas and the economic, social, character and environmental factors that exist.

The retention of the established settlement hierarchy will therefore be important to the long term investment in and economic growth of the whole Shire. This needs to be reinforced within the Local Rural Planning Strategy as it considers all land outside of existing (planned) settlements and there is ongoing pressure for change and expansion of these nodes and settlements outside of the established planning framework.

## 5.6 FIRE MANAGEMENT

The issue of bush fire risk and fire management within rural areas of the Shire is increasing particularly where there are areas of steeper topography and/or remnant vegetation. While there are a number of measures and policy instruments in place both at the State and local government level to ensure appropriate fire management of rural properties there are still a number of issues facing the rural areas of the Shire including:

- Frequent burning of native vegetation can result in the increase and spread of weed species which often out-compete native species. This is known as the fire-weed cycle.
- Achieving a balance between clearing of vegetation for fire management purposes and retention of the biodiversity and landscape values inherent to remnant vegetation.

There are a high proportion of absentee landowners and the high number of small to medium size tourism operators who lease properties during high fire risk periods, generally in rural areas. These two factors have lead to increased fire risk and threat through instances of inadequate maintenance of properties, fire protection measures, such as fuel load reduction including the clearing of gutters, weed control and lower levels of fire awareness.

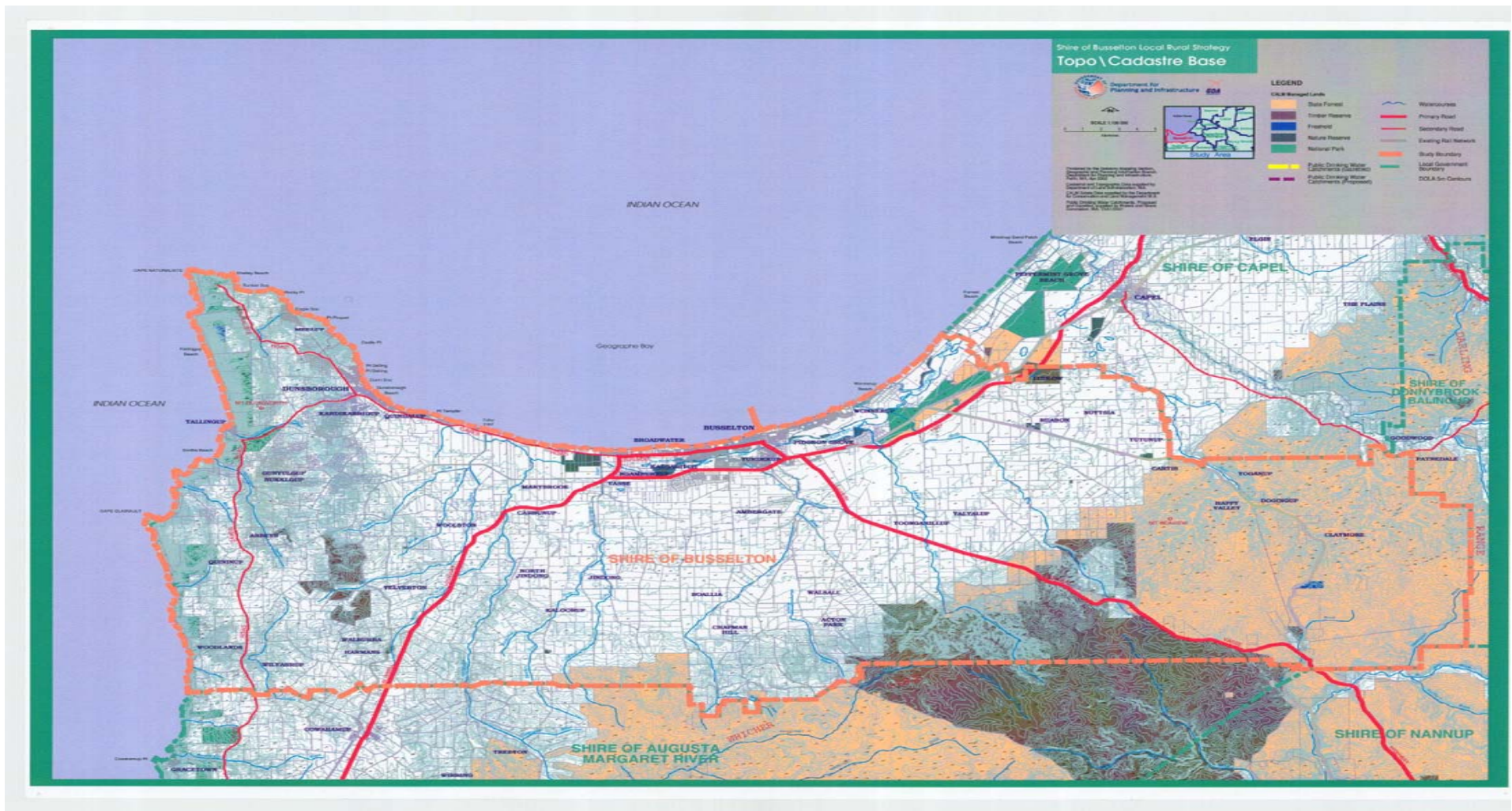


Figure 7 Topo-cadastral Base

## 6. COMMUNITY CONSULTATION

The formulation of the Strategy commenced with appointment of consultants in May 2004 to review the 1993 Strategy. The extended formulation period for the Strategy (2004-06) related to the ongoing extensive community consultation that occurred. This consultation included a number of workshops and convening of a Rural Strategy Reference Group comprising Councillors and former members of the Rural Advisory Committee, who have a high level of awareness of the issues in the rural community. The consultation process is summarised as follows.

### 6.1 VISION WORKSHOP - 2004

A vision workshop was held in Council Chambers with interested members of the community and stakeholder groups on 5 October 2004. The workshop was advertised in the local community newspaper and stakeholder groups were invited to attend.

The purpose of the workshop was to establish what the community considers to be the values, concerns and vision for the present and future of the rural areas of the Shire. Planners regard these components as key building blocks to ensure that values are safeguarded, concerns are addressed, and the vision is attained.

The workshop was attended by 23 people. These included landowners, members of the Rural Strategy Reference Group, planning consultants and Shire staff. The following were the values, concerns and visions identified at the workshop:

#### Values

- Ability to balance lifestyle between commercial viability and agriculture pursuits.
- Mix of people, cultures, backgrounds and skills of workforce.
- The natural environment including vegetation/bushland, waterways and creeks.
- The 'prestige' wine/viticultural resources in the area.
- Coastal and physical environment.
- Agricultural heritage of the area.
- Diversity (mosaic) of land uses (i.e. grazing, settlement, viticulture, bushland, waterways etc)
- Clean environment including air and quality and quantity of water supply.
- Range and variety of tourist opportunities and experiences available.
- Economic base and employment opportunities provided by agricultural uses.
- Community interest, input and 'spirit' in rural areas.
- Increased land values.
- Quality and capability of soils.
- Agricultural land use and its preservation and character.
- Regulations to control the rural environment.
- Infrastructure available to the rural community.

## Concerns

- Future of the agricultural industry particularly from the impacts of urban growth.
- Loss of diversity of agricultural uses and agricultural base.
- Difficulties in expanding agricultural pursuits due to increasing land values.
- Over regulation of land and impacts on landowner rights.
- Impact of rates and taxes and land use decisions.
- Impacts on the environment including clearing of remnant vegetation and creeks/water quality and quantity.
- Competition between lifestyle and agricultural use of rural land.
- Absentee landowners and associated loss of community.
- Overstressed infrastructure (power, telecommunications, roads etc)
- Lack of access to groundwater supply.
- Long term drainage problems due to urbanisation.
- Land use conflicts at the urban/rural interface.
- Over reliance on tourism.
- Road safety in rural areas.
- Shortage of agricultural labour force.
- Impact of climate change on agricultural industry and environment generally.
- Increased land values.
- Lack of compensation to landowners for provision of community benefit.
- Lack of rural representation on Council.
- Noxious weeds and pests.

## Visions

- Integration of land uses (small settlements, villages/hamlets surrounded by agricultural areas).
- Diversification of economic base/employment opportunities with government incentives for different businesses to locate in area.
- Retaining the younger population in the Shire.
- Preservation of the character and appeal of the area.
- A harmonious relationship between agriculture, tourism and the environment.
- Improved infrastructure including that which better protects the landscape and environment.
- Good planning of development.
- Focus on agricultural based education.
- Clear boundaries/delineation between future urban development and rural areas.
- Small clusters of development where there is no impact on agricultural use.
- Diversity of land uses.

- Mechanisms for incentives or compensation for landowners who are protecting values for community benefit.
- Improve the community fabric in rural areas.
- Support smaller businesses in rural areas including viticultural.
- An area with a mosaic of land uses and a high degree of visual and landscape amenity.
- Access to port facilities (in Bunbury) for agricultural industry.

## **6.2 STAKEHOLDER CONSULTATION - 2004**

The opportunity for direct input into the formulation of the draft Strategy was offered to all key stakeholders. This was offered in the form of an initial letter to a range of stakeholders and industry representatives outlining the formulation process, inviting them to the community workshop and indicating that further contact would be made with their organisation. The letters were followed up 2-3 weeks later with phone calls to discuss the relevant organisation's level of involvement during the formulation of the strategy.

Key stakeholders consulted included the Departments of Agriculture, Planning & Infrastructure, Environment and Conservation and Main Roads WA; WaterCorp, Geocatch, local LCDCs, WA Farmers Federation, Margaret River Wine Industry Association, Trees South West, Pastoralist & Graziers Association, Toby Inlet Catchment Group and Busselton-Dunsborough Environment Centre.

Meetings were held with representatives of the Departments for Planning & Infrastructure and Environment and Conservation as well as discussions with the Department of Agriculture.

## **6.3 COMMUNITY SURVEY - 2004**

A questionnaire survey was placed in the 'Council for Community' section of the Busselton-Margaret River Times and on the Shire of Busselton website. Over 30 replies were received and these were considered in formulating the Strategy. In view of the small response no significance can be placed on the information or opinions expressed, however the replies do represent an important checklist of issues from the community. The following is an assessment of the returned questionnaires.

### **6.3.1 Location**

The returned questionnaires were from the following locations:

- |                        |    |
|------------------------|----|
| • Yallingup            | 13 |
| • Dunsborough          | 13 |
| • Quindalup            | 4  |
| • Eagle Bay            | 2  |
| • West Rural/Commonage | 2  |

### 6.3.2 Length of time in the area

The average length of time in the area of respondents was 10.4 years.

### 6.3.3 Economic sector of the respondents

- Education 7
- Agriculture/horticulture 7
- Tourism 4
- Service 4
- Commerce 3
- Construction 2
- Health 2
- Consulting/Environmental protection 2
- Retired 3

### 6.3.4 Aspects the respondents value

There was an extremely broad variety of aspects that the respondents value.

Environmental Factors:

- Environment/weather/flora/fauna 16
- Peace/tranquillity 9
- Coast/access 6
- Agriculture/horticulture/quality farmland. 3
- Proximity (relative) to Perth 1

Social Factors

- Lifestyle 6
- Rural residential land 5
- Safety/Friendly 3
- Variety built environment 1

Economic Factors

- Inexpensive land for horses 1
- Small town dynamics 1
- Access to restaurant and wineries 1
- Tourist attractions accessible 1
- Investment 1



### **6.3.5 Aspects the respondents are concerned about**

#### Social Factors:

- Urban sprawl and over development
- Crime
- Shire doesn't know where Eagle Bay is
- Residential zoning excessive
- Increasing population/impact on lifestyle
- Services are declining
- Housing too dense
- Council policies and controls are problem
- Erosion of "rights" of property owners
- 2ha lots no good
- Spraying

#### Economic Factors:

- Bad coastal development
- Wealthy people buying property
- Development too rapid, impacts bad
- Commercial greed evident
- Development neutralising productive agricultural land
- Overdevelopment
- High rates, low service
- Overfishing

#### Environmental Factors:

- Loss of rural mosaic
- Grape monoculture
- Environmental destruction
- Fire management inadequate
- Toby's Inlet silting up
- Traffic noise

### **6.3.6 Respondents' visions for the future**

#### Environmental Visions:

- Small scale tourism to retain environmental quality
- Retain rural mosaic

- Maintain farms and green areas
- Preserve the environment
- Limit urban development
- Improved access car park to beach
- Promote organic horticulture
- Stop clearing land

#### Economic Visions:

- Retain low key tourism, caravan parks and campgrounds
- Keep lid on development
- Maintain high density in urban areas, surrounded by rural residential and rural uses
- Increase low key tourism
- Build marina at Dunsborough
- Intensify land uses in Commonage
- Bridge across Toby's Inlet

#### Social Visions:

- Develop away from coast
- Develop more tourist and recreation facilities
- Keep small holdings viable
- Don't subdivide rural areas
- Contain growth in existing urban areas
- Increase the quality and quantity of services

### **6.3.7 General Comments**

The following general comments were provided by the respondents:

#### Social Comments:

- Council doing a good job
- Retain holiday home option
- Need walk trails/bridle paths in Yallingup Hills
- Dunsborough poorly planned
- Vasse village, good planning
- Planning to date non-existent/haphazard, use McHarg approach
- Planning does not exist
- Poor planning of drainage
- Planning good to date
- Protect agriculture

- Inexperienced Council influenced by Shire staff
- Make reference to Dunsborough
- Encourage small villages
- Employ good planners

Environmental Comments:

- Encourage tree planting
- Improve fire protection
- Protect rural areas from over development
- Coastal development mismanaged
- Plan more trails/tracks in sub-divisions
- Protect the landscape
- Keep traffic away from beaches

Economic Comments:

- Balance growth with services
- Keep Dunsborough Coast commerce free
- Lack of agricultural small holding lots i.e. 5-10ha
- Development too rapid
- Control tourist development
- Home rentals should be permitted

#### **6.4 SUBMISSIONS FROM THE PUBLIC**

The opportunity was given to members of the public to provide preliminary written comment on matters relevant to rural areas of the Shire. This opportunity was taken up by two planning consultants on behalf of rural land owners, who raised the following issues which were considered in the formulation of the Strategy.

- Bunker Bay – sought assurance that development opportunities will not be ‘wound back’ as part of the review compared to 1993 Rural Strategy provisions.
- Policy Area 5 – request land to the east of Commonage Road, north of Mewett Road, be included in a Development Investigation Area for future expansion of the Dunsborough urban area.
- Precinct 7D – request area west of Caves Road in vicinity of Hemsley and Vidler Roads be provided with an opportunity for tourist development.
- Extractive Industry Policy should be reviewed to less constrain extraction of resources in the western sector of the Shire.
- Need for updated terminology.
- Eagle Bay – request land zoned ‘Agriculture’ on the fringes of Eagle Bay on Cape Naturaliste Road be provided with opportunity for rural living clusters in exchange for long term conservation of values.

- Urban expansion of Dunsborough would be less inhibited by amalgamation of titles of land surrounding the town and help the land shortage and associated social problems that arise.
- Important that the Strategy clarifies Council's position with respect to the role and status of such a strategy with respect to the Scheme and LNRSP.

## **6.5 REFERENCE GROUP MEETINGS**

December 2004

Following the October workshop, the consultants and staff presented an outline of the draft Strategy precincts including objectives, precinct strategies, land use allocation and sustainability factors. Discussion provided responses to the draft strategies to enable the consultants to further develop and refine the Strategy. The draft Strategy was formulated during 2005 and submitted to the Shire in late 2005.

December 2005

Staff presented the draft Strategy and sought discussion on the suitability of the draft for the purpose of community consultation. The Group went through the draft in detail and sought modifications, which were effected prior to reporting to Council and subsequent formal consultation.

October 2006

Following the completion of the formal consultation process the submissions were considered by the Rural Strategy Reference Group prior to referral of the matter to Council for consideration. The Group members considered the submissions and provided advice in relation to the consultation outcomes.

## **6.6 FORMAL CONSULTATION - 2006**

Following its adoption in March 2006 by Council, the draft Strategy was formally advertised for 12 weeks from March 23 to June 15 2006. This included notices in the local newspaper, direct stakeholder consultation, including referral to adjacent Shires.

The draft was accessible at the Shire office, libraries and on the web page. The Shire received many enquiries and thirty comprehensive submissions on the matter which indicates a high level of awareness in the community (as a result of the process that had been followed in formulating the document). The submissions were addressed in the report to Council on 13 December 2006 and the Schedule of Submissions attached to that report.

## **6.7 STAKEHOLDER CONSULTATION - 2006**

WA Farmer's Federation - 5 July 2006

Staff met with members of the Farmer's Federation to provide a briefing on the outcomes and the process of formulating the Strategy, and to answer questions about rural land use planning in the Shire. The issue of minimum lot size for broad acre farming was a primary concern with the Federation members recommending the retention of the 40ha minimum lot size for broad-acre farming. Other issues relating to farm viability and rural land use were discussed.

WA Farmer's Federation - 31 October 2006

Staff met with representatives of the Farmer's Federation and two Members of the Rural Strategy Reference Group to provide a briefing on the submissions received during community consultation. The main outcome of this meeting was a recommendation for retention of the 40ha minimum lot size for broad-acre farming instead of the proposed 50ha minimum. The retention of the status quo was seen as a reasonable outcome that would provide for farm affordability and ongoing agricultural viability. In that scenario, it was advised that staff would recommend that the minimum area would then relate to 'useable' or 'arable' land i.e. minimum 40ha of soils with Class I or II capability for grazing, excluding areas that could not be used for agriculture. This outcome was supported.

There was also support for the increase in minimum horticulture lot size from 20ha to 30ha. The move to a more strategic framework for rural land use planning in the Shire which did not deal with specific development proposals for individual sites was also supported.

## 7. RURAL STRATEGY PROVISIONS

The following process was followed in determining the Strategy's precinct boundaries (which are illustrated at Figure 8):

- Exclusion of the Busselton and Dunsborough urban areas.
- Exclusion of the Busselton urban expansion areas of Vasse village, Ambergate North and the Airport precinct in Yalyalup.
- Exclusion of the coastal nodes of Eagle Bay and Yallingup, and the Bunker Bay, Caves House and Smiths Beach tourist nodes.
- Selection of rural precincts based on topographical, geographical, environmental and land use capability characteristics.

Although the Strategy identifies urban areas for Busselton and Dunsborough, this does not necessarily indicate that urban development is appropriate in all of these designated urban areas. Some of this 'peri-urban' area has been included as 'urban' as it is subject to urban influence or environmental constraints and is required for green belts, rural wedge and/or conservation purposes that are an inherent part of urban development.

The following rural precincts have been identified for the purposes of the Strategy:

### 1. Primary Rural

This is the largest precinct and includes the 'coastal plain' and low-lying broad-acre farming areas of the central and eastern areas of the Shire.

### 2. Rural Wetlands

This area includes the Vasse-Wonnerup Wetlands to the south and east of Busselton and the Ludlow tuart forest north of Bussell Highway.

### 3. Whicher Range

This area is comprised mainly of the State forest areas of the Whicher Range and is unchanged from the 1993 Rural Strategy.

### 4. Western Rural

This area includes the fertile viticulture areas of the Leeuwin-Naturaliste Ridge that contain wineries, cellar-doors, restaurants and rural tourist accommodation.

### 5. Central Rural

This area comprises the central coastal/rural area between Busselton and Dunsborough.

## 6. Commonage

This area comprises rural residential and other less intensive land uses in undulating topography with high levels of rural and natural landscape amenity.

## 7. Naturaliste

This area includes most of Cape Naturaliste east and north of Dunsborough between Geographe Bay and the Indian Ocean Coast including a significant portion of the Leeuwin-Naturaliste National Park.

## 8. Western Coast

This area comprises the land between Caves Road and the Indian Ocean Coast, including a significant portion of the Leeuwin-Naturaliste National Park. It contains sensitive rural and natural landscapes, wineries and rural tourist accommodation.

## **7.1 PRECINCT 1 – Primary Rural**

### **7.1.1 Precinct Description**

- Includes the low lying coastal plain (Abba Plain, Chapman Hills and Ludlow Plain) that is used predominantly for broad acre agriculture but is also capable of intensive uses where soils and water are available.
- Covers the area from the rail trail (Busselton to Augusta) in the west to the Capel Shire boundary in the east. It lies to the south of the coastal, urban and wetland precincts in the north to the Shire of Augusta-Margaret River boundary in the south.
- The soils in this area are predominantly White-grey Calcareous Sands to Yellow Spearwood Sands with pockets of loams and laterite along the edge of the higher ground in the south.
- The precinct is substantially cleared though there are pockets of remnant vegetation on private land and reserves comprising mainly jarrah, marri and banksia vegetation associations, depending on soils.

### **7.1. 2 Sustainability Factors**

#### Environmental

- Predominantly cleared of vegetation for broad acre farming.
- Contains areas of significant remnant vegetation that need to be conserved wherever possible.
- Contains a number of reserves which have significant biodiversity values.
- High water table and generally poorly drained soils.
- Elevated nutrient levels in streams from fertilisers and cattle industry effluent requires good catchment management.
- Feral animal and weed management.

#### Economic

- Predominantly cattle grazing area and dairy industry.
- Agro-forestry and intensive uses are expanding where local conditions are suitable.
- Some rural tourist accommodation but not dominant, associated with rural landscapes.
- Mineral sand deposits and mining with potential for conflict with other uses.

#### Social

- Predominantly an area of primary rural dwellings with a stable population.
- Safeguard rural landscapes
- Reliance on Busselton and other towns for all services.



- Conservation of historic Wonnerup to Jarrahwood rail reserve.
- Recognise the importance of Indigenous and European cultural heritage.

### **7.1.3 Major Issues**

- Poor drainage needs to be considered except on higher land at Chapman Hill.
- Pockets of soils suitable for horticulture and viticulture where water is available.
- Precinct not generally suitable for rural residential land use due to high water table, poorly drained land and distance to facilities.
- Grazing uses need to be protected as the precinct has strategic importance as a dairy production area.
- Management of nutrient export - excessive nutrients result in pollution of water courses and Geographe Bay and therefore need to be managed.
- Surface and groundwater needs to be protected and managed.
- Pockets of remnant vegetation need to be conserved to benefit groundwater and landscape outcomes.
- Tourist accommodation uses need to be kept in balance otherwise land use conflict may result. Tourist accommodation should be less-intensive and low-key i.e. rural bed & breakfast/guest-house/rural lodge.
- Rural industries and rural enterprises need to be sensitively planned and managed to ensure that they do not conflict with dominant rural qualities.
- Fire risk management.

### **7.1.4 Land Capability/Water Availability**

- Good overall potential for grazing with some capability for horticulture and viticulture on higher lying well drained soils.
- Limited potential for rural residential uses.
- Good ground and surface water, however, needs to be well managed to prevent pollution from high nutrient inputs.

### **7.1.5 Precinct Vision**

That the lower lying land is secured for grazing and dairy uses and that higher, better drained land be used for more intensive agricultural uses where suitable, and that remnant vegetation be conserved.

### **7.1.6 Precinct Objectives**

#### Environment

- To protect biodiversity values of remnant vegetation with an emphasis on poorly represented vegetation, priority flora and declared rare flora and riparian/creek line vegetation.

- To protect watercourses, streamlines and groundwater, and to protect environmental flows in watercourses by restriction of dams, particularly on-stream dams, and the control of dam sizes.
- To protect and re-establish environmental corridors and buffers and to protect habitat and vegetation corridors relied on by the threatened Western Ringtail Possum.
- To promote weed and feral animal management.
- To promote the efficient use/re-use of water in agricultural and other uses.
- To promote nutrient management and the use of nutrient management plans.

#### Economic

- To retain majority of area, especially low lying areas, for dairy/grazing.
- To promote agro-forestry.
- To permit horticulture, market gardening and viticulture on more highly capable areas where soils and water availability are suitable.

#### Social

- To retain primary agricultural land use, patterns of rural use and to avoid the intrusion of rural residential and non-agricultural uses.
- To ensure an adequate level of fire management and protection.
- To recognise and protect Aboriginal and European cultural heritage.

### **7.1.7 Land Use Allocation**

#### Desirable

- Grazing and dairying.
- New dairy uses and significant dairy upgrades subject to effluent management requirements of DEC and Agriculture.
- Primary Rural Dwelling.
- Cottage Industries.
- Rural bed and breakfasts.

#### Conditional

- Second rural dwelling on lots greater than 30ha.
- Intensive horticulture/viticulture subject to detailed land capability and nutrient management plan.
- Basic raw material and mineral sand mining subject to local planning policies and DOIR and DEC policies and requirements.
- Rural enterprises subject to community consultation.

- Rural industry subject to geophysical, environmental assessment and social/amenity issues.
- Agro-forestry subject to adequate buffers as established by DEC and fire management issues, as well as State and local policy framework and preparation of traffic management and harvesting plans.

#### Undesirable

- Rural residential and rural small-holding uses other than in existing zoned areas pursuant to the Scheme.
- Tourist development except for guest-house/rural lodge and bed & breakfast on land unsuitable for agriculture.
- All other urban, tourist, rural holiday resort, chalet development or industrial uses.

#### 7.1.8 Subdivision Criteria

- General presumption against subdivision except where demonstrated as being required for agricultural land rationalisation to build up farm holdings, where lots are created without a dwelling entitlement, or are part of a subdivision/amalgamation proposal.
- Horticulture and viticulture subdivision:- minimum of 30ha of soils with high to very high (Class I and II) capability for horticulture/viticulture where detailed agronomy and hydrology reports indicate agricultural and environmental sustainability as well as achievement of minimum water requirements as prescribed in 7.9.3 and Appendix 2. The minimum lot area shall exclude areas that are not useable for agriculture e.g. remnant and riparian vegetation considered valuable for conservation (and which should not be cleared); streams, dams, wetlands and foreshores; steep terrain and rocky outcrops; setbacks to the above and any environmental buffers within which development or agriculture is not permitted; and existing tourist development.
- Broad-acre agriculture subdivision:- minimum of 40ha of soils with high to very high (Class I and II) capability for grazing where detailed agronomy and hydrology reports indicate agricultural and environmental sustainability as well as achievement of minimum water requirements as prescribed in 7.9.3 and Appendix 2. The minimum lot area shall exclude areas that are not useable for agriculture e.g. remnant and riparian vegetation considered valuable for conservation (and which should not be cleared or grazed); streams, dams, wetlands and foreshores; steep terrain and rocky outcrops; setbacks to the above and any environmental buffers within which development or agriculture is not permitted; and existing tourist development.
- In considering subdivision and development conditions the Shire may recommend or impose conditions which address land management and environmental management including, but not limited to nutrient export, protection of surface and ground water, conservation of remnant vegetation, application of buffers and setting aside areas for revegetation.
- Strata subdivision of tourist development in the 'Agriculture' zone or in other priority agriculture areas is not supported. Where supported e.g. in the 'Viticulture and Tourism' zone, strata subdivision shall be in accordance with

WAPC and Shire policy provisions and guidelines. Strata subdivision of tourist accommodation is limited to the immediate curtilage of individual chalets, with mandatory common management and consistent with the RTAP. Strata subdivision of a guest-house into individual guest house rooms is not supported.

- Rural residential subdivision is limited to existing 'Rural Residential' zones and is to be in accordance with adopted Structure and Development Guide Plans.
- In accordance with the Shire's Biodiversity Incentive Strategy (2002).
- In accordance with the LNRSP where applicable.

## **7.2 PRECINCT 2 - Rural Wetlands**

### **7.2.1 Precinct Description**

- Comprises the north eastern precincts of the Busselton Wetlands Conservation Strategy i.e. Vasse Estuary, Wonnerup Estuary and coastal precinct. It also includes the southern Tuart Forest.
- Contains low lying coastal landforms including low coastal fore-dunes and gently undulating coastal plain between 2m and 5m AHD.
- The soils comprise mainly grey calcareous sands and yellow Spearwood sands in some areas.
- The Vasse and Wonnerup Estuaries are listed 'Ramsar Convention' Wetlands.

### **7.2.2 Sustainability Factors**

#### Environmental

- Land contains high conservation values: wildlife, wetlands, vegetation and forests that require management for conservation.
- Contains a number of reserves which have significant biodiversity values.
- Feral animal and weed management is considered to be one of the priorities.
- Water quality.

#### Economic

- Mineral sand mining creates potential for conflict with forest conservation values.
- Planning for land in private ownership with high conservation values to ensure rights of owners are not infringed.
- Potential eco-tourism and recreational values require sensitive management.
- Agricultural value of land.

#### Social

- Sensitive management of conservation values on private land.
- Recreational potential needs to be well planned and managed.
- Recognise the importance of Indigenous and European cultural heritage.

### **7.2.3 Major Issues**

- Management of agriculture on the sensitive wetland fringes.
- Management of potential eco-tourism uses in close proximity to areas of conservation sensitivity.
- Management of the Tuart forest and use of the area for recreation.
- Management of mineral sand mining, particularly in the Tuart forest area.

- Management of all potential impacts on water quality and issues that may require increased intervention in wetlands management.
- Management of nutrient export.

#### **7.2.4 Land Capability/Water Availability**

- Some capability for grazing on the wetland fringes.
- Generally poor capability for urban and rural residential uses.
- Good capability/suitability for eco-tourism and recreation uses if effluent disposal and water supply issues are resolved.

#### **7.2.5 Precinct Vision**

That the Vasse-Wonnerup Wetland system and adjoining coastal land and Tuart forest areas are planned and managed for sustainability through conserving the environmental qualities and provide ongoing returns for landowners.

#### **7.2.6 Precinct Objectives**

##### Environmental

- To conserve the wetlands, wildlife, vegetation, forests and drainage system.
- To manage the forests in a sustainable manner.
- To provide for extraction of mineral sand only where impact can be managed and sustainable rehabilitation can be achieved.
- To protect environmental flows in watercourses by restriction of dams, particularly on-stream dams, and the control of dam sizes.
- Maintain extent of State forest, national park and conservation reserves.
- To protect habitat and vegetation corridors relied on by the threatened Western Ringtail Possum.
- To promote weed and feral animal management.
- To promote the efficient use/re-use of water in agricultural and other uses.
- To promote nutrient management and the use of nutrient management plans.

##### Economic

- To investigate eco-tourism/recreation potential of the area, including camping, caravanning and flat bottom boat tours of water-bird habitats.
- To develop employment in the area through eco-tourism/recreation.

##### Social

- To preserve the landscape qualities of the area and to enhance the rural and natural landscape values.

- To provide opportunities for income generation for the landowners through eco-tourism and recreation enterprises.
- To ensure an adequate level of fire management and protection.
- To recognise and protect Aboriginal and European cultural heritage.

### **7.2.7 Land Use Allocation**

#### Desirable

- Conservation of natural values and rural landscapes.
- Managed grazing of wetland margins or limited subdivision to encourage reservation of wetland fringes in accordance with the Busselton Wetlands Conservation Strategy.
- Small-scale tourist accommodation (bed & breakfast), eco-tourism and recreation.

#### Undesirable

- Urban, rural residential and rural small-holding uses.
- Chalet development, rural holiday resort and other tourism development (other than bed & breakfast).

### **7.2.8 Subdivision criteria.**

- General presumption against subdivision except:
  - where provided for by the Busselton Wetlands Conservation Strategy. Any subdivision is also to provide, where applicable, for the vesting (free of cost) of significant wetland foreshore reserves, retention of agricultural capacity and protection of natural/rural landscape values in accordance with the Busselton Wetlands Conservation Strategy; and
  - in accordance with Development Guide Plans endorsed at the time of endorsement of the LRPS.
- Strata subdivision of tourist development in the 'Agriculture' zone or in other priority agriculture areas is not supported. Where supported e.g. in the 'Viticulture and Tourism' zone, strata subdivision shall be in accordance with WAPC and Shire policy provisions and guidelines. Strata subdivision of tourist accommodation is limited to the immediate curtilage of individual chalets, with mandatory common management and consistent with the RTAP. Strata subdivision of a guest-house into individual guest house rooms is not supported.

## **7.3 PRECINCT 3 - Whicher Range**

### **7.3.1 Precinct Description**

- The Whicher Range is situated in the south east corner of the Shire.
- It comprises predominantly State Forests that are managed by the Department of Environment and Conservation for this purpose.
- The forests consist of jarrah and marri open woodland predominantly.
- The State owns softwood plantations in the precinct.
- There are some privately owned land areas that are used for small scale agriculture.

### **7.3.2 Sustainability Factors**

#### Environmental

- Management of the production of hardwoods and softwoods and maintaining conservation values.
- Management of reserves which have significant biodiversity values.
- Fire management.
- Conservation of biodiversity.

#### Economic

- The production of forest products and some grazing in the area.

#### Social

- Some primary dwellings in the area.
- Conservation of historic Wonnerup to Jarrahwood rail reserve.
- Recognise camping, recreation and bush walking potential.
- Conserve landscape and natural character.
- Recognise the importance of Indigenous and European cultural heritage.

### **7.3.3 Major Issues**

- Conservation conflicts with timber production.
- Protection of grazing and small scale agriculture.
- Management of nutrient export.
- Limited horticultural potential.
- Fire risk management.

### **7.3.4 Land Capability/Water Availability.**

- Majority of precinct consists of forest.



- Streams and winter creeks provide good water.
- There is limited groundwater in the area.

### **7.3.5 Precinct Vision**

To ensure the sustainable management of forest areas and the ongoing extensive agricultural use of private land, in conjunction with some less intensive (low-key) rural tourist accommodation.

### **7.3.6 Precinct Objectives**

#### Environment

- To retain forests and grazing.
- To retain the remnant vegetation in the Jarrahwood rail reserve and its potential as a regional recreation trail.
- To conserve biodiversity and protect habitat and vegetation corridors relied on by the threatened Western Ringtail Possum.
- To promote weed and feral animal management.
- To conserve groundwater resources.

#### Economic

- To retain timber production on a sustainable basis.

#### Social

- To retain and enhance recreation uses such as camping and bush walking.
- To ensure an adequate level of fire management and protection.
- To recognise and protect Aboriginal and European cultural heritage.

### **7.3.7 Land Use Allocation**

#### Desirable

- Grazing on private land.
- Primary dwelling.
- Cottage industries.
- Recreation.

#### Conditional

- Second rural dwelling on lots greater than 30ha in area.
- Rural enterprises subject to public submissions.
- Basic raw material extraction subject to physical and environmental assessments.

- Rural industry subject to environmental/social assessment.
- Small scale rural tourism ancillary to primary agricultural use e.g. rural bed & breakfast.

Undesirable.

- Rural residential and rural small-holding development.
- Tourist development other than rural bed & breakfast, chalet development, rural holiday resort.
- Urban uses.

### **7.3.8 Subdivision Criteria**

- Subdivision not permitted.

## **7.4 PRECINCT 4 - Western Rural**

### **7.4.1 Precinct Description**

- Effectively represents the 'heart' of the viticulture and wine/tourism industry in the Shire and for much of the Margaret River Wine Region.
- Covers the area south of Wildwood Road between Caves Road and the railway reserve (Busselton-Augusta).
- Forms part of the Leeuwin-Naturaliste Ridge with undulating topography with mainly gravely/loamy soils.
- Comprises a mosaic of rural/agricultural and tourist-based land uses with natural landscapes.
- Predominantly zoned 'Viticulture & Tourism' in the Scheme with areas in the east zoned 'Agriculture' and a number of 'Additional Uses' provisions reflecting higher order tourist development.

### **7.4.2 Sustainability Factors**

#### Environmental

- Contains significant remnant vegetation throughout including a range of poorly represented vegetation complexes and priority and declared rare flora.
- Provides significant habitat for a range of fauna.
- Contains the Yelverton National Park and other reserves which have significant biodiversity values.
- Comprises a number of watercourses that primarily flow to the west coast and is predominantly within the Cape to Cape water catchment.
- Extremely limited available groundwater and surface water resource.

#### Economic

- Part of one the most viable viticultural and popular wine/tourism regions in Australia with an economic base supported by local, state, interstate and international markets/visitors.
- Supports a significant portion of the viticultural industry within the region with this continuing to expand though extensive areas which are still used for grazing purposes.
- Supports an extensive and expanding range of tourist-based uses including accommodation, rural industry based tourism such as wineries, restaurants, breweries, galleries, herb farms, chocolate production and local produce production.
- Has relatively valuable basic raw material resources (particularly gravel) though extractive operations have decreased in the past 5 years due to perceived land use conflict.

## Social

- The unique character of the area created through a mix of land uses, natural values and landscapes and location in proximity to the coast and in a broader context to the Perth metropolitan region has resulted in this area being of significant value to the whole of the state.
- Supports a relatively sparse rural and large visitor population.
- Caves Road has particularly high visual and rural amenity values and is the main tourist route through the area.
- Historic rail reserve provides a significant historical and recreational asset particularly once implementation of the 'Rails to Trails' programme is complete.
- Recognise the importance of Indigenous and European cultural heritage.

### **7.4.3 Major Issues**

- Land use competition and conflict between agricultural uses (particularly viticulture and extractive industry) and tourist-based uses. Achieving a sustainable balance between the rural and tourist uses.
- Loss of environmental values due to clearing of remnant vegetation and impact on surface and ground water quality and availability.
- Long term sustainability and expansion of the viticultural industry in view of limited water resources.
- Incremental impact of ongoing development on the character and landscape values of the area and particularly Caves Road.
- Ability of road infrastructure to accommodate increasing traffic volumes and responsibility for infrastructure.
- Impact of larger-scale tourist resort development and ongoing fragmentation of land on the long-term sustainability and expansion of the agriculture industry, particularly viticulture.
- Restriction of rural activities due to increased rural residential and tourist use.
- Management of nutrient export.
- Fire risk management.

### **7.4.4 Land Capability/Water Availability**

- Generally high to very high soil capability for viticulture and grazing.
- Very limited groundwater and surface water availability.

### **7.4.5 Precinct Vision**

To support the ongoing primary agricultural land use and associated rural-based tourist development in a manner that sustains the high agricultural potential, existing natural environment, landscape values and rural character of the area.

#### 7.4.6 Precinct Objectives

- To ensure that land use planning in this precinct is consistent with the LNRSP and Scheme provisions.

##### Environment

- To protect the biodiversity values of remnant vegetation with an emphasis on poorly represented vegetation, priority flora and DRF, and riparian/creek line vegetation.
- To protect environmental flows in watercourses by restriction of dams, particularly on-stream dams, and the control of dam sizes.
- To protect and encourage re-establishment of environmental corridors and buffers particularly in proximity to the Yelverton National Park and linking conservation reserves with the Park.
- To promote the efficient and environmentally sustainable use and reuse of water as part of agricultural, tourist and other land uses.
- To promote weed and feral animal management.
- To promote nutrient management and the use of nutrient management plans.
- To protect habitat and vegetation corridors relied on by native fauna.

##### Economic

- To facilitate the ongoing expansion of agricultural land uses with a focus on viticulture and other intensive agriculture.
- To facilitate the ongoing expansion of rural-based tourist development where this will not impact or compete with viable agricultural land use or harm agricultural potential and where the landscape, environmental and other values and rural character of the area are sustained.

##### Social

- To maintain and protect the mosaic of rural & natural landscapes and land uses.
- To maintain the unique landscape values and character of Caves Road.
- To pursue equitable responsibility for maintenance and provision of infrastructure.
- To continue to implement the 'Rails to Trails' programme with a view to increasing historical awareness and use of the Trail.
- To maintain and enhance lifestyle values for the resident population concurrent with increasing appropriate tourist development and visitation.
- To recognise and protect Aboriginal and European cultural heritage.
- To ensure an adequate level of fire management and protection.

### **7.4.7 Land Use Allocation**

#### Desirable

- Agriculture, broad-acre.
- Viticulture and other intensive forms of agriculture where there is adequate water availability, soil capability and other values are not compromised.
- Cottage industry.
- Winery.
- Rural enterprise.
- Rural industry.
- Conservation and P uses pursuant to the Scheme.

#### Conditional

- Tourist accommodation and chalet development consistent with the Rural Tourist Accommodation Policy (RTAP).
- Discretionary uses pursuant to the Scheme.
- Extractive industry (where consistent with the Extractive Industry Policy).

#### Undesirable

- Rural residential and small-holding development.
- Large-scale, intensive (urban style) tourism development.
- Rural holiday resort except where located in the Viticulture and Tourism zone and in accordance with the RTAP.
- Commercial uses not related to agricultural production and urban type uses.

### **7.4.8 Subdivision Criteria**

- Horticulture and viticulture subdivision:- minimum of 30ha of soils with high to very high (Class I and II) capability for horticulture/viticulture where detailed agronomy and hydrology reports indicate agricultural and environmental sustainability as well as achievement of minimum water requirements as prescribed in 7.9.3 and Appendix 2. The minimum lot area shall exclude areas that are not useable for agriculture e.g. remnant and riparian vegetation considered valuable for conservation (and which should not be cleared); streams, dams, wetlands and foreshores; steep terrain and rocky outcrops; setbacks to the above and any environmental buffers within which development or agriculture is not permitted; and existing tourist development.
- Broad-acre agriculture subdivision:- minimum of 40ha of soils with high to very high (Class I and II) capability for grazing where detailed agronomy and hydrology reports indicate agricultural and environmental sustainability as well as achievement of minimum water requirements as prescribed in 7.9.3 and Appendix 2. The minimum lot area shall exclude areas that are not useable for agriculture e.g. remnant and riparian vegetation considered valuable for conservation (and which should not be cleared or grazed); streams, dams, wetlands and foreshores; steep terrain and rocky outcrops; setbacks to the

above and any environmental buffers within which development or agriculture is not permitted; and existing tourist development.

- In considering subdivision and development conditions the Shire may recommend or impose conditions which address land management and environmental management including, but not limited to nutrient export, protection of surface and ground water, conservation of remnant vegetation, application of buffers and setting aside areas for revegetation.
- Strata subdivision of tourist development in the 'Agriculture' zone or in other priority agriculture areas is not supported. Where supported e.g. in the 'Viticulture and Tourism' zone, strata subdivision shall be in accordance with WAPC and Shire policy provisions and guidelines. Strata subdivision of tourist accommodation is limited to the immediate curtilage of individual chalets, with mandatory common management and consistent with the RTAP. Strata subdivision of a guest-house into individual guest house rooms is not supported.
- In accordance with the Shire's Biodiversity Incentive Strategy (2002).
- In accordance with the LNRSP.
- Rural residential subdivision not supported - limited to existing 'Rural Residential' zones in accordance with adopted Structure and Development Guide Plans.

## **7.5 PRECINCT 5 - Central Rural**

### **7.5.1 Precinct Description**

- Comprises that area between the ultimate planned extents of the Busselton/Vasse urban area and Dunsborough south to Carburnup River.
- Comprises a range of agricultural land uses including grazing, horticulture and dairying. Limited residential and tourist development is located along Caves Road in the north, Commonage Road to the west and Bussell Highway to the east.
- Relatively level topography being part of the Swan Coastal Plain with limited remnant vegetation and many coastal areas prone to inundation.
- Comprises two distinct areas being the coastal wetland strip and broader agricultural area with the latter containing the agriculturally significant Marybrook loams land unit.
- Predominantly zoned 'Agriculture' in the Scheme with areas in the north surrounding the coastal wetlands having 'Landscape Value' and 'Wetland' area designations.
- Subject to the possible future alignment of the Vasse-Dunsborough road link - alignment yet to be determined.

### **7.5.2 Sustainability Factors**

#### Environmental

- Generally contains limited remnant vegetation in the rural areas though significant areas of vegetation with very high biodiversity values exist in Locke Reserve on the corner of Caves Road and Bussell Highway and reserve land to the south of Carburnup River, providing significant habitat for a range of fauna.
- The wetland/coastal strip provides a critical habitat for the endangered Western Ring Tail Possum i.e. peppermint woodlands, and other fauna, particularly bird species.
- Contains a number of reserves, which have significant biodiversity values.
- Comprises a number of watercourses and drains that flow into Geographe Bay.
- Low lying nature of much of the precinct and particularly in the north and west result in many areas being prone to seasonal inundation.

#### Economic

- Contains one of the two major horticultural/intensive agricultural areas in the Shire based around the highly capable Marybrook loams.
- Moderate increase in viticultural land use over the past 10 years.
- Range of tourist uses provide some economic benefit with these generally located on the periphery of urban areas and include the substantial Broadwater Resort on Caves Road.
- Limited residential component.



## Social

- Effectively forms a natural and rural wedge between the Busselton/Vasse and Dunsborough urban areas, this being critical to the retention of the settlement structure of the Shire and the autonomy and character of the towns.
- Has important landscape values along the coastal wetland area and on major east-west tourist routes such as Caves Road, Vasse-Yallingup Siding Road and Wildwood Road.
- Supports a relatively sparse rural population with a limited residential community at Carburnup River, a small though well serviced village.
- Historic Rail reserve provides a significant historical and recreational asset particularly once implementation of the 'Rails to Trails' programme is complete.
- Recognise the importance of Indigenous and European cultural heritage.

### 7.5.3 Major Issues

- Future pressure for expansion of Busselton and Dunsborough and urban development of other areas in proximity to the coast along Caves Road.
- Potential loss of highly valuable agricultural land and the rural wedge between the towns, which will heavily impact on the character, settlement function and agricultural sustainability of the Shire as a whole.
- Land use conflict between agricultural and adjoining and expanding urban uses. Incremental impact of ongoing development on the character and landscape values of the area and particularly Caves Road and the coast.
- Future alignment of the Vasse-Dunsborough road link - alignment yet to be determined by DPI/MRWA and is subject to a strategic regional road planning investigation by DPI. The possible outcomes include alignments to the south of the wetland system; immediately north of Vasse-Yallingup Siding Road; or the widening of Caves Road.
- Protection of the high biodiversity and habitat values of remnant vegetation and wetland systems.
- Hydrological and drainage impacts of filling and development of low lying/inundated areas - management of nutrient export.
- Coastal management.
- Fire risk management.

### 7.5.4 Land Capability/Water Availability

- Generally high to very high capability for horticulture, viticulture and grazing in central and southern areas with lower capabilities in the western and northern areas.

### 7.5.5 Precinct Vision

To retain the rural wedge (including coastal buffer) between Busselton (west of Bussell Highway) and Dunsborough (east of Commonage Road) and support primary

agricultural land use and associated rural-based tourist development in a manner that sustains the existing natural environment, landscape values and character of the area.

### **7.5.6 Precinct Objectives**

- To ensure that the planning in this precinct is consistent with the LNRSP and Scheme provisions.

#### Environment

- To protect habitat and vegetation corridors relied on by the threatened Western Ringtail Possum.
- To protect the coastal wetland system and the associated vegetation, hydrological and habitat values.
- To protect environmental flows in watercourses by restriction of dams, particularly on-stream dams, and the control of dam sizes.
- To maintain high level public access to the coast.
- To maintain open coastal landscape buffer.
- To protect the biodiversity values of remnant vegetation with an emphasis on poorly represented vegetation, priority flora and DRF and riparian/creek line vegetation.
- To protect and encourage re-establishment of environmental corridors and buffers particularly in proximity to the Locke Reserve, and to the south of Carburnup River, and along the coastal wetland system.
- To limit the future impact of intensive agriculture on the coastal wetland system.
- To promote weed and feral animal management.
- To promote the efficient use/re-use of water in agriculture and other uses.
- To promote nutrient management and the use of nutrient management plans.

#### Economic

- To facilitate the ongoing expansion of agricultural land uses with a focus on horticulture and other intensive forms of agriculture.
- To limit the expansion of urban areas to those presently planned for in order to maintain the agricultural land resource.
- To facilitate limited expansion of rural-based tourist development where this will not impact or compete with viable agricultural land uses and where the landscape, environmental and other values and character of the area are sustained.
- To consider the future expansion of the Carburnup River village consistent with the policies of the LNRSP.
- To maintain Busselton and Dunsborough as separate settlements.
- To maintain the low intensity development character of coastal areas.

## Social

- To acknowledge the importance of and protect the rural wedge and coastal buffer between the Busselton and Dunsborough urban areas.
- To maintain and protect the mosaic of rural and natural landscapes and land uses.
- To maintain the unique landscape values and character of Caves Road and other tourist routes.
- To continue to implement the 'Rails to Trails' programme with a view to increasing historical awareness and use of the Trail.
- To ensure the route alignment of the Vasse-Dunsborough link protects the landscape values of Vasse-Yallingup Siding Road.
- To recognise and protect Aboriginal and European cultural heritage.
- To ensure an adequate level of fire management and protection.

### **7.5.7 Land Use Allocation**

#### Desirable

- Agriculture, broad acre.
- Horticulture and other intensive forms of agriculture where there is adequate water availability and are environmentally sensitive.
- Conservation.
- Cottage industry.
- Rural enterprise.
- Rural industry and permitted uses in the Scheme.

#### Conditional

- Tourist accommodation consistent with the RTAP, excluding large-scale tourist development and rural holiday resorts.
- Extractive industry pursuant to the Extractive Industry Policy and the Scheme.

#### Undesirable

- Residential/urban development other than provided for by the relevant Scheme zoning provisions applicable to the subject land.
- Rural residential/smallholding development.
- Large-scale tourist development, rural holiday resorts.
- Commercial uses.
- Coastal development and development impacting on the wetland system.

### **7.5.8 Subdivision Criteria**

- Horticulture and viticulture subdivision:- minimum of 30ha of soils with high to very high (Class I and II) capability for horticulture/viticulture where detailed agronomy and hydrology reports indicate agricultural and environmental sustainability as well as achievement of minimum water requirements as

prescribed in 7.9.3 and Appendix 2. The minimum lot area shall exclude areas that are not useable for agriculture e.g. remnant and riparian vegetation considered valuable for conservation (and which should not be cleared); streams, dams, wetlands and foreshores; steep terrain and rocky outcrops; setbacks to the above and any environmental buffers within which development or agriculture is not permitted; and existing tourist development.

- Broad-acre agriculture subdivision:- minimum of 40ha of soils with high to very high (Class I and II) capability for grazing where detailed agronomy and hydrology reports indicate agricultural and environmental sustainability as well as achievement of minimum water requirements as prescribed in 7.9.3 and Appendix 2. The minimum lot area shall exclude areas that are not useable for agriculture e.g. remnant and riparian vegetation considered valuable for conservation (and which should not be cleared or grazed); streams, dams, wetlands and foreshores; steep terrain and rocky outcrops; setbacks to the above and any environmental buffers within which development or agriculture is not permitted; and existing tourist development.
- In considering subdivision and development conditions the Shire may recommend or impose conditions which address land management and environmental management including, but not limited to nutrient export, protection of surface and ground water, conservation of remnant vegetation, application of buffers and setting aside areas for revegetation.
- Strata subdivision of tourist development in the 'Agriculture' zone or in other priority agriculture areas is not supported. Where supported e.g. in the 'Viticulture and Tourism' zone, strata subdivision shall be in accordance with WAPC and Shire policy provisions and guidelines. Strata subdivision of tourist accommodation is limited to the immediate curtilage of individual chalets, with mandatory common management and consistent with the RTAP. Strata subdivision of a guest-house into individual guest house rooms is not supported.
- Rural residential subdivision is limited to existing 'Rural Residential' zones and is to be in accordance with adopted Structure and Development Guide Plans.
- In accordance with the LNRSP.
- In accordance with the Biodiversity Incentive Strategy (2002).

## **7.6 PRECINCT 6 - Commonage**

### **7.6.1 Description**

- Comprises the existing Commonage Rural Residential Policy Area south of Dunsborough and north of Wildwood Road.
- Forms part of the Leeuwin-Naturaliste Ridge with undulating topography and with mainly gravely/loamy soils.
- Comprises extensive rural residential development with a variety of lot sizes. Some agricultural land uses continue in the area (viticulture, grazing, and agro-forestry) with a number of small scale tourism and cottage industry land uses.
- Zoned 'Rural Residential' in the Scheme with various 'additional use' provisions to allow for small-scale tourism development - included in the 'Landscape Value' area.

### **7.6.2 Sustainability Factors**

#### Environmental

- Contains significant remnant vegetation throughout including a range of poorly represented vegetation complexes and priority and declared rare flora.
- Provides significant habitat for a range of fauna.
- Contains a number of reserves which have significant biodiversity values.
- Comprises a number of streams that flow to the west coast & Geographe Bay.
- Surface water catchment, creation of water bodies and use for non-productive purposes.
- Control of kangaroo populations, other feral animals and weeds.
- Extensive invasion of exotic weed and domestic pets.

#### Economic

- Limited economic base with some agricultural uses continuing - rural land use should be retained where compatible to maintain productivity in the precinct.
- Low-key, small-scale tourist and rural development and home based businesses exist. Scope for more sustainable tourist development in some places and expanded home-based industries.
- The cost of infrastructure provision to service rural residential subdivisions is high, as is the amount of land sterilised from agricultural land use. The precinct has a proportionally low sustainable economic value.

#### Social

- The area has high landscape values created through a mix of land uses, natural values and landscapes and location in proximity to the west and northern coasts.

- Caves, Commonage and Wildwood Roads have particularly high visual amenity values being the main tourist route through the area.
- Relatively low building and occupancy rates though this is gradually increasing.
- Minimal community infrastructure or sense of community and high cost of service provision in view of low population density.
- Proposed rural community/service centre pursuant to the Commonage Policy Area Consolidated Structure Plan and Commonage Implementation Policy.
- Recreational assets are passive with the system of PAWs providing generally limited pedestrian access and requiring some improvement.
- Recognise the importance of Indigenous and European cultural heritage.
- No convenient retail facilities presently exist although cafes, wineries etc are available.
- Fire management and fire fighting capacity a problem with a number of absentee landowners.
- Limited understanding of rural management issues by resident ex-urban and absentee landowner population.

### **7.6.3 Major Issues**

- Loss of environmental values due to clearing of remnant vegetation, damming of creeks, invasion of weeds/pests and displacement of kangaroos.
- Poor economic and social vitality - needs more mixed land use and population - requires development of community/service centre - absence of non-tourism dependant activities continues to restrict the potential for increasing the permanent population.
- Incremental impact of ongoing development on the character and landscape values of the area.
- Potential impact of larger scale tourist development on residential amenity and character of the area.
- Absence of developed community focus and access to other community services (although this is planned to occur via development of a community/service centre).
- Management of nutrient export.
- Fire risk management.
- Management of dams and water course catchments.
- Maintenance of appropriately scaled rural land uses and activities to maintain the rural sense of place.
- Inappropriate fencing restricts the movement of fauna and concentrates large numbers of kangaroos in certain areas.
- Domestic and feral cats - predation on local fauna; unrestrained domestic dogs that menace local fauna and endanger livestock.

#### **7.6.4 Land Capability / Water Availability**

- Generally high capability for recreational viticulture and grazing.
- Very limited groundwater and surface water availability.

#### **7.6.5 Precinct Vision**

- Consolidate rural residential land use and provide for a diversification in small-scale and low-key tourist, rural and home based activities in a manner that sustains the existing natural environment, landscape values and residential amenity of the area with well developed pedestrian and habitat/biodiversity links.
- Promote the retention of rural amenity and appropriately scaled rural land uses where compatible with rural residential amenity.

#### **7.6.6 Precinct Objectives**

##### Environment

- To protect biodiversity values of remnant vegetation with an emphasis on poorly represented vegetation, priority flora and DRF and riparian/creek line vegetation.
- To protect environmental flows in watercourses by restriction of off-stream dams, a presumption against on-stream dams, and the control of dam sizes.
- To protect existing and encourage re-establishment of environmental corridors and buffers particularly in proximity to reserves and particularly in areas of high landscape values.
- To promote the efficient use and reuse of water.
- To promote nutrient management and the use of nutrient management plans.
- To promote the use of native species as part of landscaping and revegetation and implement a weed management plan.
- To protect habitat and vegetation corridors relied on by the threatened Western Ringtail Possum.
- To promote weed and feral animal management.

##### Economic

- To facilitate the ongoing expansion of low-key tourism development and other activities not dependent on tourism in areas within close proximity to major tourist routes and Yallingup where the landscape and environmental values and character of the area are sustained notwithstanding potential perceived impact on residential amenity.
- To facilitate the establishment of home and cottage industries and businesses, that do not impact on environmental values or require vegetation removal and, where a sustainable water supply exists where required, recreational agriculture that does not impact on environmental values or require vegetation removal.
- To promote the development of appropriately scaled and compatible rural activities that maintain a rural sense of place.

## Social

- To maintain and protect the mosaic of rural and natural based landscapes and land uses.
- To maintain the unique landscape values and character of Caves, Commonage and Wildwood Roads.
- To ensure a high level of connectivity and pedestrian access throughout the area and to passive and active recreation facilities.
- To utilise existing and future contributions to provide community facilities.
- To ensure an adequate level of fire management and protection.
- To acknowledge and facilitate an increasing diversity of low-key commercial, agricultural processing and tourist uses to provide sustainable opportunities.
- To recognise and protect Aboriginal and European cultural heritage.

### **7.6.7 Land Use Allocation**

- In accordance with the Commonage Consolidated Structure Plan, Rural Residential zone provisions and any additional use or other applicable zoning provisions.
- Consideration of additional small-scale tourist precincts to be subject to Scheme amendment where necessary and subject to appropriate locational, environmental, landscape and servicing considerations.

### **7.6.8 Subdivision Criteria**

- Rural residential subdivision is limited to existing 'Rural Residential' zones and is to be in accordance with adopted Structure and Development Guide Plans (including the Commonage Policy Area Consolidated Structure Plan).
- In accordance with the LNRSP.
- Presumption against strata subdivision except in accordance with WAPC and Shire policy provisions and guidelines. Strata title subdivision of approved tourist developments will be permitted only in accordance with the RTAP. Strata subdivision for tourist accommodation limited to the immediate curtilage of individual accommodation units, with mandatory common management consistent with the RTAP. Strata subdivision of a guest-house into individual guest house rooms is not supported.
- Rezoning or inclusion of 'Additional Use' provisions in the Scheme is required prior to strata title subdivision of tourist accommodation.



## **7.7 PRECINCT 7 - Naturaliste**

### **7.7.1 Precinct Description**

- Covers the Cape Naturaliste area north and north-west of Dunsborough and Yallingup.
- Forms part of the Leeuwin-Naturaliste Ridge with relatively elevated and often steep topography and large parts of the west coast and Geographe Bay coast.
- Has significant landscape values comprising Cape Naturaliste, the coastline, Cape Naturaliste Road, Meelup Regional Park and National Park.
- Contains extensive reserve areas along the coastline, Eagle Bay, Bunker Bay tourist node, tourist uses along Caves Road, areas of rural residential development and a mix of agricultural land uses.
- Covered by a variety of zones with most of the coastline and adjoining land (National Park and nature reserves) reserved in the Scheme, with 'Agriculture', 'Rural Residential', 'Conservation' and 'Tourist' zones elsewhere.

### **7.7.2 Sustainability Factors**

#### Environmental

- Contains significant remnant vegetation and biodiversity values throughout and particularly in the National Park and Meelup Reserve and other reserves.
- Provides significant habitat for a range of fauna with extensive peppermint and other woodland.
- Contains a number of Cave systems that have unique and delicate ecosystems.
- Significant area of coastline and marine ecosystem in very good condition and with high environmental conservation value.
- Limited available groundwater and surface water resources.

#### Economic

- Limited broad-acre agricultural operations (grazing) with a winery the major rural industry.
- Beaches, coastline, National Park, Meelup Regional Park and Bunker Bay Resort provide major attractions resulting in this area having a high influx of tourists particularly in summer.
- Supports a range of tourism uses with the Bunker Bay Resort the most significant in addition to a number of restaurants, accommodation and other attractions, particularly along Caves Road, but also including the lighthouse precinct at Cape Naturaliste.
- Significant areas of rural residential zoned land still to be developed in the Ridglands and Meelup precincts.
- Adjoins the future expanded Dunsborough urban area in the south east.
- Contains a refuse disposal site and commercial sand extraction resources.

## Social

- The unique natural, coastal and rural landscapes and range of natural and other attractions results in this area being of significant value to people from the whole of the State and contributes significantly to development of the character of the region.
- The area is a major State and regional recreation asset with a high level of beach use, fishing, surfing, walking, diving, sight seeing and other pursuits.
- Recognise the importance of Indigenous and European/settler cultural heritage.
- Cape Naturaliste has particularly high visual amenity values being adjacent to the main tourist route through the area.

### **7.7.3 Major Issues**

- Consolidation of coastal reserve system for long term recreation use and pedestrian connectivity.
- Pressures on coastal environment and infrastructure from large visitor numbers.
- Provision of adequate servicing to Eagle Bay village without impacting on existing values.
- Retaining the unique character and landscape value of the area while accommodating tourist and other day user demands.
- Determining an appropriate level of sustainable development.
- Incremental impact of ongoing development on the character and landscape values of the area.
- Loss of environmental values and habitat due to clearing of remnant vegetation.
- Continued viability of agricultural land use.
- Fire risk management.
- Management of nutrient export.
- Ability of road infrastructure to accommodate increasing traffic volumes.
- Maintaining existing planned level of development and comprehensive environmental and sustainability assessment of any new proposal.

### **7.7.4 Land Capability/Water Availability**

- Limited areas have high capability for viticulture and grazing.
- Very limited groundwater and surface water availability.

### **7.7.5 Precinct Vision**

- Retain and conserve the natural environment, landscape values and character of the area in balance with limited tourist development.

### 7.7.6 Precinct Objectives

- To ensure that the planning in this precinct is consistent with the LNRSP and Scheme provisions.

#### Environment

- To protect the coastal environment through the management of development, use, access and provision of appropriate infrastructure.
- To protect biodiversity values of remnant vegetation with an emphasis on poorly represented vegetation, priority flora and DRF and control of environmental weeds.
- To protect and encourage re-establishment of environmental corridors and buffers, particularly in proximity to the National Park, in connecting coastal reserves and remnant vegetation through to the Meelup reserve.
- To protect habitat and vegetation corridors relied on by the threatened Western Ringtail Possum.
- To promote weed and feral animal management.
- To protect environmental flows in watercourses by restriction of dams, particularly on-stream dams, and the control of dam sizes.
- To promote the efficient use/re-use of water in agricultural and other uses.
- To promote nutrient management and the use of nutrient management plans.

#### Economic

- Facilitate the limited expansion of rural tourist accommodation development where it will not impact on landscape, environmental and other values or character.
- Support limited rural tourist development and associated infrastructure and recreation trails, consistent with the LNRSP and the RTAP.
- Support ongoing agriculture and viticulture where sustainable.

#### Social

- Maintain and protect the rural and natural character and landscapes and existing land use mosaic as a priority.
- To recognise and protect Aboriginal and European cultural heritage.
- Provide an appropriate level of infrastructure and managed access to the coast at recreational nodes.
- Limit development to existing nodes and within existing planning parameters to ensure the high values of the area are not impacted upon.
- Manage increased recreational pressure and use.
- To ensure an adequate level of fire management and protection.

### **7.7.7 Land Use Allocation**

#### Desirable

- Agriculture
- Conservation
- Cottage industry
- Rural enterprise

#### Conditional

- Rural residential in existing zoned areas pursuant to the Scheme.
- Rural tourist accommodation: chalet development consistent with the RTAP, rural bed & breakfast.
- Rural industry.

#### Undesirable

- Rural residential, rural small-holding and urban development other than in existing zoned areas pursuant to the Scheme.
- Rural holiday resort.
- Commercial uses and uses of an urban or residential character.

### **7.7.8 Subdivision Criteria**

- Horticulture and viticulture subdivision:- minimum of 30ha of soils with high to very high (Class I and II) capability for horticulture/viticulture where detailed agronomy and hydrology reports indicate agricultural and environmental sustainability as well as achievement of minimum water requirements as prescribed in 7.9.3 and Appendix 2. The minimum lot area shall exclude areas that are not useable for agriculture e.g. remnant and riparian vegetation considered valuable for conservation (and which should not be cleared); streams, dams, wetlands and foreshores; steep terrain and rocky outcrops; setbacks to the above and any environmental buffers within which development or agriculture is not permitted; and existing tourist development.
- Broad-acre agriculture subdivision:- minimum of 40ha of soils with high to very high (Class I and II) capability for grazing where detailed agronomy and hydrology reports indicate agricultural and environmental sustainability as well as achievement of minimum water requirements as prescribed in 7.9.3 and Appendix 2. The minimum lot area shall exclude areas that are not useable for agriculture e.g. remnant and riparian vegetation considered valuable for conservation (and which should not be cleared or grazed); streams, dams, wetlands and foreshores; steep terrain and rocky outcrops; setbacks to the above and any environmental buffers within which development or agriculture is not permitted; and existing tourist development.
- In considering subdivision and development conditions the Shire may recommend or impose conditions which address land management and environmental management including, but not limited to nutrient export,

protection of surface and ground water, conservation of remnant vegetation, application of buffers and setting aside areas for revegetation.

- Strata subdivision of tourist development in the 'Agriculture' zone or in other priority agriculture areas is not supported. Where supported e.g. in the 'Viticulture and Tourism' zone, strata subdivision shall be in accordance with WAPC and Shire policy provisions and guidelines. Strata subdivision of tourist accommodation is limited to the immediate curtilage of individual chalets, with mandatory common management and consistent with the RTAP. Strata subdivision of a guest-house into individual guest house rooms is not supported.
- Rural residential subdivision is limited to existing 'Rural Residential' zones and is to be in accordance with adopted Structure and Development Guide Plans and the LNRSP.
- In accordance with the Natural Landscape Amenity criteria in the LNRSP except where varied by the 'Conservation' and 'Rural Landscape' zone provisions pursuant to the Scheme. Variations between the LNRSP and the Scheme will be resolved through the Local Planning Scheme review process.
- In accordance with the Biodiversity Incentive Strategy (2002).

## **7.8 PRECINCT 8 - Western Coastal**

### **7.8.1 Precinct Description**

- Covers the area west of Caves Road south of Yallingup including the Moses Rock Rural Landscape Zone.
- Forms part of the Leeuwin-Naturaliste Ridge with relatively elevated and often steep topography.
- Comprises the majority of the western coastline and coastal access roads within the Shire.
- Has significant landscape values including the coastline, Caves Road and National Park.
- Contains extensive reserve/national park areas along the coastline, tourist uses along Caves Road and throughout the rural areas, Injidup rural residential area and a mix of agricultural land uses including viticulture.
- Covered by a variety of zones with most of the coastline and adjoining land reserved for recreation in the Scheme or zoned 'Conservation' or 'Rural Landscape'. 'Agriculture' and 'Viticulture & Tourism' zones adjoin Caves Road in the rural areas with tourist zonings in the coastal nodes.

### **7.8.2 Sustainability Factors**

#### Environmental

- Contains significant remnant vegetation and biodiversity values throughout, including in the National Park, other reserves and on private land.
- Provides significant habitat for a range of fauna.
- Contains a number of Cave systems, which have unique and delicate ecosystems.
- Significant area of coastline and marine ecosystem in very good environmental condition and with high biodiversity and landscape values.
- Contains a number of creek lines and watercourses that need to be managed to ensure maintenance or restoration of environmental flows.
- Limited available groundwater and surface water resources.

#### Economic

- Has a varied economic base with Smith's Beach tourist node providing high level tourist and conservation opportunities. A range of tourism development throughout the precinct, both associated with and independent of commercial viticulture operations.
- Beaches, coastline and National Park provide major attractions resulting in this area having a high influx of tourists, particularly in summer, and a broad economic value.

- Supports a range of tourist and viticulture industry based uses with those at Smiths Beach the most significant in addition to a number of restaurants, accommodation and other attractions, particularly along Caves Road.
- Large areas are reserved or zoned for conservation purposes and provide high landscape and natural values that are of significant tourism value.

## Social

- The unique natural, coastal and rural landscapes and range of natural and other attractions results in this area being of significant value to people of the State and contributes significantly to the character and function of the region.
- Precinct is a major recreational asset with beaches well used and with fishing, surfing, walking, diving and other pursuits.
- Recognise and protect Aboriginal and European cultural heritage.
- Caves Road and those roads connecting to coastal areas have particularly high visual amenity values being the main tourist routes through the area.

### **7.8.3 Major Issues**

- Pressures on coastal environment and infrastructure from large visitor and increasing resident numbers and improved access.
- Retaining the unique character and landscape value of the area while accommodating tourist and other user demands.
- Determining an appropriate level and type of sustainable development for tourist and settlement nodes (Smiths Beach).
- Individual and cumulative impact of ongoing development, including estate entry statements, on the character and landscape values of the area and particularly along Caves Road.
- Loss of environmental values and habitat due to clearing of remnant vegetation.
- Ability of road infrastructure to accommodate increasing traffic volumes.
- Increasing pressure for residential development opportunities and loss of productive use of agricultural land.
- Management of nutrient export.
- Fire risk management.

### **7.8.4 Land Capability/Water Availability**

- Most areas have high to very high capability for viticulture and grazing.
- Very limited groundwater and surface water availability.

### **7.8.5 Precinct Vision**

- Retain and conserve the natural environment and rural landscape values and character of the area in balance with limited tourism development.

### **7.8.6 Precinct Objectives**

- To ensure that the planning in this precinct is consistent with the LNRSP and Scheme provisions.

#### Environment

- To protect the coastal environment through the management of access and provision of appropriate infrastructure.
- To protect water quality and environmental flows in watercourses by restriction of dams, particularly on-stream dams, and the control of dam sizes.
- To protect biodiversity values of remnant vegetation with an emphasis on poorly represented vegetation, priority flora and DRF, and control of environmental weeds.
- To protect and encourage re-establishment of environmental corridors and buffers particularly in proximity to the National Park, connection of reserves and remnant vegetation on private property.
- To protect habitat and vegetation corridors required by the threatened Western Ringtail Possum.
- To promote weed and feral animal management.
- To promote the efficient use/re-use of water in agricultural and other uses.
- To promote nutrient management and the use of nutrient management plans.

#### Economic

- To facilitate the ongoing expansion of rural tourism development where it will not impact on landscape, environmental and other values and character of the area.
- To support tourism and other forms of development consistent with the settlement and nodal hierarchy of the LNRSP.

#### Social

- To maintain and protect the unique rural and natural landscapes and land uses and their contribution to the character of the region as a priority.
- To provide an appropriate level of infrastructure and managed access to the coast and other recreational assets.
- To limit development to existing nodes established under the LNRSP and within existing planning parameters to ensure the high values of the area are not impacted upon by development.
- To recognise and protect Aboriginal and European cultural heritage.

### **7.8.7 Land Use Allocation**

#### Desirable

- Conservation, as zoned in the Scheme.



- Rural lots created pursuant to the Scheme and the Biodiversity Incentives Strategy.
- Agriculture where there is adequate water availability and landscape and environmental values are maintained.
- Cottage industry and Permitted uses pursuant to the Scheme.

#### Conditional

- Rural residential in existing zoned areas only.
- Limited chalet development in accordance with the RTAP.
- Bed & breakfast accommodation.

#### Undesirable

- Rural residential development other than in specified areas.
- Large-scale (urban type) tourist development.
- Rural holiday resort except where located in the Viticulture and Tourism zone and in accordance with the RTAP.
- Extractive industry, where inconsistent with Shire policy, commercial, industry and urban type uses.

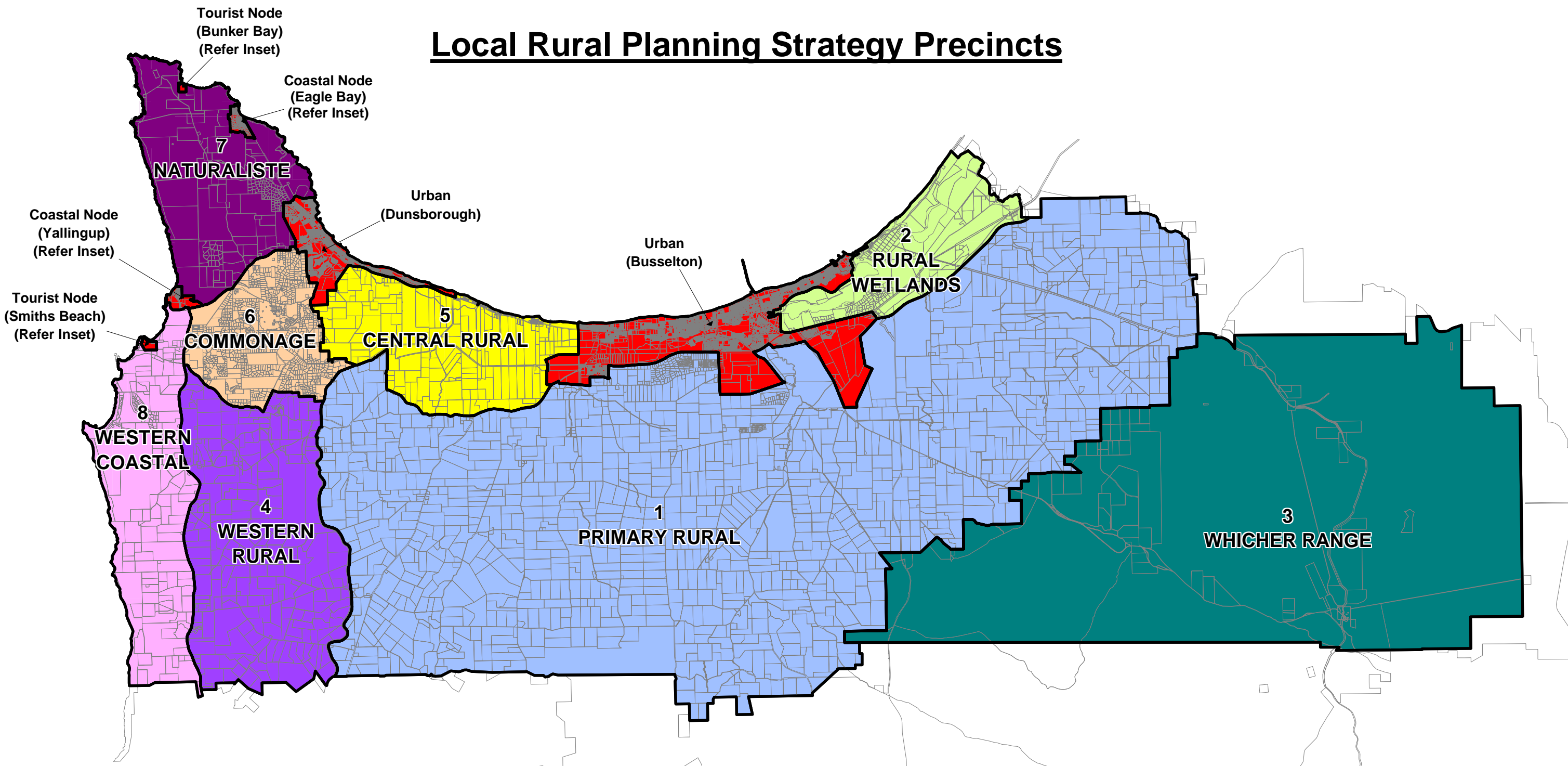
### **7.8.8 Subdivision Criteria**

- Horticulture and viticulture subdivision:- minimum of 30ha of soils with high to very high (Class I and II) capability for horticulture/viticulture where detailed agronomy and hydrology reports indicate agricultural and environmental sustainability as well as achievement of minimum water requirements as prescribed in 7.9.3 and Appendix 2. The minimum lot area shall exclude areas that are not useable for agriculture e.g. remnant and riparian vegetation considered valuable for conservation (and which should not be cleared); streams, dams, wetlands and foreshores; steep terrain and rocky outcrops; setbacks to the above and any environmental buffers within which development or agriculture is not permitted; and existing tourist development.
- Broad-acre agriculture subdivision:- minimum of 40ha of soils with high to very high (Class I and II) capability for grazing where detailed agronomy and hydrology reports indicate agricultural and environmental sustainability as well as achievement of minimum water requirements as prescribed in 7.9.3 and Appendix 2. The minimum lot area shall exclude areas that are not useable for agriculture e.g. remnant and riparian vegetation considered valuable for conservation (and which should not be cleared or grazed); streams, dams, wetlands and foreshores; steep terrain and rocky outcrops; setbacks to the above and any environmental buffers within which development or agriculture is not permitted; and existing tourist development.
- In considering subdivision and development conditions the Shire may recommend or impose conditions which address land management and environmental management including, but not limited to nutrient export, protection of surface and ground water, conservation of remnant vegetation, application of buffers and setting aside areas for revegetation.

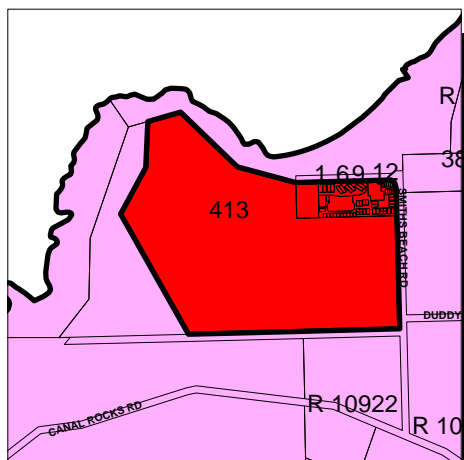
- Strata subdivision of tourist development in the 'Agriculture' zone or in other priority agriculture areas is not supported. Where supported e.g. in the 'Viticulture and Tourism' zone, strata subdivision shall be in accordance with WAPC and Shire policy provisions and guidelines. Strata subdivision of tourist accommodation is limited to the immediate curtilage of individual chalets, with mandatory common management and consistent with the RTAP. Strata subdivision of a guest-house into individual guest house rooms is not supported.
- In accordance with adopted structure plans and development guide plans for tourism development in existing zoned areas.
- Rural residential subdivision is limited to existing 'Rural Residential' zones and is to be in accordance with adopted Structure and Development Guide Plans and the LNRSP.
- In accordance with the Natural Landscape Amenity criteria in the LNRSP except where varied by the 'Conservation' and 'Rural Landscape' zone provisions pursuant to the Scheme. Variations between the LNRSP and the Scheme will be resolved through the Local Planning Scheme review process.
- In accordance with the Biodiversity Incentive Strategy (2002).

**Figure 8 Local Rural Planning Strategy Precincts**

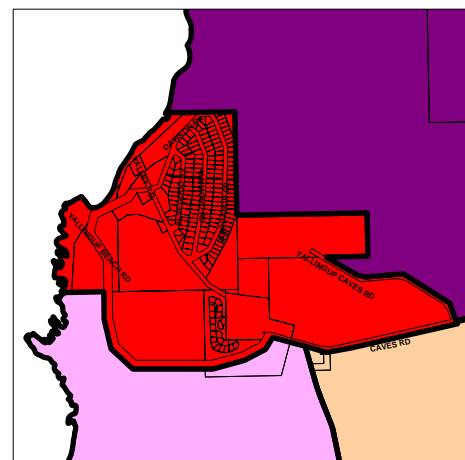
# Local Rural Planning Strategy Precincts



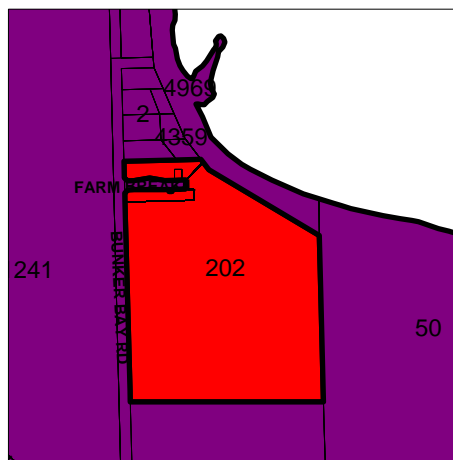
**TOURIST NODE  
SMITHS BEACH INSET**



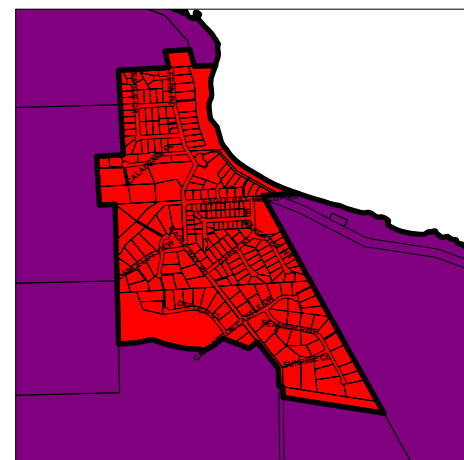
**COASTAL NODE  
YALLINGUP INSET**



**TOURIST NODE  
BUNKER BAY INSET**



**COASTAL NODE  
EAGLE BAY INSET**



**FIGURE 8**

## **7.9 SUBDIVISION AND DEVELOPMENT**

### **7.9.1 Minimum Lot Area**

The minimum lot areas for horticulture, viticulture and broad acre agriculture referred to above relate to minimum useable (arable) areas of land i.e. excluding land that does not have class I or II soil capability pursuant to the Land Capability Study prepared by the Department of Agriculture (AgMaps Land Profiler), remnant and riparian vegetation considered valuable for conservation (and which should not be cleared or grazed); buildings; access; farm infrastructure; streams, dams, wetlands and foreshores; steep terrain and rocky outcrops; setbacks to the above and any environmental buffers within which development or agriculture is not permitted; and existing tourist development.

### **7.9.2 Conservation Incentive Provisions**

It should be noted that some of the conservation (subdivision) incentives identified in the LNRSP (1998) vary from the 'Conservation' and 'Rural Landscape' zone provisions pursuant to District Town Planning Scheme No. 20 (1999). While the Scheme provisions were endorsed after the LNRSP it is appropriate that variations between the LNRSP and the Scheme be resolved through the Scheme review process by ensuring that the Scheme review reflects the provisions of the LNRSP. The Shire commenced the review process in 2006 with formulation of various strategies to comprise a Local Planning Strategy by late 2008 and to subsequently inform a Local Planning Scheme review. In considering additional rezoning of land to Conservation or Rural Landscape the Shire will have regard to the relevant provisions of the LNRSP and the District Town Planning Scheme.

### **7.9.3 Water Resources**

Water is an essential resource and it is critical that policy-makers and decision-makers appreciate the long-term extent and impact of changes to water availability. This requires detailed analysis of the issues and a co-operative strategic direction involving all stakeholders, government and industry. The provision of minimum water requirements as a basis for assessing hydrological reports should be investigated by the relevant agencies. This data needs to be assessed on a regional basis to ensure consistency, rather than each Shire attempting to determine relevant requirements. While water availability varies between localities, the requirements for agriculture should not vary greatly within the South West.

A licence to harvest surface water is now required in proclaimed catchment areas. Accordingly, applications for subdivision should also be accompanied by demonstration of access to water resources as well as demonstration that a water licence will be issued.

A licence to harvest groundwater is also required and the allocation of groundwater in the locality needs to be carefully monitored in relation to the needs of intensive agriculture. There is not unlimited groundwater for allocation in the future and more sustainable methods of water harvesting and re-use are required.

Where hydrology reports are required by Precinct subdivision criteria they should demonstrate how the proposal meets the water requirements prescribed in the WAPC endorsed "*Intensive Agriculture Subdivision Guidelines*" (as amended).

An extract of the 2007 DPI guidelines for intensive agriculture subdivision water requirements are attached at Appendix 2 and can be summarised as follows:

#### Annual Horticulture

Market gardens etc: 5-15,000m<sup>3</sup>/ha/annum depending on soil and crop type where at least 10,000m<sup>3</sup>/ha/annum is preferred.

#### Perennial Horticulture

Viticulture: 2-4,000m<sup>3</sup>/ha/annum depending on soil type.

Orchards: 7-10,000m<sup>3</sup>/ha/annum depending on soil and crop type.

Water requirements vary depending on soil type - water requirements are generally greater in sandy soils. The Department of Agriculture and Food should be consulted to confirm that the water requirements demonstrated in hydrological reports are adequate to sustain intensive agriculture on the subject soils.

DPI's general criteria for assessing proposals include:

- Intensive agriculture proposals are to be accompanied by agronomist and hydrological reports addressing Planning Bulletin 26 - Water Resource Requirements.
- The application will need to demonstrate that the lot can accommodate a wide range of crops in order to ensure ongoing agricultural sustainability.
- Matters raised in WAPC Policy DC 3.4 should be addressed where applicable, particularly Sec. 6 - Additional Information to Support Subdivision Application.
- Matters raised in the Leeuwin-Naturaliste Ridge State Planning Policy where applicable.
- Minimum lot sizes are subject to the constraints and capability of the land - larger lot sizes may be required to ensure ongoing agricultural sustainability.
- Areas required for remnant vegetation protection, windbreaks, farm infrastructure, dams, setback requirements, dwellings, access, drainage, erosion control and earthworks are not to be included in the soil requirement area.

## **8. IMPLEMENTATION**

The adoption of the Shire's Local Rural Planning Strategy in December 2006 has a range of implications for land use, subdivision, development and land management in the rural areas of the Shire.

The Strategy has been assessed by the Shire, the community and other stakeholders and has been subject to comprehensive community consultation. It has been examined by the Department for Planning and Infrastructure and other relevant Government agencies in conjunction with formal consultation, and has been endorsed by the WAPC as a guide to future land use, subdivision and development.

### **8.1 CONTEXT**

Rural strategies establish non-statutory policy direction and are used as part of the framework for land use decision-making in rural and agricultural areas. The Strategy has been adopted as a town planning scheme policy and should be read in conjunction with the existing planning framework, including the Scheme and the LNRSP.

The Strategy comprises a component of the Shire's Local Planning Strategy which will inform the review of the Town Planning Scheme. The Local Planning Strategy will include strategies relating to settlement and housing, transport, commerce, tourism, environment, heritage and rural land use. In reviewing the Scheme, policy provisions arising from this Strategy and incorporated into the Local Planning Strategy will be reflected, where relevant, in the new Scheme e.g. minimum areas required for subdivision of rural land.

The advantage of this approach is that the Strategy will have specific status under the Town Planning Regulations and the State Planning Framework Policy. The State Planning Framework unites existing State and regional policies, strategies and guidelines within a central framework which provides a context for decision-making on land use and development in Western Australia.

### **8.2 IMPLEMENTATION MECHANISM**

The Strategy is recognised by the Shire and the WAPC as a framework for future land use, structure planning, subdivision and development. This means that the community, the Shire and the WAPC may rely on the provisions of the Strategy to provide guidance in relation to rural land use and development in the Shire.

The Strategy will also be given due regard, in conjunction with the broader planning framework, in the determination of appeals against decisions of the Shire and the WAPC in relation to the determination of applications for subdivision and development in rural areas.

The Strategy provides a high degree of certainty in relation to the strategic land use planning framework for rural areas of the Shire. It is adopted by Council as a policy pursuant to clause 103 of District Town Planning Scheme No. 20 and endorsed by the WAPC. It is implemented by the Shire and the WAPC as a Scheme Policy.

## **ACKNOWLEDGEMENTS**

### **Rural Strategy Reference Group**

Cr Evelyn Brand  
Cr David Hunt  
Cr Bev Clark  
Cr Helen Shervington  
Cr Beth Hastie  
Mr Hal Scott  
Mr Allan Guthrie  
Mr Mark Miles  
Mr Murray Edmunds  
Mr Gordon Salom  
Mr David Kemp

### **WA Farmer's Federation**

Mr Robin Flowers  
Mr Ken Sue  
Mr Ben Letchford  
Mr Andy McMillan

### **Agency Stakeholders**

Department of Agriculture and Food - Eric Wright  
Water Corporation - Gary Crowd  
GeoCatch - Veronica Piper  
Department of Indigenous Affairs - Monique Pasqua  
Western Power - Karen Hughes  
Department for Planning and Infrastructure - Neil Fraser

### **Stakeholders/Submitters**

Busselton Survey Office	Seaport Pty Ltd
WA Farmer's Federation	JMW Real Estate
Cardno BSD	PR and JJ Stark
Rob Paull and Associates	VJ Bussell
Michael Swift & Associates	J d'Espeissis
Koltasz Smith	P & J Sandor
Garrison Holdings Pty Ltd	J Wise
Earnest George Nominees	R Vogel
WR Carpenter Properties	D Verbakel
Aspen Dunsborough Lakes Pty Ltd	L Zampatti
Mailings Valley Pty Ltd	M McMullen

### **Shire of Busselton**

Nigel Bancroft - Director, Lifestyle Development Services  
Tim Shingles - Manager, Strategic Land Use Planning



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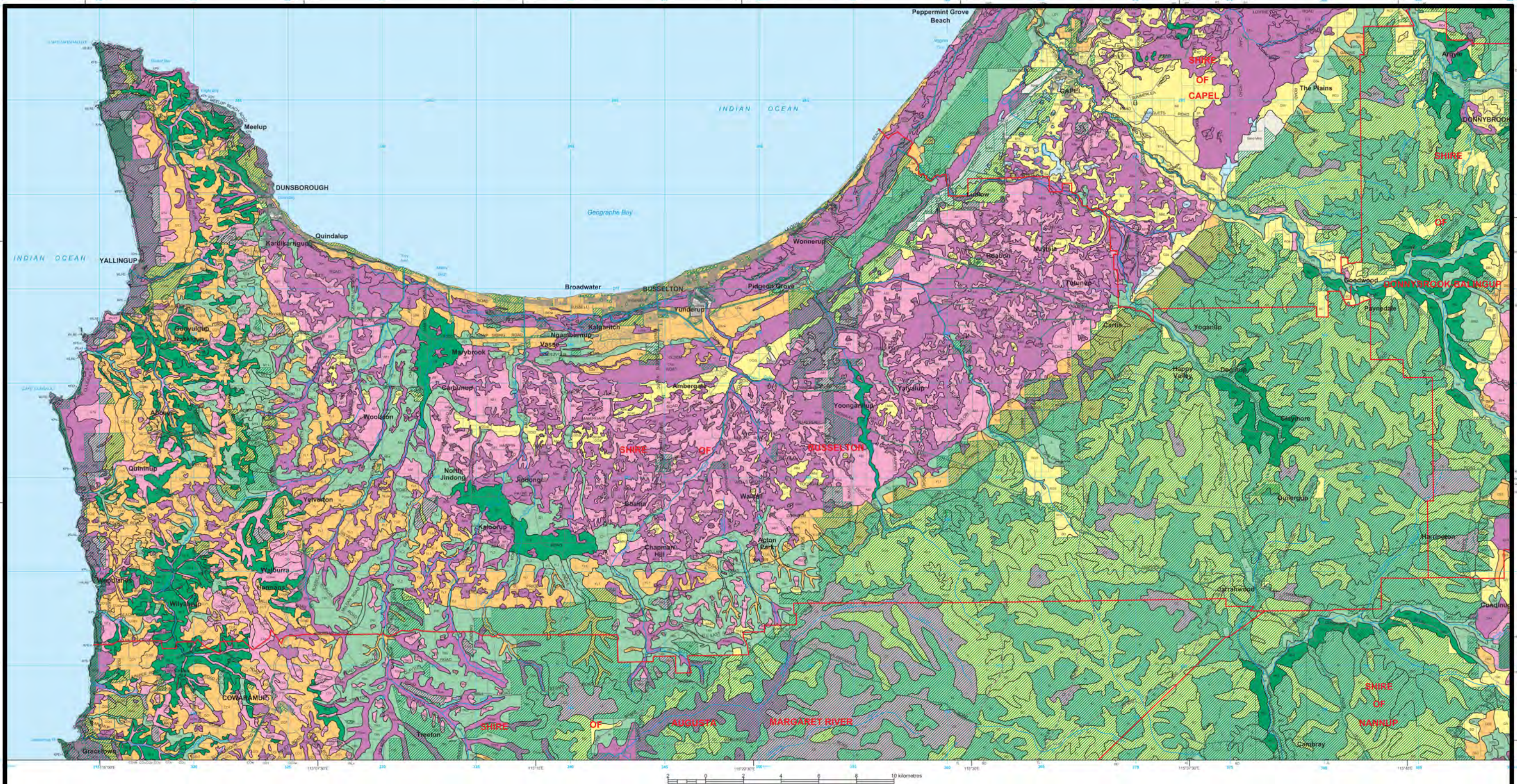
Western Australian Planning Commission, 2004: Development Control Policies 3.4, 3.7, and 4.2.

Western Australian Planning Commission, 2004: Planning Bulletins 26, 49, 56 & 64.

Western Australian Planning Commission, 2004: Statements of Planning Policy: 2, 2.4, 2.6, 2.7, 4.1, 4.3 and 5.2.

## **Appendix 1**










Land capability mapping for grazing, cropping, annual horticulture, perennial horticulture and vines.



# LAND CAPABILITY FOR PERENNIAL HORTICULTURE CAPEL-AUGUSTA REGION

Sheet 2 - BUSSELTON

## Legend

- |   |  |   |                                      |
|---|--|---|--------------------------------------|
|  | >70% of the area is Class 1 or 2.      |  | >70% of the area is Class 4 or 5.    |
|  | 50-70% of the area is Class 1 or 2.    |  | Disturbed/unmapped land              |
|  | >70% of the area is Class 1, 2 or 3.   |  | Water feature                        |
|  | 50-70% of the area is Class 1, 2 or 3. |  | Reserves (predominantly CALM Estate) |
|  | 50-70% of the area is Class 4 or 5.    |   |                                      |

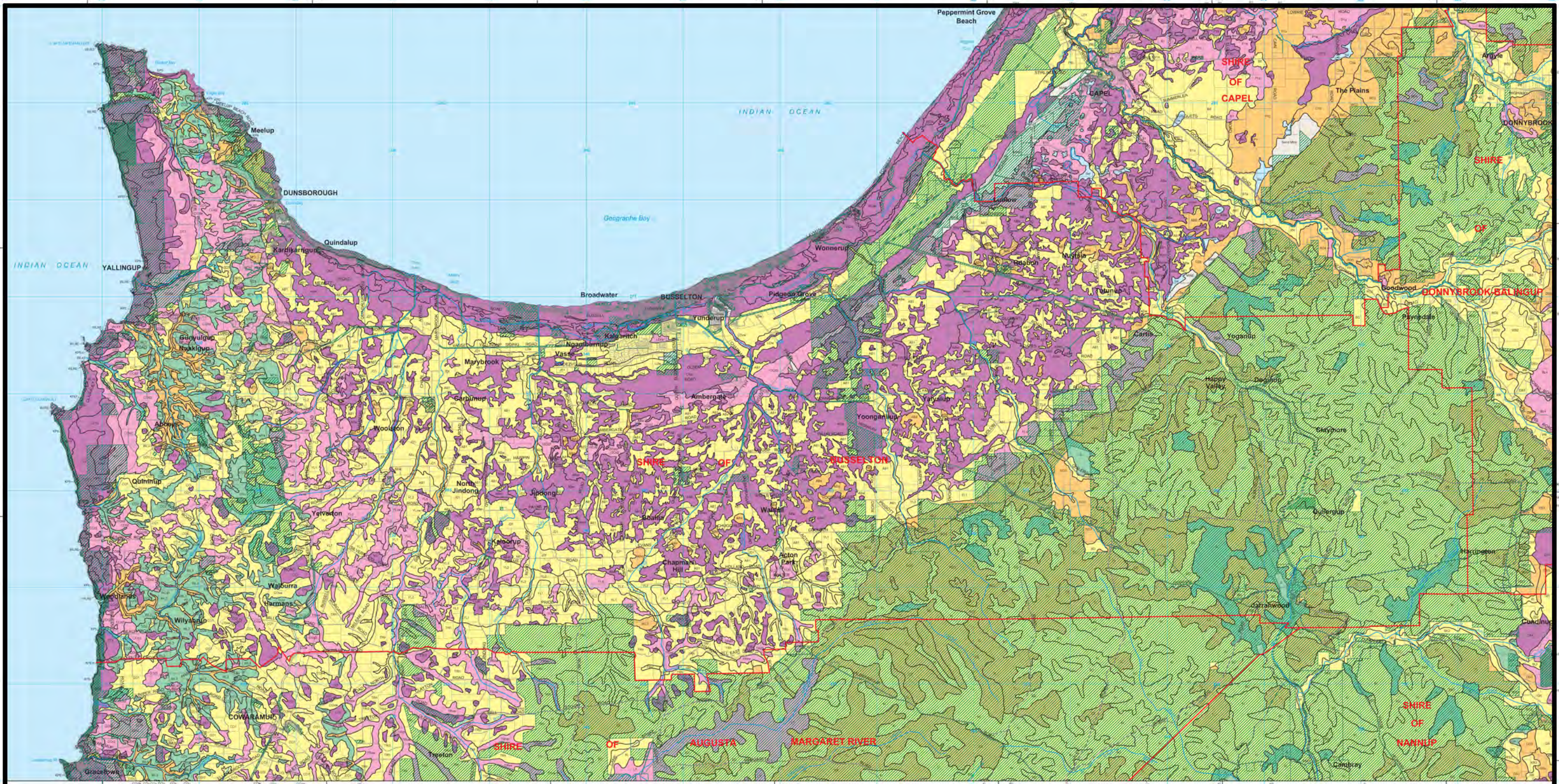
Source:  
Department of Agriculture and Food  
Agmaps 2003

Reference  
Projection: Universal Transverse Mercator, Zone 50  
Datum: Geocentric Datum of Australia 1994  
Grid: Map Grid of Australia 1994  
Source Data: Based on field survey and interpretation of aerial photography.



### Use of map

This map is designed for use at the published scale. The mapping units have generalised soil and landform characteristics which are relevant to land use planning. They are also a base for land capability assessment. An example is the method described by van Gool and Moore (1999). This document can be accessed in the references section on this CD. Technical queries should be directed to the Natural Resources Assessment Group, Department of Agriculture Western Australia.












# LAND CAPABILITY FOR LAND CROPPING (MINIMUM TILLAGE) CAPEL-AUGUSTA REGION

Sheet 2 - BUSSELTON

Source:  
Department of Agriculture and Food  
Agmaps 2003

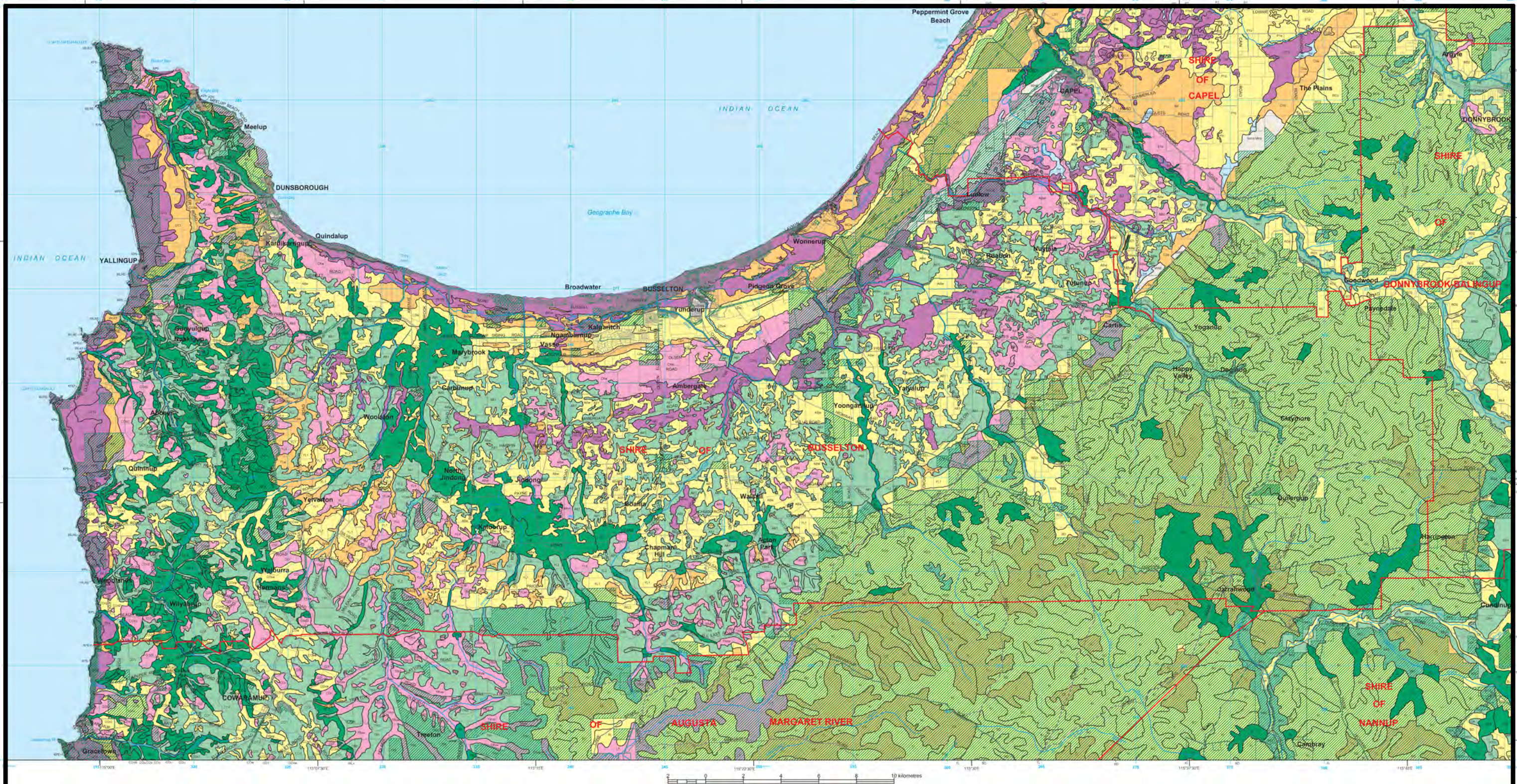
## Legend

- |   |  |   |                                      |
|---|--|---|--------------------------------------|
|  | >70% of the area is Class 1 or 2.      |  | >70% of the area is Class 4 or 5.    |
|  | 50-70% of the area is Class 1 or 2.    |  | Disturbed/unmapped land              |
|  | >70% of the area is Class 1, 2 or 3.   |  | Water feature                        |
|  | 50-70% of the area is Class 1, 2 or 3. |  | Reserves (predominantly CALM Estate) |
|  | 50-70% of the area is Class 4 or 5.    |   |                                      |

Reference  
Projection: Universal Transverse Mercator, Zone 50  
Datum: Geocentric Datum of Australia 1994  
Grid: Map Grid of Australia 1994  
Source Data: Based on field survey and interpretation of aerial photography.



Use of map  
This map is designed for use at the published scale. The mapping units have generalised soil and land characteristics which are relevant to land use planning. They are also a base for land capability assessment. An example is the method described by van Gool and Moore (1999). This document can be accessed in the references section on this CD. Technical queries should be directed to the Natural Resources Assessment Group, Department of Agriculture Western Australia.



# LAND CAPABILITY FOR GRAZING CAPEL-AUGUSTA REGION

Sheet 2 - BUSSELTON

## Legend

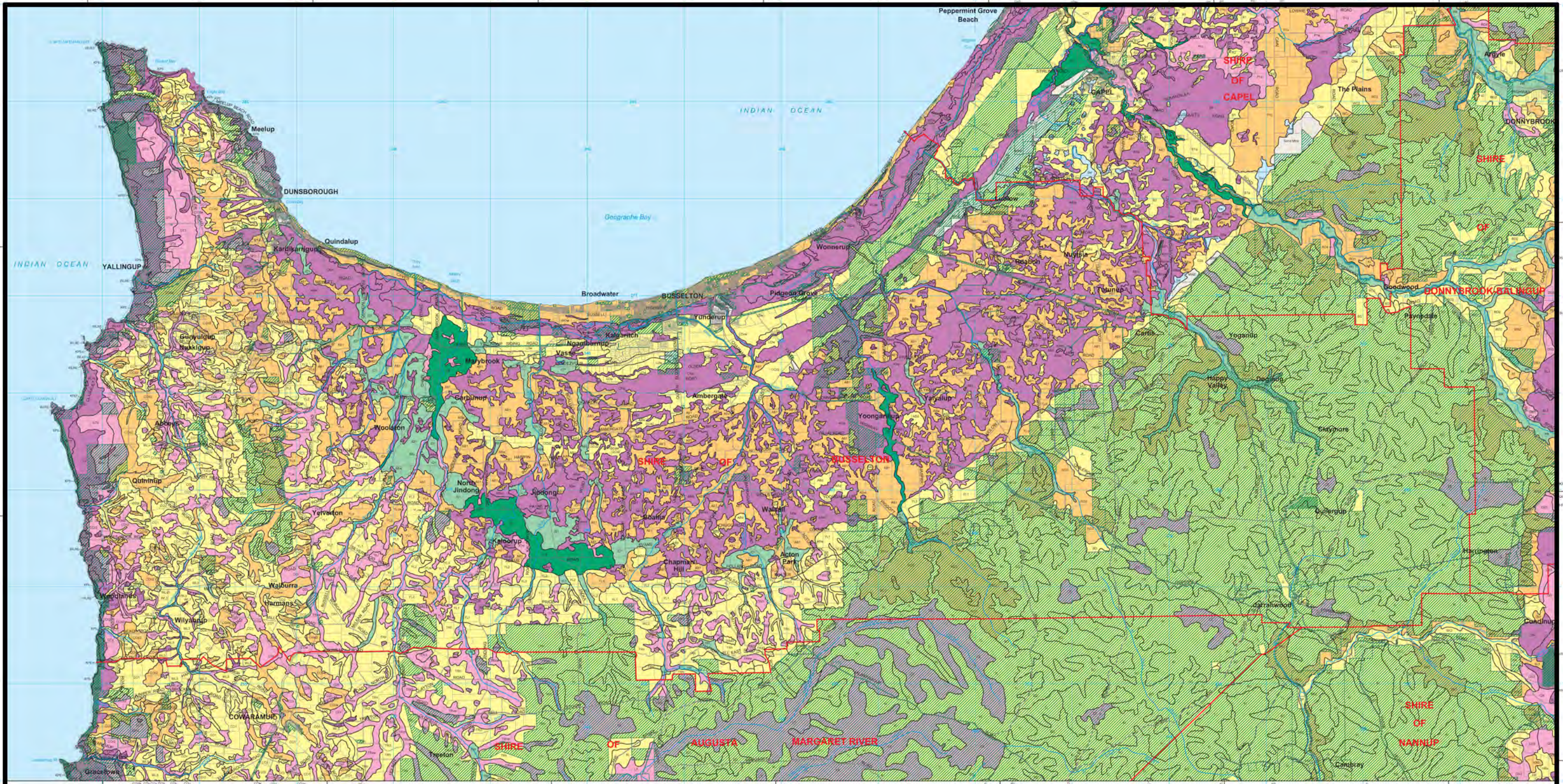
- >70% of the area is Class 1 or 2.
- 50-70% of the area is Class 1 or 2.
- >70% of the area is Class 1, 2 or 3.
- 50-70% of the area is Class 1, 2 or 3.
- 50-70% of the area is Class 4 or 5.
- >70% of the area is Class 4 or 5.
- Disturbed/unmapped land
- Water feature
- Reserves (predominantly CALM Estate)

Reference  
 Projection: Universal Transverse Mercator, Zone 50  
 Datum: Geocentric Datum of Australia 1994  
 Grid: Map Grid of Australia 1994  
 Source Data: Based on field survey and interpretation of aerial photography.



Use of map  
 This map is designed for use at the published scale. The mapping units have generalised soil and landform characteristics which are relevant to land use planning. They are also a base for land capability assessment. An example is the method described by van Gool and Moore (1999). This document can be accessed in the references section on this CD. Technical queries should be directed to the Natural Resources Assessment Group, Department of Agriculture Western Australia.

Source:  
 Department of Agriculture and Food  
 Agmaps 2003



# LAND CAPABILITY FOR ANNUAL HORTICULTURE CAPEL-AUGUSTA REGION

Sheet 2 - BUSSELTON

Source:  
Department of Agriculture and Food  
Agmaps 2003

## Legend

- >70% of the area is Class 1 or 2.
- 50-70% of the area is Class 1 or 2.
- >70% of the area is Class 1, 2 or 3.
- 50-70% of the area is Class 1, 2 or 3.
- 50-70% of the area is Class 4 or 5.
- >70% of the area is Class 4 or 5.
- Disturbed/unmapped land
- Water feature
- Reserves (predominantly CALM Estate)

Reference  
Projection: Universal Transverse Mercator, Zone 50  
Datum: Geocentric Datum of Australia 1994  
Grid: Map Grid of Australia 1994  
Source Data: Based on field survey and interpretation of aerial photography.



Use of map  
This map is designed for use at the published scale. The mapping units have generalised soil and landform characteristics which are relevant to land use planning. They are also a base for land capability assessment. An example is the method described by van Gool and Moore (1999). This document can be accessed in the references section on this CD. Technical queries should be directed to the Natural Resources Assessment Group, Department of Agriculture Western Australia.





## Appendix 2

### EXTRACT of INTENSIVE AGRICULTURE SUBDIVISION GUIDELINES 2007 Department for Planning and Infrastructure - South West Planning

<i>LOT TYPE</i>	<b>HORTICULTURE</b>	<b>VITICULTURE</b>
<b>SUBDIVISION CONSIDERATIONS</b>		
<b>Water Requirements</b>	<p><b>Market Gardening</b> 5,000 - 15,000m<sup>3</sup>/ha/anum depending on soil and crop type. <sup>(2)</sup> General rule of 10,000m<sup>3</sup>/ha/anum.</p> <p><b>Orchards</b> 7,000 -10,000m<sup>3</sup>/ha/anum depending on soil and crop type. <sup>(2)</sup></p>	<p><b>Viticulture</b> 2,000-4,000m<sup>3</sup>/ha/anum depending on soil type. <sup>(2)</sup></p>
Data obtained from the Dept. of Agriculture Land Resources Series No. 5 (Nov 1990).		
<p>General Criteria for Considering Proposals:</p> <ol style="list-style-type: none"> <li>1. Agronomist and hydrological reports are to be submitted with any intensive agriculture proposal and address Planning Bulletin No. 26 - 'Water Source Requirements' and should address the requirements of the Department's 'Draft Format for Land Capability Reports'.</li> <li>2. In determining agricultural sustainability and suitability of a proposed lot i.e. adequate water and soil provision, the applicant will need to demonstrate that the lot can accommodate a wide range of crops. Advice from DAF and DEWCP will be given due weight in determining the sustainability and suitability of any proposed 'Intensive agriculture' lots.</li> <li>3. In determining applications, the matters raised in DC 3.4, Section 6 'Additional Information to Support Subdivision Application' should be considered, where applicable. Applicants should also address these matters as part of their application, where applicable.</li> <li>4. For proposals located within SPP No. 7 - Leeuwin-Naturaliste Ridge, due regard shall be given to the objectives and specific policies, including Land Use designations and minimum lot size criteria (PS 4.1 -PS 4.5).</li> <li>5. Minimum lot sizes are subject to the constraints and capability of the land, and larger lot sizes may be required to ensure the ongoing agricultural sustainability of the these lots.</li> <li>6. Areas required for remnant vegetation protection, windbreaks, farm infrastructure, setback requirements, dwelling(s), dams, access, drainage, erosion control and earthworks are not to be included in the soil requirement area.</li> </ol>		

Notes:

- (1) Minimum lot sizes consistent with Town Planning Scheme and/or Rural Strategy. Care should be taken to apply alternative minimum lot sizes or soil requirements as specified in Scheme and/or Rural Strategy.
- (2) Water requirements will vary depending on the soil type applicable to each area. Confirmation will need to be sought from DAF that the water requirements demonstrated in the submitted hydrological report are sufficient to sustain the proposed crop, given the land's soil type. Generally, greater water requirements are needed for more sandy soils.