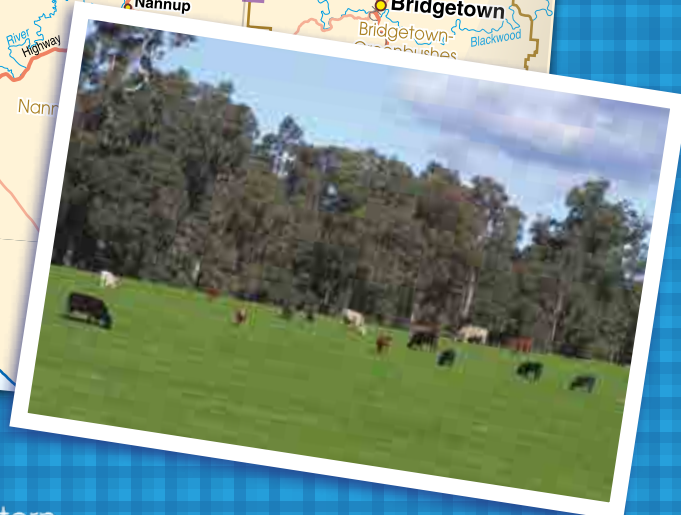


South West

Regional Planning and Infrastructure Framework

Part A: Regional Strategic Planning

December 2015



Department of
Planning



Western
Australian
Planning
Commission

South West

Regional Planning and Infrastructure Framework

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The infrastructure projects identified in the South West Regional Planning and Infrastructure Framework are based on existing unaudited information available from State agencies, utilities and departments. The infrastructure listed is not comprehensive and estimates of infrastructure, timeframes and costs are indicative only. Infrastructure identified is based upon the information available at the time of enquiry, and may be subject to review and change to meet new circumstances. Infrastructure identified in the South West Regional Planning and Infrastructure Framework should not be taken as a commitment by Government to fund these projects. Unless otherwise indicated, public funding of projects is not confirmed.

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South West

Regional Planning and Infrastructure Framework

Minister's and Chairperson's Foreword

The South West region is one of the fastest growing regions in Western Australia with an expected population of 230,000 by 2026. This brings with it a major challenge for the State and local governments and the community to ensure sustainable economic and population growth is achieved, whilst also protecting the natural environment and character of the region.

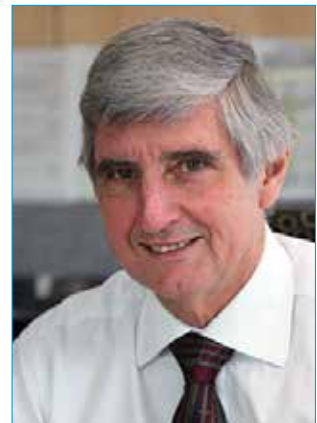
Strong population and economic growth will be driven by minerals and other natural resources, high quality agricultural land and the natural beauty that attracts people to the region to live, work and visit.

Sustainable growth in the region will be enhanced by infrastructure projects and services. The infrastructure priorities of the South West range from upgrading the Bunbury Port to providing better water services to the Warren-Blackwood sub-region.

The South West Regional Planning and Infrastructure Framework updates the South-West Framework 2009 and identifies infrastructure and planning priorities for the region to achieve sustainable growth. It was prepared by the Department of Planning under the guidance of the South West Regional Planning and Infrastructure Advisory Committee. All key stakeholders including government agencies and service providers, local governments, the private sector and the community were consulted on the priorities for the region.

The Framework will guide regional planning in the South West to assist in the delivery of coordinated policy, planning solutions and infrastructure requirements. It will also inform local governments in the preparation of their respective local strategic plans.

We commend the collaborative approach taken to prepare a document that provides a strategic framework for guiding land use and development in the South West region.



A handwritten signature in black ink, which appears to read 'Eric Lumsden'.

John Day MLA
Minister for Planning

Eric Lumsden PSM
Chairman
Western Australian Planning Commission

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1 Introduction

1.1 Background

The South-West Planning and Infrastructure Framework (the Framework) is a broad planning document that seeks to guide the future development of the South-West region over the next 20 years.

The framework addresses the scale and distribution of future population growth and housing development; and identifies strategies for dealing with economic growth, environmental issues, transport, water resources, agriculture, tourism and the emerging impacts of climate change. Importantly, it also provides an infrastructure component that advocates the region's priorities in providing both social and economic infrastructure. It seeks to ensure that growth and development in the South-West region is achieved in a way that improves people's lives and enhances the unique character and environment of the region.

The South-West Region comprises three main sub-regions:

- Bunbury-Wellington
- Warren-Blackwood
- Leeuwin-Naturaliste.

Each of these sub-regions has unique characteristics and hence different economic drivers and infrastructure requirements. The framework also addresses the population and economic growth and the social and economic infrastructure requirements for each sub-region.

The South-West has the most diversified economy of all the State's nine non-metropolitan regions, contributing significantly to the region's strong economic growth. Key industries include:

- agriculture and horticulture
- timber and forest products
- mineral extraction
- processing and manufacturing
- electricity generation
- retail
- tourism
- construction

- other manufacturing
- service industries
- fishing and aquaculture.

Mineral extraction, mineral processing and mineral manufacturing together form the South-West region's largest industry sector. In 2010-11 mineral extraction and mineral processing was worth \$525million. More than 25 per cent of the region's workforce worked in the mining, mineral processing and manufacturing and construction sectors. The manufacturing sector is the largest in regional Western Australia, contributing around \$2.7 billion in annual turnover. The future needs of these industries must be incorporated into regional and local strategies to enable them to grow and prosper.

The South-West region is an important agricultural and food production region. It's food and wine, notably the Margaret River wine region, are internationally renowned and attract overseas visitors. The South-West will continue to gain significance as a major source of food and agricultural production (valued at about \$640m per annum in 2009-10) catering to local, national and international markets. Increased population, coupled with the region's significance as an internationally recognised tourism hotspot will necessitate increased amounts of locally grown and produced food. Integrated planning is essential to secure land and water resources to support growth in this sector.

The South-West is facing a number of other challenges that must be addressed in coming years. The region is likely to experience impacts from climate change. Its population is ageing and will require additional services to be provided as the number of aged people increases. Its economy is buoyant but is, to a degree, dependent on the wellbeing of markets and economies beyond its boundaries. Finally, the rapid growth of both visitors and resident populations must be carefully managed to ensure the continued wellbeing of natural ecosystems as well as maintaining social amenity and facilitating growth of the regional economy.

The South-West contains some of the most pristine and vulnerable ecosystems in Australia and is recognised as one of the world's internationally significant biodiversity hotspots. Although extensive

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parts of the region are included in national parks, State forests and conservation reserves, much of the remaining native vegetation remains in private ownership. Careful stewardship of these lands is critical to ensure that the region's environmental and cultural assets are retained for future generations.

1.2 Planning and infrastructure context

The State Planning Strategy (Strategy) is the State strategic planning document in Western Australia that establishes a common vision for land use and development.

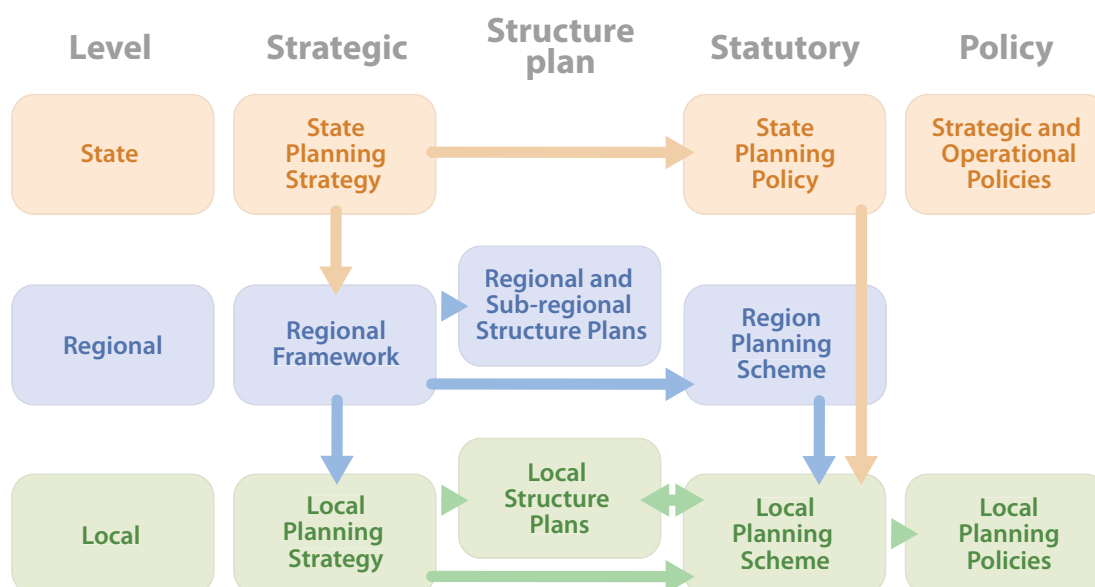
The Strategy sets out key principles relating to economic development, education, training and knowledge transfer, tourism, environment, agriculture and food and physical and social infrastructure to guide the way in which land use planning and infrastructure decisions are made to 2050 and beyond. It provides a context for more detailed policies and plans for the State's 10 planning regions (including Perth Metropolitan Region). The State Planning Framework is shown in Figure 1.

Planning and infrastructure frameworks are being prepared for each of the State's planning regions. The main objectives of these regional planning strategies are to:

- provide regional context for land-use planning;
- provide an overview of the major regional economic, social, cultural and environmental trends and drivers;
- identify the priority actions required to enable comprehensive regional and sub-regional planning; and
- identify regional infrastructure projects and initiatives required to facilitate economic development and sustainable population growth.

The frameworks will provide guidance to government agencies and local governments on land use, land supply, land development, environmental protection, infrastructure investment and the delivery of physical and social infrastructure for each region. The interaction of the Framework with other State and local planning activity is shown in Figure 2. They will also provide a framework for

Figure 1: Interpretation of State planning framework



(source: State Planning Policy No 1 – State Planning Framework Policy)

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the preparation of sub-regional and local planning strategies and inform the decisions of the Western Australian Planning Commission (WAPC) and its Infrastructure Coordinating Committee (ICC).

This Framework was prepared concurrently with other important State initiatives such as those listed below.

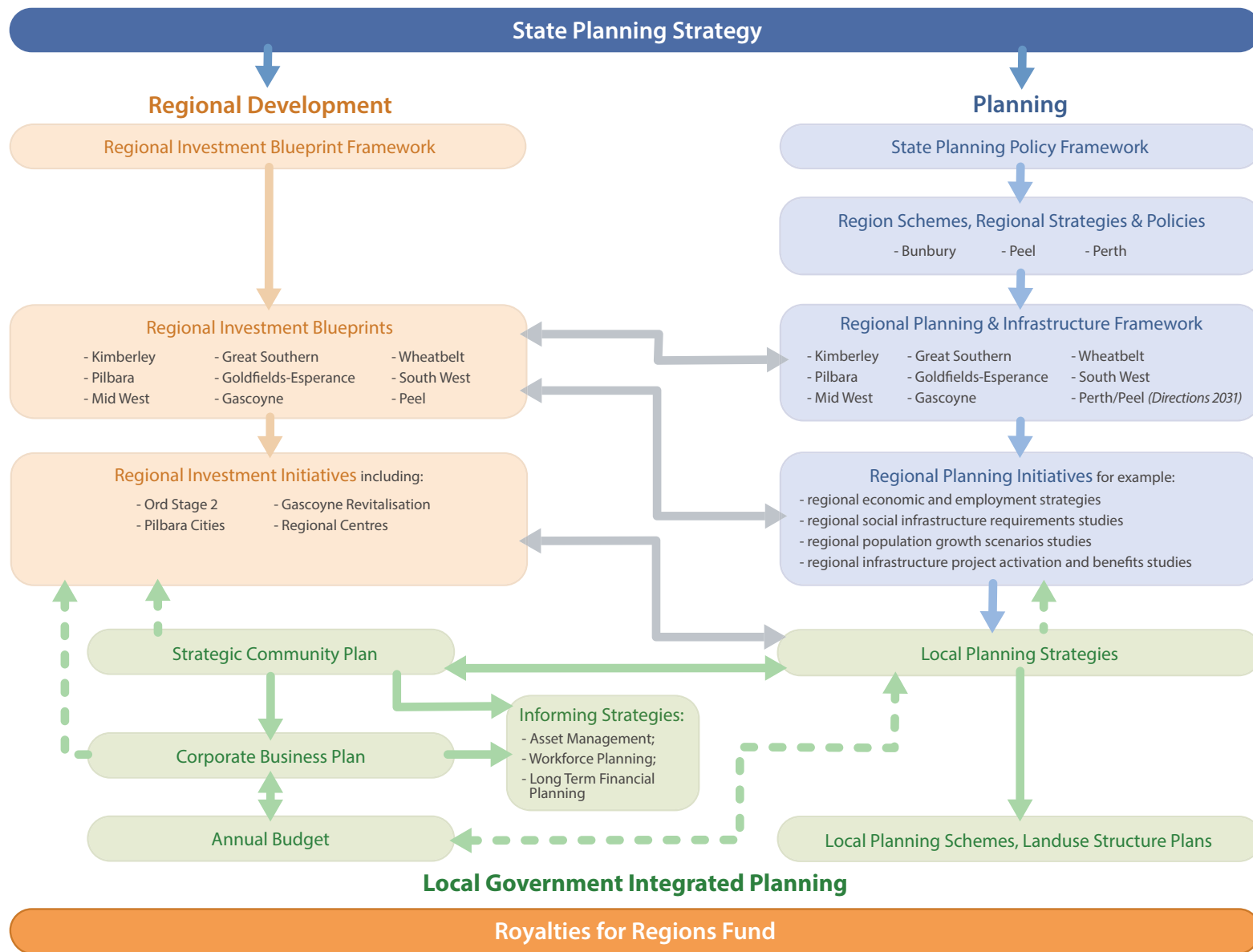
- *Regional Centres Development Plan* (SuperTowns initiative) that aims to encourage selected regional towns in the southern half of the State to plan for population growth to 2050, so that these communities will be an attractive alternative to living in the metropolitan area. In the South-west, Collie, Manjimup and Margaret River have been selected to participate in the SuperTowns initiative.
- Western Australian *Regional Freight Transport Network Plan* that will guide the future development of the freight transport network's response to population growth and economic development. The objectives of the plan are to identify the long-term transport demands shaping the transport network, identify a preferred principal State transport network and determine the network development requirements to facilitate optimal performance.
- Department of Water's water supply strategy framework to align future water resource monitoring, investigations and supply planning with priority areas for State land use planning and development. The framework supports the development of innovative, efficient and integrated water supplies through early detection of potential water shortages.
- Tourism Western Australia developed Australia's *South West – Tourism Development Priorities 2010–2015* which sets out broad and targeted infrastructure priorities to facilitate the long term growth of tourism within the region.
- *Regional Infrastructure Blueprint* for the South West (South West Development Commission) that aims to identify key drivers for development in the region and associated infrastructure needs at the regional and local level.
- *Agrifood 2025*, an initiative of the Department of Agriculture and Food that builds on the State Government's priority plan for agriculture and food. Through this initiative opportunities for the WA agrifood sector to 2025 and beyond will be investigated.

Key State strategies that complement the Framework include:

- State Water Plan, Department of Premier and Cabinet, 2007;
- South West Regional Water Plan, Department of Water 2010-2030 (May 2010);
- Water Forever, Water Corporation, April 2008;
- Roads 2025 and Regional Road Network Plan, Main Roads;
- Southern Inland Health Initiative, Department of Health;
- South West Regional Plan 2012-13, Regional Development Australia South West;
- Strategic Energy Initiative: Energy 2031, Department of Finance – Public Utilities Office;
- Transmission Network Development Plan, Western Power, 2012 and 2013; and
- Western Australian Waste Strategy: Creating the right environment, Western Australian Waste Authority, March 2012.

The Framework is consistent with these State strategies, the outcomes of the State initiatives and WAPC policy. It is cognisant of existing strategic and statutory documents that have provided guidance on previous infrastructure and planning decisions such as the Warren-Blackwood Regional Planning Strategy, Greater Bunbury Strategy and the Leeuwin-Naturaliste Ridge SPP.





(source: Western Australian Planning Commission, 2014)

Figure 2: State planning and development framework

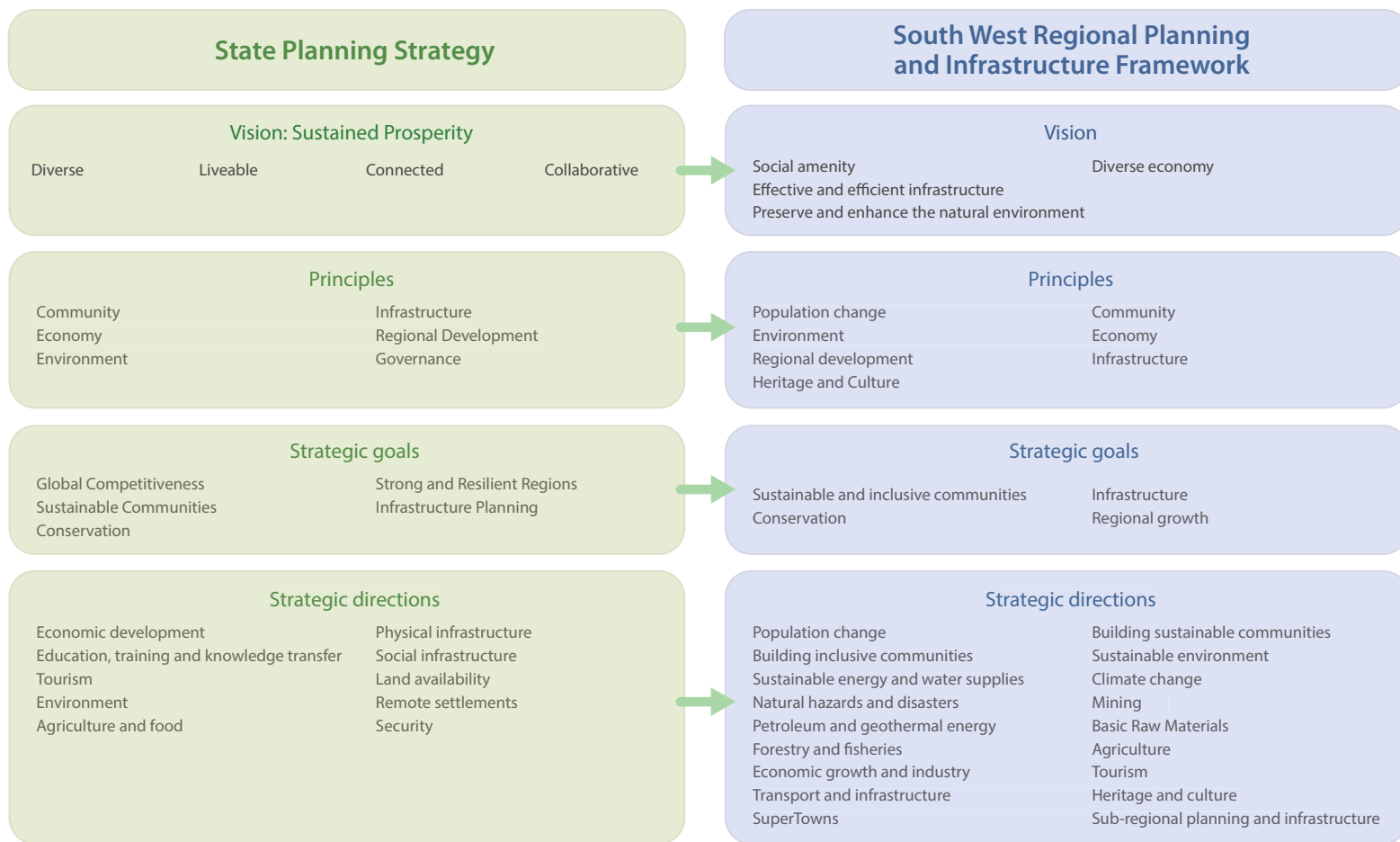


Figure 3: State Planning Strategy 2050 structure and Framework comparison

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2 Vision

The vision of the South-West Planning and Infrastructure Framework is for a region that generates high standards of social amenity, diverse economic activities and high quality food, supported by effective and efficient infrastructure and at the same time preserving and enhancing the natural environment.

This vision recognises that while strong economic growth is essential to the continued wellbeing of residents in the South-West, it must be balanced with the need to preserve the most important and unique aspects of the natural environment, avoid pollution of land and waterways, and minimise the social costs to the community that may also result from economic development.

The vision is expressed through eight key themes:

1. Population change
2. Building sustainable communities
3. Building inclusive communities
4. Sustainable environment
5. Sea level rise / storm surge
6. Natural resources and agriculture
7. Economy and employment
8. Transport and infrastructure.

3 Objective and purpose

The Framework has been endorsed by the WAPC as a regional strategy under section B2 of the State Planning Framework (State Planning Policy 1). Having been endorsed the Framework now supersedes the previous South West Framework (2009).

It provides a big-picture view of the long-term future of the South West, focusing on the major challenges facing the region and the main opportunities to guide the region towards a desired future. It restates and expands upon the key principles of the State Planning Strategy as it applies to the South West in planning for sustainable land use, development and infrastructure provision.

It brings together many policies that are specific to the South West Region but it does not replace the existing sub-regional strategies or the many policies that guide the WAPC's decision making across the State. It will be taken into account when strategies and policies that apply to the South West are reviewed.



4 Status and effect

4.1 Status

As with the current South West Framework, the new Framework was endorsed by the WAPC as a regional strategy under section B2 of the State Planning Framework (State Planning Policy 1).

The new Framework provides a big-picture view of the long-term future of the South West, focusing on the major challenges facing the region and the main opportunities to guide the region towards a desired future. It restates and expands upon the key principles of the State Planning Strategy as it applies to the South West in planning for sustainable land use, development and infrastructure provision. It also brings together many policies that are specific to the South West region.

The Framework does not replace the existing sub-regional strategies or the many policies that guide the WAPC's decision-making across the State. It will be taken into account when strategies and policies that apply to the South West are reviewed.

4.2 Effect

As a provision of the State Planning Framework, the Framework interprets the State Planning Framework at a regional level and forms the basis for cooperative action to be taken by State and local governments on land use, development and infrastructure provision.

Section 2.4 of State Planning Policy 1 states:

"The State Planning Framework unites existing State and regional policies, strategies and guidelines in a central framework which provides a context for decision-making on land use and development in Western Australia. It informs the Commission, local government and others involved in the planning process on those aspects of State level planning policy which are to be taken into account, and given effect to, in order to ensure integrated decision-making across all spheres of planning."

As such, where new strategies are being prepared, or review of strategies are undertaken, due regard is required to be given to the Framework (and other State planning policies) during their preparation. Similarly, the WAPC and local governments will give due regard when exercising their discretion on matters that pertain to land use planning.

4.3 Operational area

The Framework applies throughout the South-West planning region of Western Australia and is broken up into three sub-regions: the Bunbury-Wellington, the Warren-Blackwood and the Leeuwin-Naturaliste sub-regions. The South West region contains the local governments of the cities of Bunbury and Busselton and the shires of Augusta-Margaret River, Boyup Brook, Bridgetown-Greenbushes, Capel, Collie, Dardanup, Donnybrook-Balingup, Harvey, Manjimup and Nannup.

The operational area of the Framework, including the sub-regions is shown in Map 1.

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Map 1: Operational area

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5 Review

The WAPC has resolved the Framework will remain a current document subject to continual review and will be audited every three (3) years. The Infrastructure projects, which outline the social and economic requirements for the region and sub-regions, identified in Table 3 and 4 (see Part B), will be reviewed annually.

Reviews of population data will be conducted every five years to allow new population data from each Australian Bureau of Statistics (ABS) census to be considered and incorporated into the Framework.

This Framework is the first publication and was commenced in June 2012 to incorporate a greater level of detail on the infrastructure requirements of the South West. An advisory committee was formed to oversee the review process.

6 Planning and infrastructure framework

6.1 Population change

The South West has undergone a rapid and sustained change to both its population makeup and economy in recent decades. The region has experienced strong population growth with the estimated resident population reaching 165,985 in 2011 (ABS 2012); and is predicted to grow to nearly 210,000 people by 2026 (Western Australia Tomorrow 2015). Much of this growth is the result of migration to the region, particularly by retirees.

Current migration trends in the South West are causing an increase in people in upper age groups resulting in a rapidly ageing population. For example, the 'over 65' age group has grown 22.4 per cent between 2006 and 2011. This is well above the national and State figures of 13.9 and 16.7 per cent respectively and has significant implications for land use planning and infrastructure and service provision. In particular, the provision of aged accommodation has been raised as a key infrastructure requirement across the region.

Whilst the South West's population is predicted to grow significantly by 2026, a number of unpredictable factors can influence population and economic growth. Therefore, the region needs to be proactive in its identification and delivery of key infrastructure to ensure that it can cater for accelerated growth that may be above the predicted rate.

The SuperTowns initiative (detailed in Section 6.11) may have an impact on population growth on a regional and sub-regional level. Under this initiative Collie, Manjimup and Margaret River have an expectation to double their populations over the next 30–40 years, which equates to a growth rate of around 3.4 per cent per annum. In the case of Manjimup this is a significant increase given that the population has declined 0.5 per cent per annum over the last five years.

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WAPC position on population change

The WAPC will:

- continue to evaluate and respond to current and emerging trends that are impacting, or are likely to impact, on the sustainable growth of the South-West region. The WAPC acknowledges the introduction of the SuperTown program and the impact this may have on population growth;
- support the provision of appropriate land to accommodate population and employment opportunities; and
- assist where required in the provision of land for aged accommodation.

Committed projects, anticipated directions for regional infrastructure and planning initiatives to support population change (see Part B) include:

Table 2, Table 3 and Table 4 reference no.	Details
SW39	Aged care accommodation

6.2 Building sustainable communities

Land use planning in the region should encourage growth in appropriate locations. This growth must be carefully managed to encourage the development of sustainable, inclusive communities that support a high level of social amenity, whilst maintaining the values that attract people to live and work in the region.

WAPC position on building sustainable communities

The WAPC will support the development of sustainable communities by:

1. Planning for settlements in the region to be truly liveable, with a strong sense of place, high quality of life and that are designed to be environmentally sustainable through:
 - promoting mixed use and higher density residential forms in appropriate locations and in major centres and towns;

- facilitating high-quality urban design that is sensitive to, and enhances the identity and character of the South-West's towns and settlements;
- ensuring that new development reflects and enhances the natural, cultural, visual and built character of the local and regional landscape;
- ensuring that new development reflects the South-West's climate and incorporates climate design principles, including orientation, siting, passive climate control, sustainable recycling, and efficient water management; and
- retaining the characteristics that make settlements unique and give them their sense of place.

2. Supporting strategies and plans that encourage sustainable growth in centres that provide a high level of amenity and employment opportunities to residents and visitors and that:

- facilitate planned and staged growth of existing settlements in accordance with the settlement hierarchy table (Table1) and map (Map 8);
- promote Bunbury as the regional centre for the South-West with the highest order of commercial activity and expand this role to ensure a greater range of services are located in the region;
- focus major recreational and commercial facilities, employment and community services in well planned and accessible centres;
- provide for a range of housing, industry and employment sectors, supported by appropriate social and economic infrastructure;
- provide an appraisal of opportunities for providing additional homes and jobs in existing urban areas;
- consolidate and make more efficient use of residential land by setting targets for increasing the proportion of new dwellings provided through infill or redevelopment in existing centres; and
- reinforce the character and identity of towns and centres by preventing urban development in defined urban breaks and/ or by defining boundaries to settlement growth.

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3. Supporting strategies and plans that use appropriate planning processes to:
 - identify land that is contiguous to existing settlements and that is suitable for development to accommodate predicted growth of settlements;
 - establish mechanisms to provide more affordable housing and product diversity and identify other options to provide more affordable housing choices; and
 - encourage more diversity of housing product through lot size and built form.
4. Constraining low-density urban sprawl through:
 - preventing the creation of new rural residential lots beyond those identified in existing local planning strategies or local town planning schemes, while making provisions for the creation of conservation lots or other forms of lots that provide a mechanism for the protection of existing native vegetation or opportunities for revegetation of previously cleared land with endemic species;
 - support increasing the density of existing rural residential areas where this is seen as beneficial to the community as a whole and does not adversely impact on the landscape and environmental values of the locality; and
 - encourage infill consolidation in existing centres through the preparation of local planning strategies, schemes and structure plans. Such infill should be in line with the objectives and policies outlined in Liveable Neighbourhoods.
5. Building on existing communities with established infrastructure and services by supporting strategies and plans that:
 - have a presumption against development, unless consistent with the planned and staged rollout of major infrastructure;
 - concentrate retail, employment, recreational and other activities which attract large numbers of people in and around existing well serviced and easily accessible activity centres. Focus particularly on those that can be made accessible by public transport, so as to reduce the need for car-based travel, encourage non-car modes of transport and create attractive, high-amenity centres which will encourage business investment;
 - identify and use vacant and under-used land for higher densities where these can be achieved without detriment to neighbourhood character or the natural environment and encourage carefully planned urban expansion; and
 - support and plan for a variety of lots and dwellings in terms of size, type, affordability and location, with targets for the provision of wider housing opportunities and choice, (including 1-2 bedroom dwellings to create more affordable housing options) to reflect the changing demographics.
6. Supporting strategies and plans that encourage the vitality and vibrancy of the town centres through:
 - promoting commercial, industrial and mixed use development at an appropriate scale and consistent with defined urban design principles;
 - encouraging mixed use precincts in town centres that combine an appropriate mix of high-density housing, commercial, retail, tourism and community service and related land uses; and
 - identifying and protecting through local planning strategies and schemes all places, precincts, landscapes and buildings of historic, scientific, cultural, social, architectural and aesthetic significance to the region.

Committed projects, anticipated directions for regional infrastructure and planning initiatives to build sustainable communities (see Part B) include:

Table 2, Table 3 and Table 4 reference no.	Details
P3	Urban consolidation in rural towns
P4	East of Eaton Structure Plan
P5	District playing fields audit
SW40	Upgrade racecourse and facilities at Bunbury Turf Club (Thoroughbred Code)
SW41	Upgrade patron and equine facilities at Bunbury Trotting Club (Harness Racing Code)

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6.3 Building inclusive communities

The WAPC recognises that people are the most important component of all communities and are a community's greatest resource. The importance of planning for future population growth to build inclusive communities that minimise disadvantage and recognise our rich and diverse cultural heritage is fundamental to the South West.

WAPC position on building inclusive communities

The WAPC will seek to minimise disadvantage in communities by supporting strategies and plans that seek to:

1. Build inclusive and vibrant communities that:
 - encourage participation and volunteering in the community;
 - ensuring there are adequate areas to accommodate employment opportunities for all members of the community;
 - provide adequate, well located and well developed and maintained areas of active and passive public open space; and
 - provide opportunities for increased community participation in decision-making.
2. Build social capital in communities by:
 - providing for early establishment of social infrastructure in developing communities;
 - providing opportunities for participation in shared community activities by disadvantaged members of the community; and
 - improving essential services so that they are readily accessible to all members of the community.
3. Assist in efforts between Commonwealth, State and local governments and communities to identify and fill gaps in social infrastructure to:
 - improve coordination and provision of education, health and community facilities and services;
 - identify appropriate locations for essential services and set aside land during the relevant planning stages; and
 - include planning for social services in land use planning processes.
4. Maximise the use of existing infrastructure by:
 - encouraging new urban development, including infill to areas with or adjacent to, existing infrastructure;
 - using and managing existing infrastructure efficiently and effectively to maximise community benefit;
 - promoting the use of multi-function facilities or buildings that may be adapted to a variety of purposes and users. Such facilities to be used to provide a high level of community services and education and enable co-location of services and sharing of infrastructure; and
 - protecting infrastructure corridors and sites from incompatible land uses.
5. Provide sustainable, well designed and liveable neighbourhoods that:
 - ensure safe and convenient access to employment, health, education, shopping, leisure, social and community facilities for all residents;
 - create sustainable neighbourhoods that use water, energy and other resources more effectively and efficiently and where possible encourage self-supply to ease demand during peak times; and
 - adopt high-quality urban designs that are sensitive to and enhance the identity and character of the South West's regional towns and settlements.
6. Promote community design which caters for a mix of age groups.
7. Plan for the needs of an ageing population by:
 - supporting health services and the provision of infrastructure that meet the needs of elderly people; and
 - supporting the development of retirement homes, lifestyle villages and other forms of high-density accommodation suited to aged persons, that are appropriately located in major centres and in close proximity to existing and/or planned medical services, and commercial and community facilities that are designed to provide for integration into the community.

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8. Plan for youth by supporting strategies and plans that:
 - provide youth with places to meet and undertake cultural and recreation activities;
 - provide opportunities for education, training and employment in close proximity to where they live; and
 - improve access to facilities through public transport, safe cycling and walking routes.
9. Support educational initiatives that facilitate the development of a strong, regionally based tertiary education sector that:
 - adopt a cooperative approach by universities, government and the private sector to meet local industry research needs;
 - provide a wide variety of courses offered at local university campuses and technical colleges to meet local industry demand for trained employees with the aim of trying to retain youth in the South West; and
 - provide greater access to online courses and resources at local universities.

Committed projects, anticipated directions for regional infrastructure and planning initiatives to build inclusive communities (see Part B) include:

Table 2, Table 3 and Table 4 reference no.	Details
SW33	New automotive centre at South West Institute of Technology (SWIT)
SW34	South West Health Academy
SW35	SWIT refurbishment and upgrade of Bunbury campus buildings
SW36	Relocation of Year 7 students to secondary schools
SW37	New Busselton training campus
SW38	South West Refuge

6.4 Sustainable environment

The WAPC aims to ensure that development occurs in a manner consistent with environmentally sustainable principles.

WAPC position on land clearing and biodiversity protection

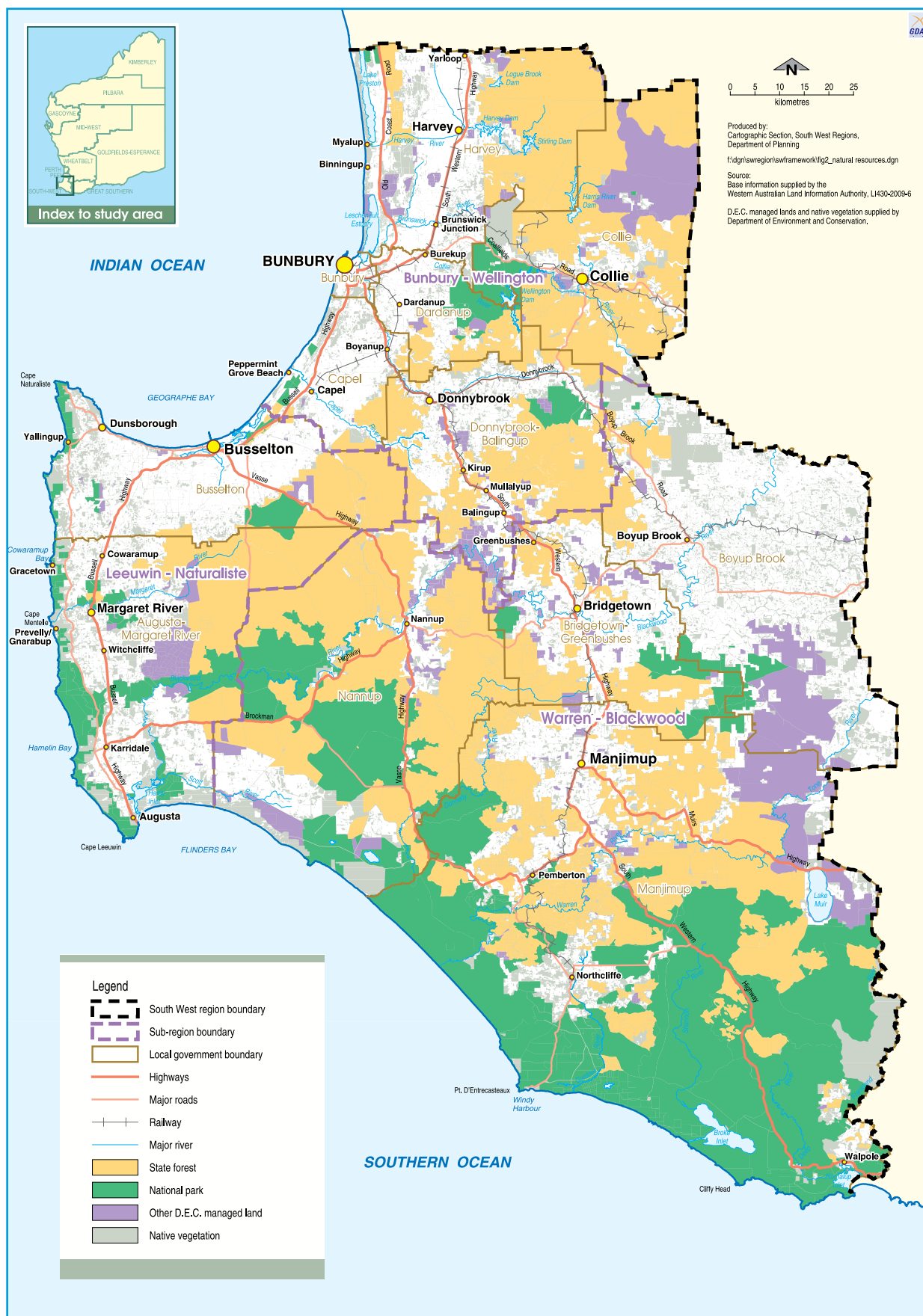
The WAPC will support strategies and plans that:

1. Raise the sustainability requirements for landuse planning by establishing environmental targets to preserve habitats and biodiversity and prevent the disturbance of acid sulfate soils.
2. Protect and manage our biodiversity for future generations through:
 - adopting a primary position that there should be no further clearing of native vegetation¹;
 - identifying habitat protection areas, biodiversity corridors and regionally significant vegetation;
 - promoting retention of remnant vegetation and establishment of ecological corridors in developments;
 - identifying and preserving areas of remnant native vegetation during the preparation of planning schemes, strategies and plans;
 - introducing programs that result in a net gain of vegetation and overall public benefit across the region with the adoption of targets to measure success;
 - supporting the establishment of conservation zones and conservation covenants where they result in environmental benefits;
 - establishing measures to preserve areas of land in the existing urban footprint, or areas of urban zoning that may have State or regional biodiversity significance;
 - where clearing is essential for the provision of essential infrastructure, providing offsets that result in a net ecological benefit; and

¹ By stating that it supports strategies, plans and developments that adopt a primary position that there should be no further clearing of vegetation, the WAPC expresses a presumption against clearing of native vegetation and a strong preference for development to occur on cleared land. The WAPC does recognise that clearing will, at times, be necessary for the provision of key infrastructure or services. The statement does not remove the obligations and rights that exist under current land clearing regulations, nor seek to replace the role of the Environmental Protection Authority (EPA) as the environmental regulatory authority. The statement should not be interpreted to mean that the WAPC will relax planning criteria for cleared areas. It does place an obligation on agencies and developers to demonstrate to the WAPC that clearing is absolutely necessary to develop sustainable, inclusive communities.

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Map 2: Natural environment

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- the preparation of 'Strategic Environmental Assessments' for sub-regional areas.

Natural Environment areas are shown in Map 2.

6.4.1 Sustainable water and energy supplies

Groundwater and surface water are vulnerable resources that are susceptible to the pressures of urban growth and other industries associated with this. They have limits to their availability and suitability for use. Demand for water resources is increasing as the population and economy of the South West expand. Changes to industry and water allocations have also challenged water managers.

Water resources are currently managed under six different Acts. These Acts regulate: water take and use; waterways protection; drainage management; public drinking water source protection, and; water supply.

The 2013 public position paper '*Securing Western Australia's Water Future*', proposed a wide-ranging reform of the State's water management regime. Outcomes of the proposed reform are expected to include the consolidation of the six existing Acts into one modernised Water Resources Management Act.

While demand for water has risen, declining rainfall has led to a significant alteration of the region's water regimes. A number of initiatives have been introduced in the South-West region to improve water use planning, efficiency and supply:

- The WAPC released *Better Urban Water Management Guidelines (2008)* to better integrate land use and water planning;
- The Department of Water released the State Water Plan (2007) and prepared the South West Regional Water Plan 2010-2030 (May 2010) to guide water resource management in the State and in the South West region, as well as a number of sub-regional plans and strategies which need to be considered;
- The Department of Water's water supply strategy framework aims to align future water resource monitoring, investigations and supply planning with priority areas for State land use planning and development. The framework supports the development of innovative, efficient and integrated water supplies through early detection of potential water shortages. This includes forward demand planning for 50 years for town supply

schemes in the region by Water Corporation, Aqwest and Busselton Water. This will provide consistency in water demand-supply forecasts and efficiency targets, equitable access to the remaining groundwater reserve for public water supply and a shared understanding of when groundwater will be fully utilized; and

- The Water Corporation has produced South West Water Forever Plan

Similar to water, the demand for energy is rising from both residential and commercial consumers as a result of population and economic growth, increased affluence and the increasing prevalence of affordable electrical appliances.

Almost half of the electricity generation capacity on the State's main grid is located in the SW Region. Coal-fired power stations near Collie provide about 90 percent of the baseload generation on the South West Interconnected Network and virtually all of the scheduled, non-gas generation that is a critical hedge against gas supply disruption. These power stations are therefore vital to the security of the State's electricity supply. Protecting these assets from incompatible land uses will be important into the foreseeable future.

WAPC position on water and energy management in the South West

1. The WAPC will continue to work with stakeholders and other agencies to:
 - improve integration of land use and electricity infrastructure planning;
 - Mitigate against development encroachment within existing strategic infrastructure corridors;
 - identify and support the implementation of innovative waste water management systems and solutions;
 - improve integration of land use and water planning;
 - encourage the re-use of treated wastewater on local government assets such as playing fields, State assets such as plantations and private developments including industrial estates;
 - require the adoption of water-sensitive urban design in all new 'Greenfield' developments as outlined in the Better Urban Water Management Guidelines; and
 - promote the adoption of water-sensitive urban design in all infill developments.

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- ensure the protection of existing and proposed energy infrastructure through appropriate buffers, access to necessary resources and identification through the structure planning process
2. The WAPC supports efforts to raise the sustainability requirements for land use planning and will support strategies and plans that:
- reduce water use and ensure water allocations are inside sustainable limits;
 - reduce waste, and increase re-use and recycling;
 - encourage development of compact communities to reduce demand for private motor vehicles and encourage use of public transport;
 - encourage the re-vegetation of cleared areas with appropriate vegetation to remove carbon from the atmosphere;
 - support the development of renewable power sources and other forms of power generation that reduce the region's contribution to greenhouse gas emissions only where they complement the existing power supply for the South West;
 - reduce energy consumption and encourage the use of alternative energy supplies (on-site generation and storage);
 - encourage the development of thermally efficient buildings to minimise reliance on energy for heating and cooling; and
 - prevent the disturbance of acid sulfate soils.

Committed projects, anticipated directions for regional infrastructure and planning initiatives to support sustainable water supplies (see Part B) include:

Table 2, Table 3 and Table 4 reference no.	Details
SW26	Extension of groundwater regional monitoring bore network
SW27	Seawater intrusion coastal groundwater monitoring bore network
SW28	Urban stormwater infrastructure retrofit
SW30	Managed Aquifer Recharge (MAR) at Bunbury and Busselton and other forms of wastewater recharge

6.5 Climate change

Climate change is a major issue for the South West and the WAPC promotes adaptation as a way of preparing for a changing climate to manage the risks and maximise opportunities. The proximity of towns and cities to the coastline means they are vulnerable to the impacts of sea level rise and storm surge. A response to this issue has been the commencement of sea level rise and storm surge modeling for Bunbury and Busselton by Geoscience Australia through the Department of Planning. The 'Peron Naturaliste Partnership', which includes all the local governments from Rockingham to Busselton, has also been formed to provide a regional mechanism to facilitate effective and timely adaptation responses to climate change. The outcomes of these responses are not yet complete and in some cases will be ongoing. Any proposed policy changes will be assessed by the WAPC and, where considered appropriate, will be reflected through the relevant planning policies and statutory framework.

The impacts of climate change are not only evident on the coast, but also inland on the agricultural land, which is an important economic driver throughout the South-West. The reduction in rainfall makes it increasingly difficult for farmers to provide pasture for broad acre farming or food growers to provide water to grow crops. Existing water allocations to irrigated land may also be affected by this issue. The reduction in rainfall also increases the risk of bushfires with fuel loads drying out for longer periods during the year.

Other key impacts of climate change that are likely to occur include:

- rising average temperatures;
- modifications to landscapes, land production systems and agricultural types;
- reduced stream flows and aquifer recharge potentially resulting in a lesser reliability of water supply;
- impacts on the region's biodiversity such as extinction of species, alteration or loss of existing ecosystems and development of new ecosystems; and
- potential impacts on the maintenance of infrastructure (caused by flooding or lack of water available), including recreation assets or a need to change infrastructure types.

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WAPC position on climate change in the South-West

The WAPC will continue to support planning that mitigates and adapts to the probable impacts of climate change in the South West through:

1. working cooperatively with other agencies and local governments (in particular GeoScience Australia and the Peron Naturaliste Partnership) on the development of regional climate change policies to minimise the region's contribution to climate change and to mitigate its impacts;
2. supporting development of compact communities to reduce demand for private motor vehicles and encourage use of public transport;
3. encouraging re-vegetation of cleared areas with appropriate vegetation to remove carbon from the atmosphere and which is fire retardant to minimise bushfire risk;
4. supporting development that is energy efficient, and that reduces the amount of household greenhouse gas emissions and household waste;
5. supporting the development of renewable power sources and other forms of power generation that reduce the region's contribution to greenhouse gas emissions to complement the existing power supply for the South West;
6. the amendment, structure planning and if appropriate subdivision processes and the requirement for a sustainability outcomes and implementation plan;
7. working with local governments through their local planning schemes and strategies to support innovations in farming and new emerging industries as a result of climate change;
8. assessing the region's coastal vulnerability to determine the risk to coastal settlements and infrastructure from sea level rise and storm surge; and
9. minimising potential impacts of sea level rise through planning policies and controls in vulnerable areas.

6.6 Natural hazards and disasters

The South West is subject to a range of potential natural disasters such as flood, cyclones (though rare), storm surge, coastal erosion, severe storms, landslide and bushfires. The cost of recovery and response to such disasters can be significant. It is considered that one of the most effective strategies for reducing the long-term impact of natural hazards is to integrate mitigation measures into the land use planning process.

A number of mitigation mechanisms currently exist to reduce potential impacts of natural hazards and should be considered when preparing local planning strategies and schemes. These include:

- **Flood** – Special control areas that identify flood prone land and special development requirements relating to development in these areas;
- **Storm surge and coastal erosion** – State Planning Policy 2.6 – State Coastal Planning Policy sets out the coastal setback requirements for development to address these issues. Further work is being undertaken in the South West to determine specific areas that are vulnerable to these hazards and further changes may be implemented as a result;
- **Severe storm and landslides** – requirements to deal with these are contained within the Building Code of Australia (as amended) in the form of construction standards in areas that are most vulnerable; and
- **Bushfire** – Planning for Bushfire Protection (as amended) is a protection planning tool that formalises the integration of fire protection into the planning process. Local planning schemes can also play a role in determining fire prone areas, to justify stringent building standards under the Building Code of Australia (as amended).

It is important that all stakeholders coordinate, prepare or review any necessary documents to respond to potential natural hazards and disasters.

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WAPC position on natural hazards and disasters in the South West

The WAPC will:

1. Continually work with local governments to ensure that their strategies and schemes are adequately equipped to mitigate against natural hazards; and in particular, contain up-to-date bushfire mapping and development requirements.
2. Ensure that statutory provisions in local planning schemes refer to the Building Code of Australia (as amended) to facilitate appropriate building standards in hazard areas.
3. consider that there is a presumption against development in extreme / high fire risk areas. However, where justification can be provided that the development is built to the appropriate standards and ensures that the requirements of the Commission's Planning for Bushfire Protection (as amended) are implemented wherever possible to protect the community from bushfire risks, such proposals will be considered.
4. Consider that there is a presumption against development in flood prone areas identified by the Department of Water.
5. Recommend that risk assessments be undertaken for all urban areas, by local governments in consultation with relevant agencies, to ensure that they are adequately equipped to cater for a natural disaster such as a bushfire or flood.
6. Continually update relevant planning policies when new data and information becomes available.
7. Support the Government in preparing statewide bushfire mapping that will inform decision-making both at the State and local level.

6.7 Natural resources and agriculture

6.7.1 Mining

Mineral extraction and mineral processing is a major and important contributor to the South West's economy. In 2010-11 mineral extraction and mineral processing in the region was worth a total of \$525 million, which has since increased 100 per cent since

2007-08, and accounts for approximately 27 per cent of the South West's GDP. The mining sector is a major employer in the region with approximately 3,300 employees.

Mineral extraction includes the extraction of coal, mineral sands, spodumene (a lithium-containing mineral), tantalum, tin and bauxite. It does not include the extraction of basic raw materials such as sand, limestone, gravel and blue metal. Mineral processing is focused towards the production of alumina from bauxite and synthetic rutile from ilmenite. Mineral manufacturing includes the production of titanium dioxide pigment and silicon. Coal, alumina and mineral sands are the largest contributors to the region's value of mineral production.

To understand the relationship mining has with planning, it is important to understand how the *Mining Act 1978* operates. Mining applications are processed under the Mining Act and therefore planning approvals are not required from the WAPC or local government. Section 120 of the Act requires that any mining proposals shall take into account the provisions of any planning scheme in force under the *Planning and Development Act 2005*, but such provisions shall not prohibit or affect the granting of a mining tenement or the carrying out of a mining operation. Should a mining tenement be contrary to the provisions of the Scheme, a recommendation is required by the Minister for Planning prior to a determination being made by the Minister for Mines and Petroleum.

Mining has been a major economic driver in the South-West and vital in the energy security of the State. It has typically operated in various locations around the South West, such as Collie and Greenbushes, with relatively minimal negative impacts on the community. However, recent coal mining proposals within the Leeuwin-Naturaliste sub-region have resulted in significant community concerns in relation to environmental, landscape and infrastructure impacts. These proposals have raised a number of environmental issues, particularly in relation to the protection of the underground aquifers in the sub-region. The Minister for Mines and Petroleum has now excluded coal mining from all areas within the Vasse Coal Resource Area shown in Map 4. The WAPC supports the Minister for Mines and Petroleum's position in relation to mining in the Vasse Coal Resource Area.

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Notwithstanding the significant and vital contribution mining makes to the South West's economy, it is important to provide a robust planning process where all issues, including local governments concerns, can be assessed and addressed when proposals are put forward. Importantly it will be necessary to manage any approved mining proposals to ensure minimal impacts to the environment, significant landscapes and local amenity.

The WAPC position on the extraction of mineral resources is to:

1. support mining in the South West acknowledging its significant and important contribution to the region's economy and the energy security of the State, except in the relevant circumstances as identified within the Vasse Coal Resource Area;
2. ensure that where mining occurs its impacts are carefully managed and the land is restored appropriately;
3. restrict incompatible land uses in identified mineral resource areas so as not to jeopardise future mining proposals; and
4. acknowledge and support the local government's opportunity to form a position on the planning implications of mining in their local area through the local planning strategy and scheme. Matters to consider may include those related to:
 - environmental
 - impacts on amenity
 - land-use conflict
 - loss of productive agriculture land
 - landscape protection
 - heritage and cultural significance.

6.7.2 Petroleum and geothermal energy

The exploration and extraction of petroleum and geothermal energy falls under three separate pieces of State and Commonwealth legislation:

1. *Petroleum and Geothermal Energy Resources Act 1967* (WA)
2. *The Petroleum (Submerged Lands) Act 1982* (WA)
3. *Offshore Petroleum and Greenhouse Gas Storage Act 2006* (Commonwealth)

Unlike the *Mining Act*, none of the above legislation makes reference to the *Planning and Development Act* or any other requirement for the involvement of the Minister for Planning in the decision making process. As such, the WAPC has no formal position on petroleum or geothermal energy but any such proposal should take into account the objectives of the Framework.

6.7.3 Basic raw materials

Basic raw materials consist of sand, limestone, hard rock, gravel and clay. These materials are required for a number of uses with most relating to the construction industry (buildings, roads, retaining walls etc). Due to the demand on these resources it is becoming increasingly difficult to extract viable deposits to keep up with the growth of the South West region.

In response to the increasing demands for basic raw materials the Department of Planning and the WAPC prepared the 'Basic Raw Materials Demand Study for the Bunbury and Busselton Region 2012', which identifies future demand and where the main raw material deposits are located. The study identifies a number of regionally significant deposits that need protection from potential land uses that would restrict future extraction of resources so that they can be accessed in the future when required.

WAPC position on basic raw materials

The WAPC will support the sustainable extraction of basic raw materials by:

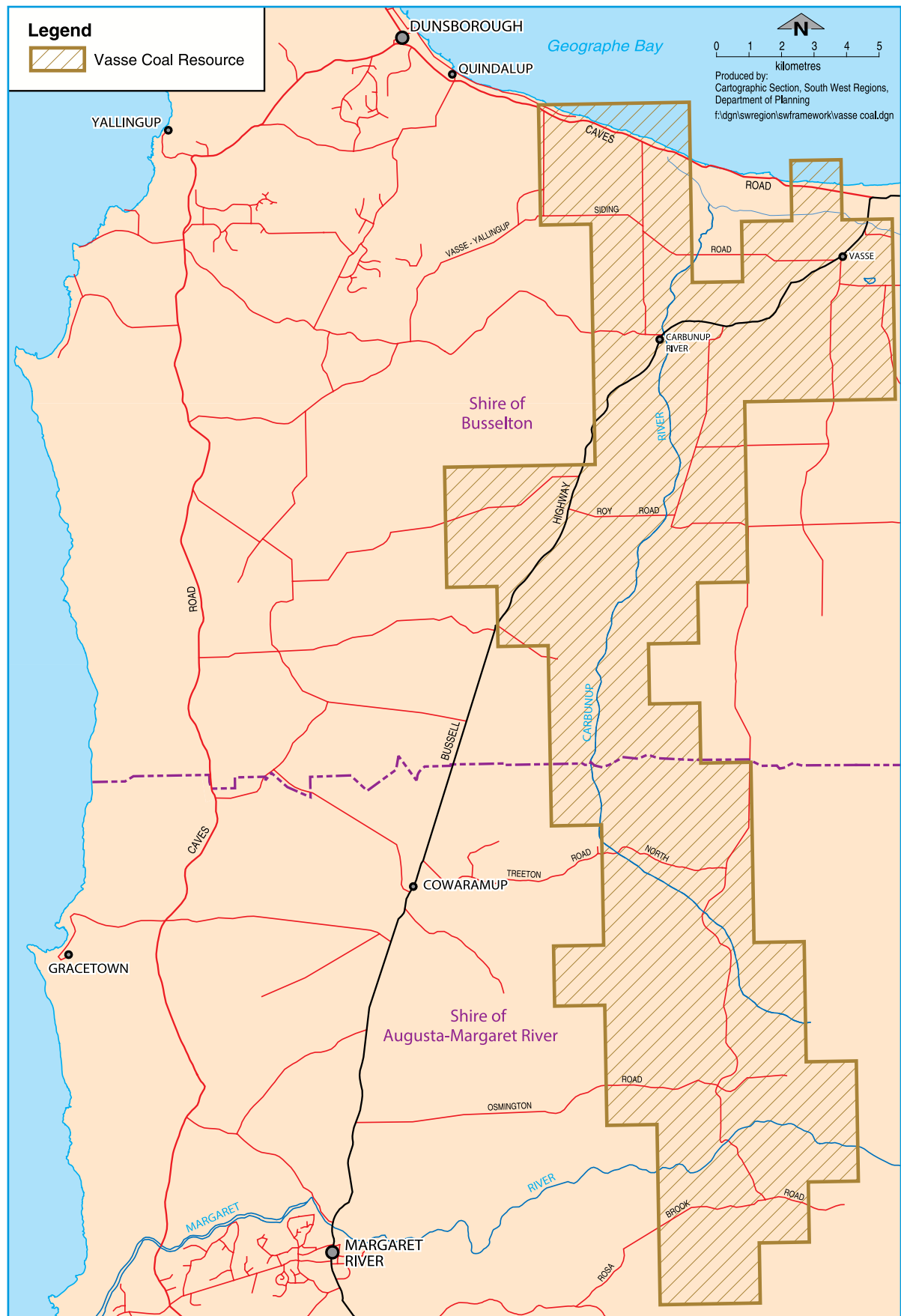
1. working with local and State government agencies to ensure that a consistent approach to the extraction of basic raw materials is undertaken through processes in local planning strategies, schemes and associated policies;
2. supporting the staged and sequential extraction of basic raw materials to allow for future changes in land use and to meet the current and future resource requirements;
3. identifying high value basic raw materials and restricting changes in land use that may impact on future extraction; and
4. supporting alternative forms of development that minimise the use of basic raw materials by responding to the natural topography of the site, such as the use of 'brick build-up' construction, stilt/pole or split level buildings.



Map 3: Interregional mineral resources and basic raw materials

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Map 4: Vasse coal resource area

6.7.4 Forestry and fisheries

Forestry and fishing industries have traditionally been strong economic sectors in the South West region. Employment in these sectors has declined significantly in the last decade due in part to diminishing fish stocks and a reduction in logging of old growth forests.

During the past decades there has been an increase in farm forestry. However the forestry industry remains an important economic, environmental, social objective for the State.

WAPC position on forestry, fisheries and natural resources

1. The WAPC will support agency initiatives to manage forests, marine fisheries and other natural resources in sustainable limits and that:
 - encourage continuation of existing industries and development of new industries that use renewable natural resources in sustainable limits; and
 - review limits periodically to ensure that levels of usage remain sustainable.
2. The WAPC will encourage the sustainable usage of the region's natural resources through:
 - supporting agencies to identify opportunities for sustainable use of natural resources and facilitate this usage by way of land use planning strategies and plans;
 - supporting efforts to encourage compatible uses of natural systems that allow for the sustainable harvest of renewable resources from natural biological systems;
 - working with agencies to minimise the impact of agricultural practices and extraction or use of natural resources on the environment; and
 - working with agencies to link natural resource management and land use planning strategies to promote sustainability, enhance productivity, protect the environment and encourage community participation.

6.7.5 Agriculture

Agriculture is an important industry and employment sector in the South West, contributing greatly to the character and culture of the region, and is a significant attractor for both visitors and those seeking a lifestyle change. With large numbers of people seeking to live in rural areas, agricultural land is being increasingly sought after for non-agricultural land uses and subdivision into smaller lifestyle lots.

It is acknowledged that the agricultural sector is also under pressure from the deregulation of the dairy industry, both the domestic and global markets due to the economic downturn that began in 2008; and also the impacts of a drying climate and in particular the reduction in rainfall within the region. These issues have led to the need to diversify the sector and look for alternative or innovative ways of farming.

Despite these issues, recent Department of Agriculture and Food WA figures indicate that gross value of agricultural production of land in the South West was approximately \$902 per hectare in 2009–10 which is up 22 per cent from 2008.

WAPC position on agriculture

The WAPC released a statement in 2009 to state its intention to minimise the loss of farmland and agricultural activities to maintain and encourage rural production and employment. The WAPC considers the highest and best use for rural land to be agriculture and horticulture. The WAPC will therefore, when making decisions, seek to:

1. Support development of plans and strategies at the sub-regional scale that:
 - support a presumption against the further unplanned fragmentation of agricultural land in the South West;
 - include measures to prevent the loss or stagnation of high-value and productive agricultural land, for example, the development of sensitive land uses within close proximity to existing agricultural operations; and
 - express a presumption against the subdivision of agricultural land for non-agricultural purposes.

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2. Support agency initiatives to preserve the productivity of agricultural and natural resources areas and encourage the establishment of value-adding industries in appropriate locations to maximise economic advantages to the region and ensure long-term food security.
3. Support agency initiatives to enhance productivity of agricultural systems through:
 - working to ensure that sufficient water supplies are made available to agricultural precincts to maximise their potential in sustainable limits;
 - providing for water use efficiency and reduced water consumption through better management and use of recycled water;
 - promoting the adoption of adaptive management practices that mitigate on-site and off-site environmental impacts while achieving profitability and social responsibility;
 - minimising the impact of agricultural practices and extraction or use of natural resources on the environment; and
 - linking natural resource management and land use planning strategies to promote sustainability, enhance productivity, protect the environment and encourage community participation.
4. Support development of policies and strategies by the local government that:
 - incorporate provisions for the rehabilitation of degraded land, re-vegetation of cleared land, strategic fencing and other appropriate land management controls as conditions of development or subdivision;
 - support innovations in farming and new emerging industries as a result of a drying climate;
 - address the issues of land management, water resource management, environmental protection, land use conflict, coastal management, rural land use and subdivision;
 - establish planning zones and policy areas to preserve productive agricultural land, identify key horticultural, agricultural and forestry precincts, preserve land for agricultural purposes and resolve conflicting land uses in these areas; and
 - give due regard to the WAPC's Development Control Policy 3.4 – Subdivision of Rural Land.

Agricultural areas are shown in Map 5.

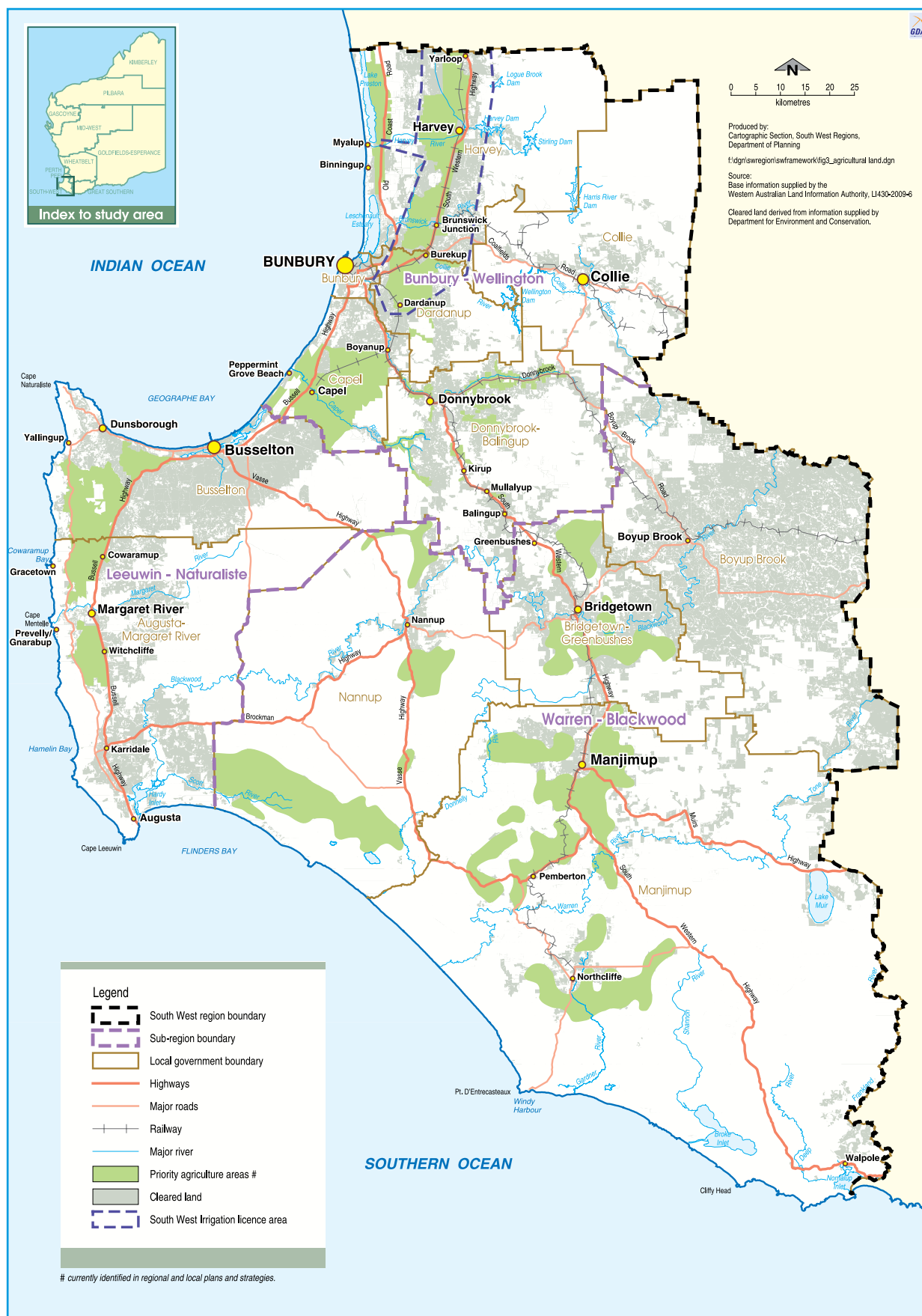
Committed projects, anticipated directions for regional infrastructure and planning initiatives to support agriculture (see Part B) include:

Table 2, Table 3 and Table 4 reference no.	Details
P2	Priority agriculture analysis



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6.8 Economy and employment

6.8.1 Economic growth and industry

The South West supports a strong and diverse regional economy that continues to attract residents to live and work in the area. The region has the most diversified economy of all the State's nine non-metropolitan regions. Activities include:

- agriculture and horticulture
- timber and forest products
- mineral extraction
- processing and manufacturing
- electricity generation
- retail
- tourism
- construction
- other manufacturing
- service industries
- fishing and aquaculture.

The South West has benefited from strong and sustained economic growth. The region's gross regional product in 2010–11 was estimated at \$16.8 billion, having increased at an average of 16.2 per cent per annum over the last five years. More recent analysis of employment trends by the Department of Planning indicates that most industry sectors have continued to perform strongly to 2012.

While it is unknown if the period of strong growth will continue into the future, a number of major mining, processing and industrial expansion projects have been completed or are currently underway, with future expansions also planned in the region. The WAPC recognises the need to promote the sustainable development of both traditional and new, innovative industries through proactive land use planning.

6.8.2 Port of Bunbury

The Port of Bunbury is critical to the region's economy and is the export port of the South West region for bulk product. The Port currently trades more than 14 million tonnes annually, of which 12 million tonnes are exported. Commodities include alumina, iron concentrate, mineral sands, caustic soda, wood chips and general cargo. There

is significant opportunity to expand the functions and capacity of the Port to facilitate the continual growth in the mining, processing and manufacturing sectors. However, this growth will not be achieved unless the vital access routes are provided at the time of the expansion. Part of this process requires improvements to the access to the Port via road and rail. Significant investment has already been made in this regard through the construction of the first stage of the Port Access Road. The final stage will be completed when there is sufficient demand.

6.8.3 Strategic Industrial Areas

The South West has two significant Strategic Industrial Areas which are specifically designated for heavy industry, at Kemerton and Collie Shotts Industrial Park.

The WAPC has recognised the Kemerton Industrial Park as one of the State's strategic industrial areas, providing a location for 'heavy' industry to provide downstream processing and value-adding to the region's extensive primary resources for export or domestic markets. Through the Greater Bunbury Strategy, the WAPC has planned additional areas to accommodate general industry in the Greater Bunbury area including the Preston Industrial Park. The WAPC recognises that where demand cannot be met in existing industrial parks, additional planning will be required to accommodate new industries and industry types.



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There is potential for growth in the emerging Creative Industries Sector. The value of this sector is \$306 million and employs an estimated 1,095 people in the South West. Creative Industries sector employment is growing at around 3.6 per cent with the Leeuwin-Naturaliste sub-region experiencing substantial sectoral growth to take a 44 per cent share of creative workers in the South West region.

WAPC position on economic growth in the South West

The WAPC will support strengthening of the existing economic base and encourage diversification in industrial and commercial sectors in order to promote growth in traditional as well as knowledge-based, high-value and specialised industries suitable to the South West by supporting agency efforts to:

- ensure supply of industrial and business development land in appropriate locations, serviced with an adequate level of infrastructure such as reticulated water, power, natural gas and high-speed communications, heavy haulage transport (road and rail) and waste services;
- ensure that urban expansion does not impact on the operation or future expansion of existing industrial areas;
- identify industry precincts that facilitate establishment of industry clusters and partnerships;
- encourage creativity and innovation, supported by the establishment of well designed technology and business centres to provide the opportunity for nurturing of local talent and value-adding;
- provide for the development of new and emerging industries in the South West where these are appropriate to the location;
- promote the role of Bunbury as the regional centre for the South West to provide a focus for services and investment; and
- support development that facilitates new employment opportunities in identified industrial areas and in mixed use areas within the existing urban fabric.

6.8.4 Tourism

Tourism is a significant industry sector in the South West, capitalising on the region's natural beauty, diverse rural landscape, scenic coastline, and established and emerging wine regions. In 2010,

approximately 1.4 million tourists (overnight) visited the South West and contributed \$590 million in direct tourism expenditure. That same year, Tourism Western Australia developed Australia's South West – Tourism Development Priorities 2010 – 2015, which sets out broad and targeted infrastructure priorities to facilitate the long-term growth of tourism within the region. These priorities, which have been selected after significant consultation include proposals to improve air, rail and road access, waterfront redevelopment, conference/ convention facilities and natural recreational/ heritage activities.

Furthermore, the document *Tourism Futures South West* developed by the SWDC recognises the importance of developing the region's tourism infrastructure, events, and product packaging to provide high quality tourism experiences, and suggests key outcomes.

In 2012, the industry continued to grow with approximately 1.55 million tourists (stayed one night or more) visited the South West and contributed \$800 million in direct expenditure.

WAPC position on tourism

The WAPC will support strategies and proposals that:

1. broaden opportunities for the tourism sector to provide experiences derived from the region's natural, cultural and economic resources and attractions, where this can be achieved in cultural and environmental constraints through:
 - identifying strategically or locally significant tourism areas in local tourism planning strategies;
 - identifying other key tourism sites and precincts that maximise the economic benefit to the region or sub-region, while minimising adverse impact on the environment and local amenity; and
 - identify ancillary facilities for camping and caravans including black waste dump points in appropriate areas.
2. promote development of nature-based tourism that complements the environment without causing harm to natural ecosystems; and
3. ensure adequate planning and infrastructure is in place to support this sector.

6.9 Transport and infrastructure

The predicted future population and economic growth will place increasing pressure on the regional road network and provision of other capital and social infrastructure. Timely provision of new infrastructure and the maintenance of existing assets are therefore critical to the region's continued growth.

Key infrastructure needs for the region include:

- a high standard of road links and passenger rail services connecting Bunbury to Perth;
- provision of adequate public transport options for rural based commuters to be able to access services in larger centres;
- a high standard of road links connecting Bunbury to the South West region as a whole;
- expansion and ongoing maintenance of freight rail service infrastructure in the region;
- increased investment in regional telecommunications to facilitate greater mobile coverage and high speed internet access;
- improved access to the Bunbury Port through completion of the Port Access Road and the Bunbury Outer Ring Road;
- expansion of the Bunbury Port including the diversion of the Preston River;
- ensuring energy security through the South West Interconnected Network encouraging development of renewable energy, with recognition that the historical system is largely based on coal fired power generation;
- a diversified electricity grid and power generation capacity, with an emphasis on increasing the capacity to generate electricity via renewable energy sources;
- Identification and protection and management of existing and future electricity infrastructure sites and corridors; and
- infill sewer in towns and cities.

WAPC position on transport and infrastructure

The WAPC will support development of strategies and plans that:

1. developing a high standard of road links and planning a high speed passenger rail services between Bunbury and Perth;
- provide adequate public transport options for rural based commuters to be able to access services in larger centres.
- promote integration of land use and electricity infrastructure planning that minimises land use conflict and protects the strategic power infrastructure within the South West Interconnected Network.
- Improving efficiency and opportunities for expansion of freight rail services in the region; and
- expanding the Bunbury Port;
2. support increasing investment in high-speed communications infrastructure;
3. locate regional facilities that service the needs of the entire region or sub-region in, or in close proximity, to the regional centre and other activity centres through:
 - locating rail stations, major bus stations and other major public transport infrastructure in major centres and in locations that are accessible by walking and other forms of non-car-based forms of transport;
 - locating regional hospitals, higher education, regional recreation, and major shopping facilities in major centres and close to existing activity centres; and
 - supporting the expansion of the Busselton regional airport;
4. promote sustainable integration of land use and transport planning that minimises the reliance on private motor vehicles and reduces energy use through initiatives to encourage the use of alternative forms of transport, and increase energy and resource efficiency;
5. support the establishment of a diversified electricity grid and prioritised power generation capacity with an emphasis on increasing the capacity to generate electricity via renewable energy sources;

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6. support the introduction of micro-power generating systems to reduce peak electricity demand, and reduce reliance on fossil fuels;
7. support an infill sewer program and encourage alternative systems to facilitate sustainable development within regional towns to accommodate population growth;
8. support, where possible, the potential of sharing infrastructure and subsequent cost across government, particularly where there is opportunity to prepare for future infrastructure requirements;
9. encourage the feasibility of new or alternative modes of transport such as light rail as the population of the region continues to grow; and
10. support the re-use or upgrading of older infrastructure to accommodate new technologies or uses.

The locations of major transport routes, electricity corridors and industry parks are shown in Map 5.

Committed projects, anticipated directions for regional infrastructure and planning initiatives to support transport and infrastructure (see Part B) include:

Table 2, Table 3 and Table 4 reference no.	Details
SW1 (1&2)	'Roads to export' and additional grade separation at Brunswick, Burekup, Picton and Bunbury.
SW2	Upgrading and realigning of Brockman Highway from Scott River Road to Karridale
SW3	Upgrading and realigning of South Western Highway from Donnybrook to Manjimup
SW4	Upgrading of South Western Highway from Waroona through to Harvey
SW5	Upgrading of South Western Highway from Harvey through to Bunbury
SW6	Dual Ludlow Deviation Bussell Highway
SW7	Dual Bussell Highway from Capel to Ludlow

Table 2, Table 3 and Table 4 reference no.	Details
SW8	Vasse to Dunsborough Route
SW9	Upgrading South Western Highway from Manjimup through to Walpole
SW10	Upgrading Muir Highway from Manjimup through to Nyamup
SW11	Margaret River Perimeter Road
SW12	Upgrading Bussell Highway from Vasse through to Margaret River
SW13	Busselton Outer Bypass
SW14	Upgrading Busselton Airport to International Standard
SW15	Manjimup Airport Upgrade
SW16	Bunbury Airport expansion
SW17	Bunbury Port expansion
SW18	Fast Passenger Railway Corridor to Bunbury
SW19	Fast Passenger Railway to Busselton
SW21	Bunbury to Kwinana line improvements
SW22	Brunswick Junction to Ewington Junction duplicate
SW23	Regional dual use path network
SW24	Bunbury to Albany Gas Pipeline Corridor
SW25	Network Upgrade : 132kV line from Picton to Busselton
SW29	Infill sewer program
SW31	High capacity broadband network
SW32	Mobile coverage
P1	Grade separation review

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Map 6: Infrastructure

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Map 7: Interregional road, rail and air connections

6.10 Heritage and culture

The South West is a multicultural region rich in heritage and culture that provides each town, city and sub-region its own unique sense of place. Areas of cultural and heritage value are increasingly under pressure from urban development as the population and demand for housing and other services continues to grow.

The South West is part of the Noongar country. The Noongar people of the South West have strong cultural connections to the region dating back thousands of years. A large number of sensitive places and sites that hold significance to the Noongar people have been identified throughout the South West. Such sites include pre-contact and habitation and usage, burial sites, battle sites and camping/ hunting/ fishing sites. Whilst there are also a large number of sites that are not yet officially documented, the *Aboriginal Heritage Act 1972* does provide protection.

The *Native Title Act 1993* provides for the recognition and protection of Aboriginal and Torres Strait Islander people's native title rights and interests. Certain government actions, such as grants of freehold or other exclusive tenures to other parties, have been found to extinguish native title. Claims for native title cannot be made over areas where native title has been extinguished; for example, land held in freehold or exclusive tenure in developed areas.

Native title is a relevant consideration when planning for urban growth and development in the South West, as land in and around towns that may be identified as appropriate for certain development options may be subject to native title claim. Broadly, however, native title has been extinguished on the majority of land in the South West by the granting of freehold titles over large areas.

Since 2009 the WA Government and South West Aboriginal Land and Sea Council have been negotiating on the South West Native Title Settlement, a negotiated settlement for six separate native title claims by the Noongar people of the south west of Western Australia. These negotiations were completed in late 2014, with the WA Government's offer being accepted by all Noongar claim groups. The full details of the Settlement are recorded in six Indigenous Land Use Agreements (ILUAs), which were executed in June 2015. It is anticipated that the Settlement will commence in full around July 2016 after registration of the ILUAs with the National Native Title Tribunal.

Under the Settlement, native title will be exchanged for a negotiated package of benefits, including formal recognition of the Noongar people as traditional owners, land, investments and the establishment of Noongar Regional Corporations. A major component of the Settlement is the establishment of the Noongar Land Estate through the transfer of a maximum of 320,000 hectares of Crown Land for cultural and economic development, comprising 300,000ha as reserve land and 20,000ha as freehold title. This will result in the Noongar people being major landowners in the Wheatbelt, and it is therefore likely that there will be an increase in interaction of Noongar people with the land-use planning system.

Post European settlement in the South West has resulted in the creation of buildings and places that also hold a level of significance within the community. Heritage is an important element of any urban and rural area as it helps to define the amenity of that area and give it a sense of place. Heritage is protected on two levels in Western Australia – through the Office of State Heritage and the State Heritage List; and the relevant local government through its Local Municipal Heritage Inventory.

WAPC position on heritage and culture

1. Invite the local Noongar people into the decision making process by:
 - liaising with the Department of Aboriginal Affairs and the local Noongar people when preparing key strategic documents and, where relevant, when assessing statutory planning applications; and
 - encouraging local governments to liaise with the Noongar people in developing planning documents and where development applications may impact on places or sites of Aboriginal heritage significance.
2. Protect buildings and places of heritage significance by:
 - encouraging local governments to regularly update their municipal heritage inventory;
 - ensuring that local planning scheme's are model scheme text compliant in relation to heritage controls; and
 - ensuring that the municipal heritage inventory forms part of the Scheme by reference only, to ensure that it is easily updated.

7 Sub-regional planning and infrastructure framework

6.11 SuperTowns

The Regional Centres Development Plan (SuperTowns) program was established by the Minister for Regional Development and Lands in July 2011. It is a Royalties for Regions initiative aimed at enhancing and stimulating growth in regional towns in the southern half of the State by enabling those communities to plan and prepare for what is predicted to be a doubling of the State's population over the next 40 years. The nine towns chosen in the program were Collie, Boddington, Esperance, Jurien Bay, Katanning, Manjimup, Margaret River, Morawa and Northam.

Three of the nine towns are located within the South West region being Collie, Manjimup and Margaret River.

The SuperTowns program required the preparation of growth plans for each town, with the objective of facilitating the doubling of the town's population by identifying a range of priorities and projects required to achieve this. Business cases were prepared and submitted for the top four transformational projects in each town. Funding has now been distributed to each town to begin implementing these projects.

It is anticipated that the SuperTowns program has the potential to significantly impact on the South West Region by strengthening and diversifying the economy and providing alternative places to live. The growth rates required to achieve the population target in each town is around 3.4 per cent per annum.

WAPC position on SuperTowns

1. Support the SuperTown Growth Plans as they are predominately based on WAPC endorsed local planning strategies and are a guide for further planning through the standard planning framework and processes.

7.1 Overview

The South West can be divided in three sub-regions – the Bunbury–Wellington, Warren–Blackwood and the Leeuwin–Naturaliste. All three sub-regions have unique characteristics and hence different economic drivers and infrastructure requirements. It is therefore important to address each sub-region separately to ensure that the issues and subsequent infrastructure needs are reflective of where they are actually required. The following sections address the population and economic growth of each sub-region and the subsequent economic and social infrastructure requirements.

Economic infrastructure refers to fixed assets that may form part of a large network that delivers the essential service to the community such as water, sewer, gas, roads and electricity. Social infrastructure refers to the delivery of prioritised services such as emergency services, education, sports and recreation, health and cultural services.

7.2 Bunbury–Wellington

7.2.1 Population growth

The Bunbury–Wellington sub-region is the most populated sub-region in the South West, accounting for 62 per cent of the population. Of this, approximately 52 per cent or 84,000 people, live within the Bunbury² urban area, therefore highlighting Bunbury's primacy as the major regional centre of the South West.

The Bunbury–Wellington sub-region experienced population growth of 2.6 per cent per annum, which is below the State average of 2.7 per cent. The large greenfield sites including Dalyellup, Treendale and Millbridge have continued to grow accordingly. It is estimated that the strong population growth will continue with the population of the Bunbury² urban area expected to reach 150,000 between 2031 and 2050.

² The term "Bunbury" here is used to refer to the Bunbury urban area. It includes large urban areas in the shires of Capel, Dardanup and Harvey, and the City of Bunbury. Each of the areas that comprise Bunbury have their own character, identity and in some instances, local government administration centres. From a settlement perspective, Bunbury is regarded as one centre, in much the same way as Perth is viewed as a single city.

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The Bunbury–Wellington sub-region has an aging population. Over the last five years, the number of people above the age of 65 years has grown 29 per cent, which is well above the South West average of 22.4 per cent and the State average of 16.7 per cent. Whilst this only equates to 12.6 per cent of the total population, if it continues to grow at a rapid rate it will add more pressure to the existing infrastructure constraints of the sub-region.

In contrast, the Bunbury–Wellington sub-region is on par with both the South-West and the State in terms of population growth in the under 25 years age group at 12 per cent over the last five years. Of this 12 per cent, the Bunbury local government area population declined by 0.5 per cent over five years. This is concerning given that it is the regional centre of the South West and, as such, has considerable infrastructure aimed at this demographic.

7.2.2 Economic growth

The labour force in the Bunbury–Wellington sub-region has grown 20 per cent over the last five years from 39,312 to 47,207. The unemployment rate has also increased from 3.9 per cent to 4.8 per cent over the same period. This is likely the result of the large increase in the workforce over the last five years and in particular the growth of over 65s remaining in or returning to the workforce.

The ‘mining, manufacturing and construction’ sectors have continued to grow with the number of people employed increasing 29 per cent, 15 per cent and 43 per cent respectively over the last five years. This is reflected in the value of these sectors doubling since 2007–08 to \$4.5 billion. The strong construction figures can be attributed to the major mining and energy expansion projects undertaken in the sub-region, region and State-wide.

There has been a significant increase in the number of ‘professionals, scientific and technical services’ employees which has increased 41 per cent over the last five years. This reinforces Bunbury’s role as the regional centre of the South-West.

The public sector has also significantly increased its workforce in the region with ‘education and training’ and ‘health care and social assistance’ increasing 29 per cent and 30 per cent respectively over the last five years. Service provision has also been a key focus area with the number of people employed in the ‘electricity, gas, water and waste services’ sectors increasing 45 per cent over the last five years.

In contrast, the number of people working in the agricultural sector has decreased by 14 per cent over the last five years. This can be attributed to a number of factors including restructuring of industries such as dairy, viticulture and fruit orchards, increases in the scale of farm businesses by leasing other farmland and the retirement of older farmers and farmers exiting the industry.

It is considered that the economy in the Bunbury–Wellington sub-region is strong with varying growth in most sectors. This reflects Bunbury’s primacy as the major regional centre of the South-West and provides a positive outlook for the future.

7.2.3 Potential social infrastructure projects

This section outlines social infrastructure priorities which require further consideration and planning before being implemented through specific projects outlined in Table 3.

Regional health and education facilities

The South West Health campus, Edith Cowan University, Manea College and South West Institute of Technology are currently co-located in Bunbury. This is a recognised successful model for co-location of health and education service delivery.



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Public transport

The Bunbury² urban area is largely dependent on the use of private motor vehicles for transport. This is due to the efficiency of the current road system and available of parking facilities within the CBD and other activity centres and the limited public transport system.

In the longer term, with the population projected to reach 150,000 between 2031 and 2050, it is anticipated that the increase in vehicles will put added pressure on the existing road network and the need for an efficient public transport network will become a priority. It is not yet known what type of public transport system will be achievable for the Bunbury² urban area, with further investigations and discussions required. Once this process is finalised and specific infrastructure projects have been identified, it should be added to Table 3 or 4. (see Part B)

Not-for-Profit Organisations

As the population of the Bunbury-Wellington sub-region increases, the number of not-for-profit organisations also increases to cope with the demands and issues associated with a growing community. As such, identifying space to accommodate these organisations is becoming increasingly difficult. Subsequently, the City of Bunbury is currently in the process of investigating an additional Lotteries House on the land currently occupied by the Sterling Street Art Centre and a not-for-profit centre at Jaycee Park (adjacent to the existing train station). These projects are currently in the design phase with the specific infrastructure projects yet to be prioritised. Once the project has been prioritised the specific project should be added to Table 3 or 4 of this document. Adequate areas should also be identified in sub-regional areas to meet demand.

Regional Sporting Facilities

The Bunbury-Wellington sub-region has well established regional sporting facilities primarily located within Bunbury² urban area. These include Hay Park and the SW Sports Centre, the Leschenault

Leisure Centre and playing fields, Eaton Recreation Centre being the home of the State League Basketball teams and Hands Memorial Oval. Whilst these facilities in most cases are currently adequate or have recently been upgrading, continual upgrading will be required as the population and demand for these facilities increases. It has been identified that the Hay Park including the SW Sports Centre will require substantial upgrading. The City of Bunbury has recently completed the South West Sports Centre Master Plan which will inform future development of the facility and the Hay Park Development Plan will inform the development of the broader Hay Park area. Once these documents have been finalised and specific projects identified, they should be included in Table 3 or 4 of this document. (see Part B)

Hands Memorial Oval is considered the premier regional sporting ground in the sub-region with State level cricket and AFL matches held here. The first stage of the redevelopment has recently been completed including repositioning and resurfacing the ground, new viewing area, new fencing and lights. The second stage of the redevelopment will include upgrading the clubrooms and facilities to an appropriate standard. The design and infrastructure requirements for this project have not been finalised and will therefore be considered at a later date for inclusion in Table 3 or 4 of this document. (see Part B)

The sport of shooting currently has a fragmented presence within the Bunbury-Wellington sub-region, with different disciplines located in different areas. A need has been identified for a consolidated regional multi-disciplinary facility at a standard that would attract regional or state level events. A location or design for such a facility is yet to be finalised and will therefore be considered at a later date for inclusion in Table 3 or 4 of this document. (see Part B)

The Greater Bunbury Cycling Plan has been finalised and these paths will be provided through a cooperative approach by MRWA and the local and State governments.

² The term "Bunbury" here is used to refer to the Bunbury urban area. It includes large urban areas in the shires of Capel, Dardanup and Harvey, and the City of Bunbury. Each of the areas that comprise Bunbury have their own character, identity and in some instances, local government administration centres. From a settlement perspective, Bunbury is regarded as one centre, in much the same way as Perth is viewed as a single city.

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Infrastructure projects and initiatives

The following table outlines the key social infrastructure projects and initiatives for the Bunbury–Wellington sub-region as identified in Table 3 or 4. (see Part B)

Table 2, Table 3 and Table 4 reference no.	Details
BW23	New primary school at Treendale
BW24	Stage 2 – Dalyellup College
BW25	Affordable housing in Glen Iris
BW26	Affordable housing in Dalyellup.
BW27	Affordable housing in Tuart Brook (Usher)
BW28	Regional kennel and cattery facility
BW29	Collie velodrome refurbishment
BW30	New club facilities for netball/ athletics at Hay Park District Playing Fields
BW31	Upgrade of State league sporting facilities at Eaton Recreation Centre
BW32	Fire station – Leschenault area
BW33	Enhanced fire response zones – (Premier's statement in response to Keelty 2)
BW34	Emergency services hub – Bunbury
BW35	Air support to emergency services
BW36	Bunbury Regional Art Gallery expansion

7.2.4 Potential economic infrastructure projects

This section outlines economic infrastructure projects and initiatives that require further consideration and planning before being implemented through specific projects outlined in Table 3 or 4. (see Part B)

Rail

Two of the current flagship priorities involve the upgrading of the Bunbury Port to increase the export potential of the Port and the upgrading of road and rail infrastructure into the Port to facilitate this growth.

Significant current and future export trade will come out of Collie and as a result the frequency of train movements will continue to increase. The current rail alignment runs through the centre of Collie, fragmenting both the commercial and residential areas. Increased freight movements on this line will impact on accessibility to the town centre. Similar effects may also be experienced in the townsites of Brunswick, Roelands and Burekup. Consideration needs to be given to how this issue will be addressed in the long term, in the case of Collie either through upgrades to the existing line or creating a transport corridor around the urban area to relocate the rail line altogether. Depending on the outcomes of future investigations, any major projects should be included in Table 3 or 4. (see Part B)

Leschenault Inlet Master Plan

The City of Bunbury in consultation with relevant State Government agencies is currently preparing the Leschenault Inlet Masterplan. This document will set out the strategic direction for the water way and foreshore areas including any infrastructure that is required. Given that there is a mixture of private and Crown land vested in the local government and the State, there may be infrastructure projects that are of a regional and sub-regional nature that require inclusion in Table 3 or 4. (see Part B)

Horse racing

There is a need to upgrade the Bunbury Turf Club and Bunbury Harness Racing in the short to medium term as identified in Table 4, to facilitate continual economic growth in this sector. It is considered that in the longer term an alternative location be investigated to facilitate a multi-purpose racing

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facility to allow the redevelopment of the current sites for residential and ancillary purposes. Any infrastructure priorities required to facilitate the relocation should be included in Table 3 or 4 as and when required. (see Part B)

Infrastructure projects and initiatives

The following table outlines the key economic infrastructure projects and initiatives for the Bunbury–Wellington sub-region as identified in Table 3 or 4. (see Part B)

Table 2, Table 3 and Table 4 reference no's.	Details
BW1	Dodson Road intersections
BW2	Raymond Road Australind through to Roelands
BW3	Millbridge/Treendale Bridge
BW4	Duplication of Kombanna Drive from Austral Parade to Blair Street
BW5	Duplication of Old Coast Road – Hamilton Road to Australind Bypass
BW6	Boyanup Bypass
BW7	Eelup roundabout upgrade
BW8	Wellington National Park scenic drive roads and major access road upgrades.
BW9	Cruise ship infrastructure
BW10	Greater Bunbury Bike Plan
BW11	Casuarina Boat Harbour
BW12	Network upgrade: Construct a double-circuit 132kV line from Kemerton to Picton (may have portions constructed at 330kV)
BW13	Gas supply to Collie townsite
BW14	Collie Irrigation District irrigation piping project
BW15	Greater Bunbury Drainage and Water Management Plan (DWMP) groundwater monitoring bore network

Table 2, Table 3 and Table 4 reference no's.	Details
BW16	Collie–Kemerton Integrated Water Management Plan
BW17	Waste water recycling
BW18	Upgrade of Five Mile Brook
BW19	Collie water supply to Perdamon
BW20	Upgrade water capacity in Bunbury–Wellington region
BW21	Upgrade wastewater capacity in the Bunbury–Wellington region
BW22	Irrigation options for Myalup horticultural area in the Shire of Harvey
BW37	Collie Motorplex
BW38	Upgrade of Pile/ Mungilup roads
BW39	Donnybrook Apple Interpretive Centre, Museum and Community Resource Centre
BW40	Lake Kepwari Development
BW41	Wellington National Park trails network development
BW42	Recreation at Stockton, Logue Brook and Glen Mervyn dams
BW44	Regional waste management site
BW45	Regional saleyards

7.3 Warren–Blackwood

7.3.1 Population growth

The Warren–Blackwood sub-region is the least populated sub-region in the South West from a population perspective accounting for approximately 11 per cent of the population. The sub-region's population has declined over the last five years at a rate of approximately 0.1 per cent per annum. Of particular concern is that the major sub-regional centre of Manjimup's population has declined over the last five years at a rate of approximately 0.2 per cent per annum. The decline can be attributed to a number of factors including the changing agricultural industry (workforce also declining), changes to the timber industry and the distance to the coast.

The Warren–Blackwood sub-region also has an aging population. Approximately 17 per cent of the population is aged 65 years and over, which is well above the State and South-West averages of 12.3 and 11 per cent respectively. This figure however, has been relatively stable over the last five years with growth of three per cent, which is well below the State and South-West averages of 16.7 and 22.4 per cent respectively. This is likely influenced through the decline in population and lack of infrastructure for the aged.

The Warren–Blackwood sub-region has approximately 30 per cent of the population under the age of 25 years which is slightly less than the State and South-West averages of 33 per cent each. This age group however, has declined 2.7 per cent over the last five years, which is in contrast to the growth of the State and South-West of approximately 11 per cent over the same period. When analysed further, the decline was only evident in the Shire of Manjimup with all four remaining local governments experiencing limited growth. This is concerning given that Manjimup is the sub-regional centre of the Warren–Blackwood sub-region and has greater access to services and employment opportunities than other inland towns.

7.3.2 Economic growth

There has been relatively low growth in the labour force and the number of jobs available in the Warren–Blackwood sub-region. The labour force has grown 2.7 per cent over the last five years from 7,500 to 7,700. The unemployment rate has increased from three per cent to 4.4 per cent over the same period. Whilst this is still considered a 'low' unemployment rate, the changes indicate that the local economy cannot accommodate the number of jobs required as youth enter the labour force and the number of persons over 65 still in the workforce has increased 21 per cent over the last five years.

'Agriculture, forestry and fishing' as defined by the ABS is the primary employment sector of the Warren–Blackwood sub-region, accounting for 18 per cent of the workforce. Similar to the rest of the South-West, this employment sector has declined 10 per cent over the last five years. This is concerning given it is the primary employment sector of the sub-region. According to the Department of Food and Agriculture, this can be attributed to a number of factors, including:

- the restructuring of industries such as timber, dairy, viticulture, fruit orchards and general horticulture;
- increases in the scale of farm businesses through the leasing of other farmland;
- the retirement of older farmers; and
- the exiting of farmers from the industry.

Despite this decline, DAFWA figures indicate that gross value of agricultural production of land in the South-West has increased 22 per cent since 2008.

A number of other employment sectors have also declined over the last five years, including 'manufacturing' by 20 per cent; 'rental, hiring and real estate services' by 16 per cent; and 'wholesale trade' by six per cent. This is a result of factors such as the downturn in the economy; and a decline in population, and a subsequent low demand for housing.

Projects that support the diversification and strengthening of the Warren–Blackwood sub-region's economy, particularly those that provide opportunities for young adults, should be supported. This is particularly important for the stability of towns such as Nannup and Boyup Brook.

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Despite the declining sectors, a number of employment sectors have grown over the last five years. These include 'mining' by 43 per cent, 'electricity, gas, water and waste services' by 31 per cent, 'construction' by 20 per cent, and 'health care and social assistance' by 15 per cent. This can be attributed to continual investment in key service provision and an increase in 'fly-in-fly-out' workers in the sub-region.

7.3.3 Potential social infrastructure projects

This section outlines social infrastructure priorities that require further consideration and planning before being implemented through specific projects outlined in Table 3 or 4. (see Part B)

Hospitals

The Manjimup and Bridgetown hospitals each require upgrading to improve the level of services provided to the Warren–Blackwood sub-region. Given their proximity to each other it is important that they complement each other rather than compete for services.

The Southern Inland Health Initiative is a funding mechanism to improve health services in Manjimup. Funding has already been made available and work has commenced to attract and retain medical practitioners in these areas. It is acknowledged that this initiative will identify new projects that may require inclusion as a project in Table 3 or 4 (see Part B) of this document. These should be considered as part of any future reviews. It is important for the local communities in Nannup and Boyup Brook that their health facilities and hospitals are retained.

Public transport

The frequency, reliability and absence of public transport have been raised as infrastructure issues for the Warren–Blackwood sub-region. They can be considered on two levels: transport between towns and other sub-regions and transport within towns, particularly Manjimup, as the sub-regional centre. Public transport is the responsibility of the Public Transport Authority and as such, the location and frequency of services is determined through its own criteria. From a planning perspective, whilst it is desirable for all members of the community to have access to public transport, it is not always a

sustainable option particularly if the demand for the service is low. This issue requires further investigation before being considered for inclusion in Table 3 or 4. (see Part B)

Infrastructure projects and initiatives

The following table outlines the key social infrastructure projects and initiatives for the Warren–Blackwood sub-region as identified in Table 3 or 4. (see Part B)

Table 2, Table 3 and Table 4 reference no.	Details
WB6	Affordable housing in Manjimup
WB7	Sub-regional recreation and sporting facilities
WB8	Fire and emergency management facility upgrade at the Nannup Recreation Centre
WB9	Student accommodation
WB10	Crisis care facility in Manjimup
WB21	Manjimup 'Agricultural Expansion Initiative'

7.3.4 Potential economic infrastructure projects

This section outlines economic infrastructure projects and initiatives that require further consideration and planning before being implemented through specific projects outlined in Table 3 or 4. (see Part B)

Roads

Heavy haulage is considered a major issue in the Warren–Blackwood sub-region as the majority of towns are located on South Western Highway, which is the major haulage route to Bunbury and Perth. This has a major impact on the function, amenity and safety of the main streets of various towns. This is particularly an issue for Bridgetown, with the local economy reliant on visitors to the town. However, a consequence of redirecting trucks around the town centre is that this may also redirect tourist traffic. This issue needs to be carefully thought out when looking at further progressing this proposal. The Shire of Bridgetown–Greenbushes, through the

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local planning strategy, has identified the need for a heavy haulage bypass road around the townsite. This will require further planning and cross-government support prior to being considered as a feasible project and included in Table 3. (see Part B)

Rail

Similar to the road issue above, the main rail infrastructure through the Warren–Blackwood sub-region is located adjacent to the main road and as such runs through many of the towns located along South Western Highway. The rail line is currently unused and until there is a new resource or product sourced in the sub-region, it is likely to remain closed. This is an issue for the Manjimup townsite, with the rail line creating a barrier between residential and commercial areas. One of the key aspects of the SuperTown projects is to redevelop some of the rail line reserve to improve access for the community. For this to be effectively achieved a bypass corridor would be required to facilitate rail transport should it open in the future. It would be beneficial if this corridor also included road infrastructure for heavy haulage vehicles. As such this proposal requires further planning and cross-government support to proceed.

Water

Potable water and water for agricultural uses is an issue in the Warren–Blackwood sub-region. It is considered that the potable water issues particularly the lack of integration between towns will be addressed through the Water Corporation's major projects over the next 10–15 years, as outlined in Table 3 or 4. (see Part B)

Water for agriculture is not part of Water Corporation's network and is reliant on water allocations from the Department of Water as well as the catchment of water through other means such as dams. The current issue is the ability to move water from one farm to another as required. The Manjimup 'Agricultural Expansion Initiative' will investigate how this can effectively be achieved and what infrastructure is required to be implemented.

Infrastructure projects and initiatives

The following table outlines the key economic infrastructure projects and initiatives for the Warren–Blackwood sub-region as identified in Table 3 or 4. (see Part B)

Table 2, Table 3 and Table 4 reference no.	Details
WB1	Warren–Blackwood bridge refurbishment/replacement initiative
WB2	Upgrade key tourist routes in the region
WB3	Aggregation/disaggregation area for heavy vehicles
WB4	Upgrade water capacity in Warren–Blackwood region
WB5	Upgrade wastewater capacity in the Warren–Blackwood region
WB11	D'Entrecasteaux National Park camping expansion
WB12	Performing arts centre in Manjimup
WB13	Manjimup trails network
WB14	Pemberton trails network hub development
WB15	One Tree Bridge precinct
WB16	Walpole townsite and Coalmine/ Knolls precincts and Walpole and Nornalup inlets Marine Park access
WB17	Pemberton light industrial area
WB18	Walpole light industrial area
WB19	Waste destruction plant in Boyup Brook
WB20	Regional waste management
WB22	Bridgetown light industrial area

7.4 Leeuwin–Naturaliste

7.4.1 Population growth

The Leeuwin–Naturaliste sub-region is the second largest sub-region in the South West in terms of population, of which it accounts for 27 per cent. The sub-region has had the highest population growth over the last five years at 2.7 per cent per annum. This is attributed to the sub-region containing the second largest urban centre in the South-West in the City of Busselton. The City has a number of large scale greenfield developments such as Provence and Vasse–Newtown, which can accommodate population growth.

Similar to the other two sub-regions, the Leeuwin–Naturaliste sub-region also has an ageing population. The number of persons over the age of 65 has increased 23 per cent over the last five years – well above the State and South-West averages of 12.3 and 11 per cent respectively. Of this, the City of Busselton has increased 34 per cent in this age group. This growth will place substantial pressure on the existing infrastructure in the sub-region.

The Leeuwin–Naturaliste sub-region is consistent with both the South-West and State in terms of population growth in the under 25 years age group, at 14 per cent over the last five years. This is an important statistic when considering social infrastructure requirements such as schools and daycare facilities.

The household structure in the Leeuwin–Naturaliste sub-region has continued to grow and diversify in the last five years. The number of couples with no children or lone person households has grown by 18 per cent over this period. Similarly the number of couple and single parent families has grown by 15 per cent. This is relevant when considering the type, location and density of housing to suit the differing needs.

7.4.2 Economic growth

The strong population growth in the Leeuwin–Naturaliste sub-region has led to growth in the labour force there and subsequently, growth in the number of jobs. The total labour force has grown 13 per cent over the last five years from 17,421 to 20,066. The unemployment rate however, has also increased from 3.3 per cent to 4.7 per cent over the

same period. Whilst this is still considered a 'low' unemployment rate, the change is likely the result of the large increase in the workforce and the growth of the over 65s demographic, who are remaining in or returning to the workforce, which has grown 27 per cent over the last five years.

The Leeuwin–Naturaliste sub-region is renowned for its lifestyle, landscape and amenity as a key tourist destination. This is reflected in the number of people employed in the 'accommodation and food services' and 'retail' which combined represents 22 per cent of the total workforce. These two sectors have seen growth of seven per cent over the last five years. Investment in infrastructure such as the super yacht tender facilities would provide opportunities to further develop tourism diversity.

The 'mining' sector in the Leeuwin–Naturaliste sub-region has experienced the highest growth in the South-West at 52 per cent over the last five years. Given there is not currently any mining operation in this sub-region, this growth can be attributed to an increase of fly-in fly-out workers, with this service offered from Busselton airport; and also workers travelling to other sub-regions.

The majority of employment sectors in the Leeuwin–Naturaliste sub-region has grown over the last five years. The larger growth sectors include 'electricity, gas, water and waste services' and 'information media and telecommunications' at 30 per cent; 'education and training' at 27 per cent; 'administration and support services' at 24 per cent; and 'public administration and safety' and 'professional, scientific and technical services' at 21 per cent. This is likely attributed to the population and the requirement for an increase in services particularly from the public sector.

In contrast, the number of people working in the 'agricultural' sector has decreased by 14 per cent over the last five years. This can be attributed to a number of factors including restructuring of industries such as dairy, viticulture and fruit orchards, increases in the scale of farm businesses by leasing other farmland and the retirement of older farmers and farmers exiting the industry.

Other sectors that declined over the last five years include 'financial and insurance services' and 'rental, hiring and real estate services'. This can be attributed to the economic downturn and impact on the housing sector in particular.

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It is considered that the economy in the Leeuwin-Naturaliste sub-region is strong with varying growth in most sectors. This reflects Busselton's continual transformation into a major regional centre of the South West that supports the strong tourism economy in the sub-region.

7.4.3 Potential social infrastructure projects

The following section outlines social infrastructure projects and initiatives which require further consideration and planning before being implemented through specific projects outlined in Table 3 or 4. (see Part B)

Schools

The Department of Education determines the provision and location of schools. It is anticipated that as the need arises for additional facilities, the Department will undertake the necessary planning and provision of suitable facilities. There may be potential in the future for a co-located South West Institute of Technology / University campus.

Cemeteries and crematoriums

The City of Busselton has broadly raised the issue of cemeteries and crematoriums and the amount of land required to accommodate these. In most cases they are heavily constrained by encroaching residential, commercial and industrial land uses. It is considered that a regional view or strategy needs to be developed to identify appropriate areas to accommodate cemeteries and crematoriums which can be used by numerous local governments at a sub-regional or regional scale.

Infrastructure projects and initiatives

The following table outlines the key social infrastructure projects and initiatives for the Leeuwin-Naturaliste sub-region as identified in Table 3 or 4. (see Part B)

Table 2, Table 3 and Table 4 reference no.	Details
LN10	Women's refuge in Busselton
LN11	Fire station and career fire-fighters in Busselton

7.4.4 Potential economic infrastructure projects

This section outlines economic infrastructure priorities that require further consideration and planning before being implemented through specific projects outlined in Table 3. (see Part B)

Roads and trails

Due to the high population growth in the sub-region and the topography and natural constraints around Busselton it is anticipated that there will be issues accessing the Busselton CBD from south of the Broadwater wetlands by both visitors and residents in the future. There are currently only three main access routes via Causeway Road, Bussell Highway and Queen Elizabeth Avenue. The City of Busselton is currently investigating extending Ford Road through the wetlands along the current road reserve alignment. It is anticipated that this option would require significant environmental assessments and outside funding sources to be viable.

Walk trails are also highly valued in the sub-region with the Cape to Cape trail world renowned. It has been identified that there is a need for the development of trails that link with other established trails such as the Bibbulmun and Munda Biddi tracks. The location of such trails needs to be further investigated.

Rail

Fast rail access to Busselton has been identified as a regional priority in the long-term with the need to plan for the alignment and corridor as part of road planning for the region. It has also been identified that there is a need for a freight rail line to link the airport and adjacent industrial area with the Bunbury Port and State freight rail network. The alignment of this line needs to be addressed in the shorter term.

Port transport

The City of Busselton has identified an opportunity to provide cruise ship tender facilities at Busselton Jetty or an alternative jetty location to facilitate the berthing off shore of cruise ships. The feasibility study has been finalised and the project has now been added to the Table 4. (see Part B)

Infrastructure projects and initiatives

The following table outlines the key economic infrastructure projects and initiatives for the Leeuwin–Naturaliste sub-region as identified in Table 3 or 4. (see Part B)

Table 2, Table 3 and Table 4 reference no'	Details
LN1	Leeuwin-Naturaliste National Park scenic drive trails development
LN2	Regional boating facilities – Augusta Boat Harbour – Stage one
LN3	Regional boating facilities – Augusta Boat Harbour – Stage two
LN4	Artificial reefs – fishing and surfing
LN5	Network upgrade: Install second transmission line from Busselton to Margaret River sub-station from 66kV to 132kV
LN6	Expansion of Margaret River treated wastewater network
LN7	Upgrade water capacity in Leeuwin-Naturaliste region
LN8	Upgrade wastewater capacity in the Leeuwin–Naturaliste region
LN12	Busselton Foreshore
LN13	Rails to Trails Project
LN14	Margaret River Cultural and Events Centre
LN15	Performing arts centre in Busselton
LN16	Convention centre in Busselton
LN17	Leeuwin–Naturaliste National Park Boranup Forest picnic and trails development
LN18	Margaret River trails network development
LN19	Cruiseline and super yacht facilities in Busselton and Augusta
LN20	Capes Region waste management

8 Settlement hierarchy

The WAPC has adopted a settlement hierarchy for the South-West region, based on the role and function of existing centres. Bunbury² is the highest order centre in the South-West, and is the largest regional city in Western Australia outside of the Perth-Peel metropolitan area. Bunbury functions as the commercial and administrative hub of the South West. It supports the region's only port facility and is the centre of the it's rail and road networks. Almost half the people living in the South West currently live in, or around Bunbury. Many others commute to Bunbury from other centres for work.

Although less than one third the size of Bunbury, Busselton is the region's second largest centre. Busselton's relatively high growth rate has also been accompanied by strong economic growth. Busselton performs as a sub-regional centre for the Busselton-Margaret River region.

Manjimup and Collie are two other high order centres that function as sub-regional centres. These centres are significantly smaller in size than Bunbury and Busselton and subsequently have had traditionally much lower growth rates. The population in Collie has increased over the last five years (3.6 per cent) after having negative growth in the previous five years. The population of Manjimup continued to decline (0.5 per cent). The increase in Collie's growth is likely attributed to the mining and industrial expansion projects that have been undertaken in recent years and the number of employees required for these.

The WAPC promotes planned and staged development in existing settlements in the South West. When planning for expansion of settlements, consideration will be given to the function of the settlement as listed in Table 1 and the merits of each proposal. The settlement table is a guide only and if justification is provided, settlements can grow

³ The term "Bunbury" here is used to refer to the Bunbury urban area. It includes large urban areas in the shires of Capel, Dardanup and Harvey, and the City of Bunbury. Each of the areas that comprise Bunbury have their own character, identity and in some instances, local government administration centres. From a settlement perspective, Bunbury is regarded as one centre, in much the same way as Perth is viewed as a single city.

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larger than proposed. Local governments and/or developers must demonstrate to the WAPC why additional rezoning of land for development should be supported.

Table 1 lists the settlements in hierarchical order.

The size and growth potential of settlements is indicated in Map 8.

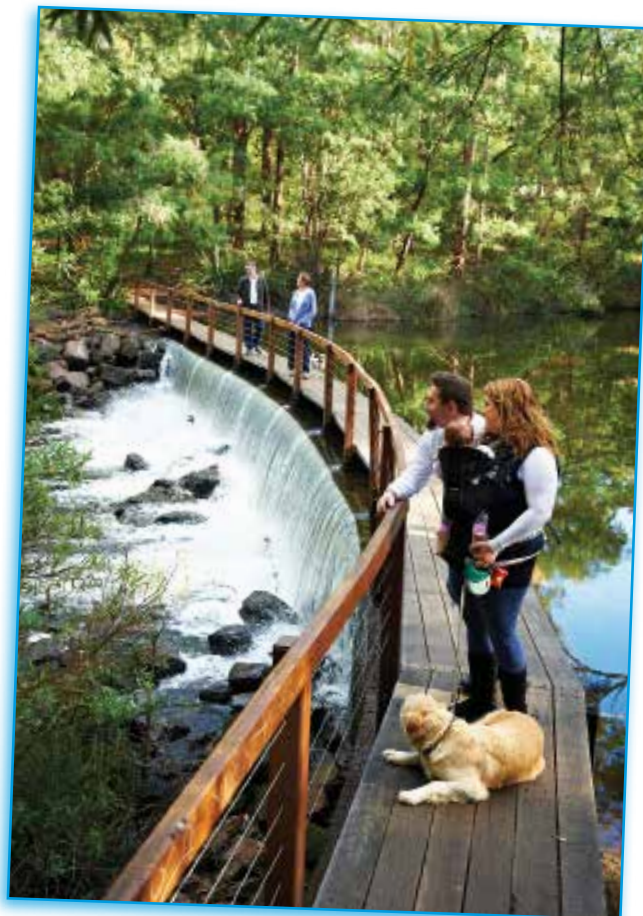


Table 1: Settlements

Settlement type	Settlement	Current population (Latest ABS data)	Current growth rate	Estimated growth potential	Infrastructure and services	Commercial and community	Key social, economic and environmental drivers
Regional centre	Bunbury *	57 550	High	High	Regional port, regional health campus, tertiary and technical institutions, private and public secondary schools, regional state administrative offices, regional transport hub (including regional airport), aged care facilities, rail connection to Perth, focal point of transport corridors and provides the only port for the region.	Regional, district and local	Regional centre. Focus of retail, commercial and administrative sectors and major services, tertiary and technical institutions. Bunbury will strengthen its role as a regional centre and will develop as the focus of industrial growth. In addition to traditional industry, the area will attract value-adding, sustainable industries to maximise economic advantages in the region. Expansion of the port is expected to drive economic growth in Bunbury and in the South-West.
	* Including urban areas of Eaton, Australind, Dalyellup and Gelorup						
Sub-regional centres	Busselton	22 000	High	High	Major district high school, district hospital, aged care facilities, regional airport (Busselton) and coal industry and infrastructure (Collie).	District and local	Major growth centres for their respective sub-region. Busselton will be a hub of diversified industrial and commercial sectors such as creative/ innovative and leisure industries. Will develop centres of excellence in environmental management, sustainability and education (Vasse). Busselton town centre will develop a vibrant tourism, commercial and retail economy through cultural tourism.
	Collie (excluding Allanson)	8 000	Low	Medium			
	Manjimup	4 300	Low	Medium			
Major towns	Bridgetown	2 700	Medium	Medium	High schools* (including agriculture colleges), tertiary institution, local hospitals, aged care facilities and local administrative centres. *in some cases to year 10 only.	District and local	Services and administrative centres for their surrounding districts. The centres have potential for growth in value-added, specialised and creative/innovative industries. Centres of agriculture, excellence in food, wine, sustainable industries to emerge. Their role as tourist and cultural centres, hosting a number of festivals and cultural events, will increase in importance.
	Donnybrook	2 500	Medium	Medium			
	Dunsborough	4 000	High	Medium			
	Harvey	3 300	Low	Medium			
	Margaret River	6 300	Medium	Medium (potential for high growth)			

Settlement type	Settlement	Current population (Latest ABS data)	Current growth rate	Estimated growth potential	Infrastructure and services	Commercial and community	Key social, economic and environmental drivers
Towns	Augusta	1 300	Low	Low	Local medical services, aged care facilities, primary school and local shopping facilities.	Local level* * Nannup and Boyup Brook are the administrative centres and the only towns in their local government.	Service and/or administrative centres for rural areas only. Boyup Brook, Nannup and Pemberton will develop their role as cultural centres of the region and will increase in importance for tourism based on their local and cultural identities. Dunsborough will consolidate as a vibrant, boutique holiday town. Brunswick Junction and Capel will provide an opportunity to accommodate residents employed in Bunbury. Diversification of industry to promote some value-adding and tourism. Augusta has the natural attributes to support a vibrant retail, hospitality and tourism industry. It has the capacity to accommodate increase in population, and support industries related to tourism and renewable energy.
	Boyup Brook	900	Low	Low			
	Brunswick Junction	1 200	Low	High			
	Capel	2 200	Medium	High			
	Nannup	1 000	Low	Medium			
	Pemberton	1 000	Low	Low			
Villages	Balingup	400	Low	Low	Primary schools in some locations. Local shopping facilities and aged care facilities. May have a local shop only. Some locations have limited tourism facilities.	Convenience services and community focus.	Small self-sustaining communities that rely on nearby towns for high order goods and services. The coastal towns of Yallingup, Gracetown, Prevelly/Gnarabup and Walpole are scenic tourist nodes. The coastal settlements of Myalup, Binningup and Peppermint Grove Beach have a low-key residential and holiday role. The coastal towns, together with the villages of Balingup, Cowaramup, Witchcliffe, Karridale, Northcliffe and Yarloop, have a distinct identity, character and role. The villages are known for their collaborative festivals, local culture and industries. Greenbushes is a local centre for mining and heritage. Boyanup, Burekup and Dardanup are residential enclaves for Bunbury.
	Binningup	1 000	Medium	Medium			
	Boyanup	1 300	Medium	High			
	Burekup	500	Medium	High			
	Cowaramup	1 100	Medium	Medium			
	Dardanup	450	Medium	High			
	Gracetown	300	Low	Low			
	Greenbushes	300	Low	Low			
	Karridale	300	Low	Low			
	Kirup	300	Low	Low			
	Mullalyup	300	Low	Low			
	Myalup	100	Low	Low			
	Northcliffe	300	Medium	Low			
	Peppermint Grove Beach	400	Medium	Low			
	Prevelly/Gnarabup	400	Low	Low			
	Walpole	700	Low	Low			
	Witchcliffe	300	Low	Medium			
	Yallingup	1 100	Low	Low			
	Yarloop	500	Low	Low			

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Acronyms and abbreviations

ABS	Australian Bureau of Statistics
AAGR	Average annual growth rate
AMR	Augusta - Margaret River
BPA	Bunbury Port Authority
BTC	Bunbury Turf Club
BWGC	Bunbury Wellington Group of Councils
CoB	City of Bunbury
DAFWA	Department of Agriculture and Food
DCPFS	Department for Child Protection and Family Support
DFES	Department of Fire and Emergency Services
DoE	Department of Education
DoP	Department of Planning
DPaW	Department of Parks and Wildlife
DoT	Department of Transport
DRD	Department of Regional Development
DSD	Department of State Development
DSR	Department of Sport and Recreation
DTWD	Department of Training and Workforce Development
DoW	Department of Water
EPA	Environmental Protection Authority
h	hectare
ICC	Infrastructure Coordinating Committee
LGA	Local Government Authority
m	metre
MRWA	Main Roads WA
PTA	Public Transport Authority
RWWA	Racing and Wagering WA
SJAA	St John Ambulance Australia
SWDC	South West Development Commission
SWPIFAC	South West Planning and Infrastructure Framework Advisory Committee
SWRPC	South West Region Planning Committee
the Framework	South West Regional Planning and Infrastructure Framework
WAPC	Western Australian Planning Commission

Further information

Submissions on the Framework received from the following agencies:

Bunbury Port Authority

City of Bunbury

City of Busselton

Department of Agriculture and Food

Department of Parks and Wildlife

Department of Fire and Emergency Services

Department of Education

Department of Indigenous Affairs

Department of Transport

Department of State Development

Department of Sport and Recreation

Department of Training and Workforce Development

Department of Water

LandCorp

Main Roads WA

Racing and Wagering WA

Regional Development Australia

Shire of Augusta-Margaret River

Shire of Bridgetown – Greenbushes

Shire of Boyup Brook

Shire of Capel

Shire of Collie

Shire of Dardanup

Shire of Donnybrook – Balingup

Shire of Harvey

Shire of Manjimup

Shire of Nannup

South West Development Commission

State Heritage Office

Water Corporation

Western Power

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