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## **LOCAL PLANNING STRATEGY**

# FOR THE NARROGIN, PINGELLY AND WICKEPIN AREA

## PREPARED FOR THE SHIRE OF PINGELLY

MAY 2004 (AMENDED NOVEMBER 2010)

Endorsed by the Western Australian Planning Commission 27 March 2007

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## **EXECUTIVE SUMMARY**

#### INTRODUCTION

#### **BACKGROUND**

- 1. The Strategy Area comprises the Town of Narrogin and the Shires of Narrogin, Wickepin, Pingelly and Cuballing. It is within the Central South Sub Region of the Wheatbelt Region. Statistically there has been no comprehensive review or analysis of the sub region since 1988. Although the Shire of Cuballing forms part of the strategy area as they have prepared their own Local Planning Strategy, this local planning strategy applies to the remaining local authorities only.
- 2. Physically the Strategy Area is at the divide between the Avon, Murray and Blackwood catchments. This has resulted in the creation of statistical divisions by AGWA, the ABS and others, which need to be disaggregated, to enable the background data for the Strategy Area to be assessed and monitored.
- 3. The Strategy Area is at the crossroads between the South West, Great Southern and the Central Wheatbelt and between Perth and the South West. Though Narrogin is only 100 km from Armadale or 150 km to the coast in a direct line, public perception is that the area is remote and "off the beaten track". The regions accessibility and proximity to urban centres needs to be promoted and better links to the Peel Region needs to be investigated. A regional identity needs to be established.
- 4. In 2000 there was an estimated 72,596 people living in the Wheatbelt Region which was 3.9% of the State's population and 14.1% of regional Western Australia's population. The Central South Sub Region comprises 28% of the Wheatbelt Region and contains approximately 25% of the Wheatbelt population. The 2001 population for the Central South Sub Region was 18 737 compared to 19 829 in 1996 and 22 870 in 1981. The population is spread across 21 towns and several smaller localities. (See Table 4).

The western portion of the Central South Region forms the Hotham Statistical Subdivision. It has approximately three times the population of the eastern portion or Lakes Statistical Division.

The 2001 population for the Strategy Area totals 8165 compared to 8287 in 1996 and 9070 in 1981. 83% of the population lives in the towns of the Strategy Area.

5. In assessing future population growth for the Strategy Area, the WAPC forecasts indicate that the rural areas are likely to remain at a constant and static level of population while the Towns of Narrogin, Pingelly, Wickepin and Cuballing have the potential to increase at a gradual rate. (See Table 4)

The current population projections prepared by the WAPC show a steady increase in the Wheatbelt's population over the next 30 years which is estimated to reach 118,000 with the major growth areas being the local authority areas adjoining the Perth Metropolitan Region. If the Central South Sub-Region were to maintain its proportion of population growth, then the sub region population would grow to 29,000 over the 30 year period with the proportion which comprises the Strategy Area growing to 13,300, an increase of just over 5000 persons.

6. Agricultural production in the Strategy Area has increased from \$77.5 million in 1983 to \$115.3 million in 1999. The major contributors in 1999 were wheat (\$37m), wool (\$23m), sheep sales (\$12m), hay and pasture (\$7.7m), hay crops (\$6.6m), pig sales (\$6.4m), oats (\$6.1m) and barley (\$5.3m). New crops introduced since 1983 or minor products in 1983 where there are significant increases include lupins (all LGA's), canola (all LGA's), chick peas (Pingelly), triticale (Pingelly) and nurseries (Narrogin and Wickepin). While there has been steady, and in some cases, significant increases in the major produce of wheat, sheep sales, hay and pasture, hay crops and pig sales and more modest increases in wool, cattle sales and barley, there have been decreases in oats, poultry, eggs and milk (see Tables 6 & 7).

Employment in the agriculture sector comprises 27% of the rural population in the Strategy Area.

- 7. In the Central South Sub Region in 1986 there were 58 manufacturing establishments employing 235 people (WDC, 1989). This represented 2.4% of the workforce significantly lower than the States' then manufacturing employment of 11.3%.
  - In Narrogin in 1986 there were 16 manufacturing establishments employing 104 persons, 2 in Pingelly, 5 in Cuballing and 1 in Wickepin. Those firms manufacturing wood products are located in proximity to the Dryandra Forest.
- 8. The majority of dwelling approvals in the Wheatbelt Region are in the local authorities adjoining the metropolitan region. Building activity in the Strategy Area for 1997-2001 is predominantly in the Town of Narrogin. (See Table 9)
- 9. In 1987 there were 149 wholesale trade establishments and 371 trade outlets in the Central South Sub Region. This sector employed 1,205 persons making it the second largest employer in the region. Retail establishments in the Town of Narrogin numbered 85 with a further 3 in the Shire of Narrogin, 13 in the Shire of Wickepin and 21 in the Shire of Pingelly.
  - In 2002, commercial establishments in the Town of Narrogin had increased to 192 including retail, service industry, other commercial and general industry.
- 10. The Dryandra Woodlands is one of the Central South's three major tourist attractions, attracting 30,000 visitors/year compared with 66,000/year to Wave Rock at Hyden.

There are few other physical tourist attractions in the Strategy Area. However there is the potential for the area to attract visitors through special events utilising its magnificent sporting facilities and taking advantage of the climatic and seasonal factors.

The Greater Dryandra and Central South Tourism State of the Industry report, January 2003 (WDC, 2003) proposes a restructuring of tourist services with a parent Dryandra Visitor Centre in Narrogin with satellite information centres at Cuballing, Pingelly, Wandering and Wickepin.

- 11. All the Shires and major towns within the Strategy Area are serviced with potable water from the Great Southern Towns Water Supply Scheme.
- 12. The Towns of Narrogin and Pingelly each have a wastewater scheme operated by the Water Corporation. Wickepin has a Council operated waste water scheme.
- 13. The Strategy Area is supplied with power from a substation at Narrogin. The network consists of a 22kv main line from which 12.7kv single phase spurs tee off to supply the rural community. The supply to the Shire of Pingelly comes from Western Power's Narrogin substation. Typically rural distribution networks are characterised by having limited ability for provision of bulk loads and are not as reliable when compared to urban distribution systems.

The load growth for the Shires of Narrogin, Pingelly and Wickepin is small. There will be significant work required to provide for any bulk load in the Shires of Pingelly or Wickepin. In general it will be easier to supply a large load the closer it is located to the Narrogin substation. The imposition of commercial loads on the 12.7kv systems will in most cases require the installation of 22kv three phase. The planning horizon for the identification of distribution system requirements is 5 years.

#### THE STRATEGY

#### **REGIONAL**

14. A Local Planning Strategy provides the physical basis to implement or to allow the implementation of a local authority's strategic objectives through its Local Planning Scheme.

In this instance where the Strategy Area comprises five local authorities we have reviewed relevant regional as well as local authority reports. These have included previous studies primarily focusing on economic issues prepared by the Wheatbelt Development Commission, in particular the findings of the recent report of the Central South Action Group as well as consideration of the objectives of Strategic Plans prepared by the Town of Narrogin and the Shire of Wickepin which themselves have resulted from input from their respective communities. These have been supplemented by workshops and investigations with Council representatives and officers and Government Agencies.

- 15. This has enabled the identification of planning issues to be addressed in this Local Planning Strategy and in response, the establishment of the following strategic objectives:
  - the maintenance and enhancement of the attractive features of a country lifestyle;
  - the establishment of an identity for the region which promotes the above values and is attractive to new industry and existing and new residents;
  - the management of population growth/decline;
  - the facilitation of economic development in accordance with the above objectives;
  - the protection of prime agricultural land;

- the facilitation of new agricultural uses in rural areas subject to proposals meeting acceptable performance criteria;
- the incorporation of natural resource land management practices in development and subdivision proposals;
- 16. The Strategy promotes the concept of the Strategy Area as a single planning unit to take advantage of economies of scale and to justify higher order facilities and services through an enlarged catchment. This requires individual local authorities to ignore local boundaries and to adopt a regional/sub regional approach to planning.

Specifically the LGA's of the Strategy Area can through this LPS:

- Formulate common regional goals independent of local government boundaries.
- Support regional tourism strategies/recommendations where possible.
- Support regional marketing strategies/recommendations where possible.
- Ensure individual local government strategy plans are supported by this Strategy and the Local Planning Scheme.
- Ensure that strategic major links required outside the region are developed.

Importantly it needs to be recognised that the most effective means to create this identity is to promote and enhance Narrogin as the regional centre.

- 17. For planning purposes, this approach has extended beyond the participating local authority boundaries to incorporate local authority areas within 50 km of Narrogin to the west, north and south, and 100 km to the east. (See Figure 17) This equates to 30 minutes and 60 minutes of travelling time to the Regional Centre of Narrogin similar to metropolitan access to higher order facilities and services and represents an identifiable catchment for Narrogin. The catchment's current population is 14 00015 000 persons. It approximates 75% of the Central South Sub Region of the Wheatbelt Region. The catchment population would need to increase to a minimum 25 000 to attract higher order facilities and services to Narrogin.
- 18. The sub-region needs to forge an individual identity to assist social cohesiveness economic co-operation and to promote the sub-region to new industry and new residents. This is consistent with the recommendations of the Wheatbelt Development Commission.
- 19. Within the Strategy Area, local government initiatives should in the first instance be concentrated in the major towns and within the triangular area defined by Pingelly, Narrogin and Wickepin and the major transport corridors between them.
- 20. The Strategy supports the location of new industry within this triangle. Realistically, major industry requires a significant power load and will need to be located close to or south of Narrogin because of the cost of the infrastructure upgrade required elsewhere, unless a significant industry such as the kaolin mine east of Wickepin were to be commissioned which may justify a power upgrade elsewhere.
- 21. The Strategy incorporates a settlement hierarchy to enable development programmes to be focused in appropriate areas according to their designated function in the hierarchy. This focuses efforts to attract industry and makes more efficient use of current and proposed infrastructure.

- 22. Key features of the Settlement Strategy are:
  - Narrogin is recognised as the regional centre and all the local authorities in the Strategy
    Area should lobby for the higher order services to be located in Narrogin.
  - Outside of Narrogin, all other town centres are considered as satellite centres where rural residential and rural smallholding development should be encouraged. This includes local centres, Pingelly, Cuballing, Wickepin, as well as rural townsites Popanyinning, Yealering and Highbury.
  - Smaller towns such as Dattening, Moorumbine, Tincurrin, Toolibin and Harrismith are regarded as rural hamlets where rural residential can be accommodated provided the availability of an adequate potable water supply can be demonstrated as well as adequate water for land management where appropriate.
- 23. Target populations have been set for each settlement to allow for accommodating population growth in the planned hierarchy, when and if, demand increases. The target populations are based upon a preliminary assessment of surplus capacity in each townsite. With the exception of Narrogin no provision has been made for population growth outside of existing townsites. If town capacities are reached, the total population will be double the current population and provide the regional critical mass to justify the higher level of facilities and services associated with a regional centre. (See Table 12 and Figure 20)

#### RURAL

- 24. The Strategy Area is a prosperous farming area which is seen to readily adapt to new technologies, new management practices and new crops. These initiatives are supported in the Strategy through recommending more flexible land use provisions in the local authority Local Planning Schemes to allow new and innovative changes to land uses provided they meet specified performance criteria to ensure that there is no adverse impact on existing surrounding agricultural activities. As the current predominant land use and lot size does not threaten the maintenance of broadacre agriculture it is recommended that the rural zone be zoned "General Agriculture" in all Local Planning Schemes with provision made for Intensive Agriculture for specific acceptable proposals.
- 25. Currently the demand for rural smallholdings in the Strategy Area, either for residential purposes or as hobby farms is modest.

Notwithstanding, the towns closer to the metropolitan region have a small but demonstrated market. In accordance with the proposed settlement hierarchy, we recommend that the focus for this type of development be within current townsite boundaries or abutting the smaller towns, particularly those with a reticulated water supply. Those not on scheme water would need to adequately demonstrate the availability of a potable water supply. Except for the smaller rural townsites special rural development contiguous with the townsite boundaries is not favoured. The Local Planning Scheme should include provisions for a Rural Smallholdings Zone, that should also include performance standards/assessment criteria for Rural Smallholdings proposals.

- 26. Because of Government initiatives in relation to sustainability of practice and the programme to reduce or ameliorate the impacts of salinity, the Strategy recommends that the Local Planning Scheme includes provisions relating to tree planting, arterial drainage and the construction of dams. Vegetation corridors based upon tree planting and fencing programmes are recommended along the major water courses particularly where they link town centres and where there may be the opportunity to develop a series of heritage trails. These proposals need to be integrated with ongoing landcare programmes. Subdivision and development resulting from or consistent with achieving the above objectives should be supported.
- 27. The Strategy recognises the major transport network as a landscape amenity corridor and Councils should adopt a general Landscape Management Policy as well as specific guidelines for development within the corridor. The corridor should be recognised as such in Councils' Vegetation Management Plans and programmes initiated to maintain and enhance its visual amenity where possible.

#### **URBAN**

- 28. Narrogin, Wickepin and Pingelly are all classic, legible railway towns where there is easy access to the town centre in a rural setting. Each has a high percentage of vacant and/or absentee owner land within their boundaries. As there is no evidence of excess demand, the original townsite framework should be maintained and in-filled and contained within a green belt to reinforce demarcation between urban and rural.
- 29. A variety of choice and lifestyles and housing is proposed within the urban areas of the Strategy Area where it is economically, socially and environmentally viable. Quality and innovation in design of settlements should be encouraged so that the landscape and streetscape character are maintained or enhanced.
- 30. Pingelly and Narrogin as the larger centres need to retain those features which make country living attractive. Each is compact and legible with ease of access to community facilities. Each is a classic railway town with distinctive town boundaries. These boundaries need to be retained as a clear delineation between urban and rural.
- 31. The Strategy proposes R20/R30 residential development close to the commercial centres of Pingelly and Narrogin and above commercial premises.
- 32. In urban areas, residential densities should be made more flexible and increased in sewered areas. It is proposed that a split code is allocated to each area with the first code representing the average density and the second code representing the maximum density. A three tier hierarchy is proposed which reflects country town values as expressed through the community input to this strategy.

	Average	Max
Rural Residential and unsewered urban areas	R2	R5
Sewered areas	R12.5	R20
CBD, town centre and adjoining areas	R20	R30/R40
	(subject to bo	nus provisions)

- 33. Townscape plans prepared for Narrogin, Wickepin and Pingelly are recommended for review and reactivated. This will enhance community pride in the most visible part of the region. The concept of a core triangle corridor between Narrogin, Pingelly and Wickepin will provide the framework for the formulation of an events calendar for visitors.
- 34. A consistent zoning is proposed for all local authority Local Planning Schemes. For the commercial areas it is as follows:
  - Central Business District; (Narrogin)
  - Town Centre (Pingelly, Wickepin)
  - Rural Townsite (Highbury, Yealering, Popanyinning)
  - Rural Hamlet (Moorumbine, Dattening, Tincurrin, Harrismith, Toolibin)
- 35. To maintain simplicity, proposed zones are Mixed Business, Composite Residential/Light Industry, Light Industry, General Industry, Civic/Community, General Agriculture, Rural Smallholdings, Intensive Agriculture (only if necessary), Rural Residential, Special Use. Provision is also made for additional/restricted uses.
- 36. Local Planning Policies are recommended for:
  - Townscape and urban design guidelines in town centres;
  - Vegetation management in designated Vegetation Corridors;
  - Visual management in designated amenity corridors;
  - Natural resource management best practices in rural areas in conjunction with rezoning, change of use and/or subdivision proposals;
  - Heritage protection/townscape provisions for heritage buildings/precincts;
  - Performance criteria for the introduction of new rural uses into the "general agriculture" zone.

### **Pingelly**

- 37. Recommended zones for the Pingelly, Moorumbine and Dattening townsites reflect the zoning categories described above.
- 38. Pingelly townsite includes large areas of vacant land where infill development should be encouraged. A register of vacant blocks needs to be established and those for which rates have not been paid be made available to the market. It is recommended that the Wheatbelt Development Commission initiate negotiations with the Water Corporation with a view to seeking a modification to their policy in respect to the recovery of rates on vacant land, so as to enable such land to be put on the market and be able to generate rates.
- 39. To enable more centrally located land to be developed for compatible Town Centre activities, Council should consider gradually relocating their depots to the industrial area.

- 40. A specially planned composite residential/light industry zone should be investigated for a proportion of the current industrial zoned area in the north of Pingelly townsite.
- 41. Specific routes through and around Pingelly for heavy vehicle traffic are proposed to improve townscape opportunities for town centre development on either side of the railway.
- 42. Rural residential development should not be contiguous with the town boundary which should remain as a clear urban/rural demarcation (green belt).

#### LOCAL PLANNING STRATEGY

## 1.0 STATE AND REGIONAL PLANNING CONTEXT

#### 1.1 WHAT IS A LOCAL PLANNING STRATEGY?

The Town Planning Amendment Regulations 1999 introduced the requirement for local authorities to prepare a Local Planning Strategy (LPS) when they envisage the zoning or classification of land through the preparation or the review of a Local Planning Scheme.

Regulation 12A (3) of the Town Planning Amendment Regulation 1999 requires that a Local Planning Strategy shall:

- (a) set out the long-term planning directions for the local government;
- (b) apply State and regional planning policies; and
- (c) provide the rationale for the zones and other provisions of the Scheme.

The Local Planning Strategy replaces the former Town Planning Scheme Report required to precede the preparation or review of Local Planning Schemes and should incorporate any existing Rural, Commercial, Industrial, Residential/Housing, Tourism or other strategies relating to the local government. The LPS needs to be reviewed on a regular basis to respond to changing circumstances.

A Local Planning Strategy should be:

- A "leadership" document which provides strategic planning direction for the next 15 years or longer as distinct from the Local Planning Scheme, which manages that growth within a statutory framework.
- A document which sets out the direction for economically, socially and environmentally sustainable development based on a comprehensive analysis of state, regional and local planning issues and objectives.
- A document which gives direction both to local government, the Department of Planning and Infrastructure, the WAPC and the Minister in assessment of amendments, subdivision, development and provides strategic planning support for this decision making.
- A document which provides the basis for co-ordinated decision making on future servicing of the local government area by local, state government and any other service agency.
- A document which explains/justifies the strategic direction for growth and development to all stakeholders.

The LPS should be consulted when questions of background data about the Shire emerge in relation to the Scheme Text and Maps. It may also be useful during the planning approval process to provide the background reasoning for decisions where Council is required to use its discretionary decision making powers.

The LPS effectively forms part of the Local Planning Scheme and provides a broader 10-15 year vision for the formulation of the Scheme Text and Maps which operate over a 5 year timescale.

The LPS should also assist the public's understanding of:

- · How State and regional policies apply to the municipality; and
- The planning rationale for the zones, reservations and statutory provisions contained in the Local Planning Scheme.

In essence, the LPS is the community's vision for the municipality and how this will be reflected in longer term directions for land use and development, anticipating growth and change. It will determine the preferred pattern of rural land use and settlement having regard to the most appropriate future for agriculture, the growth and form of urban areas and other settlement forms such as rural residential and rural smallholding areas.

This Local Planning Strategy applies at three levels.

At the regional level it applies to the Central South Region as defined by the Wheatbelt Development Commission. The Central South Region comprises 15 local authorities in which Narrogin is the major town (See Fig. 1).

Within the Central South Region, the local authorities of Pingelly, Narrogin (Town and Shire) and Wickepin have sought specific direction for their sub region within the wider regional context. For these purposes the above local authority areas together with the adjoining Shire of Cuballing, who have already prepared a Local Planning Strategy, comprise the Strategy Area (See Fig. 1). This is the second level of investigation.

The third level of investigation is at the local level. At this level the Local Planning Strategy provides the framework for a new or reviewed Local Planning Scheme for each local authority area. The Strategy therefore identifies issues specific to each municipality, as well as those common to the whole of the Strategy Area.

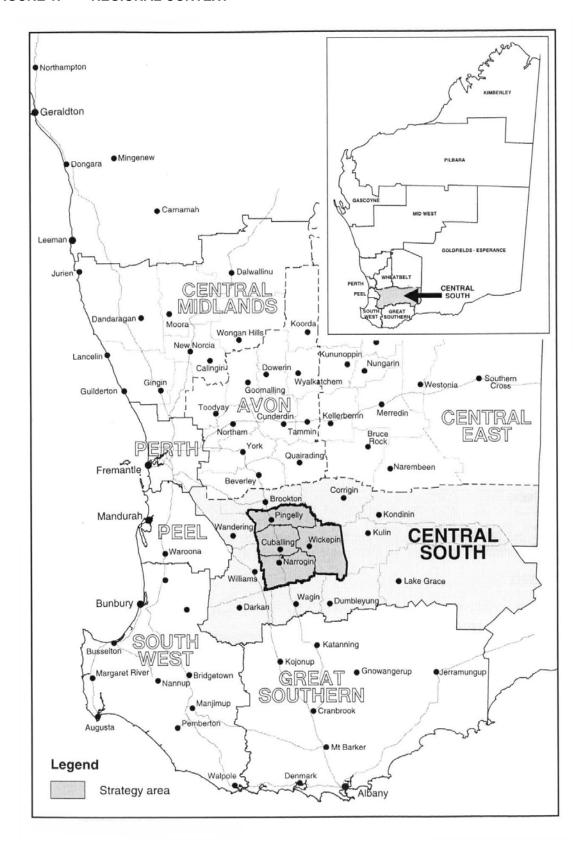
This LPS is in two parts. The first part is a description of the elements and features common to the region and sub region. The second part comprises the strategy for the participating local authorities with a section tailored to each individual local authority.

Planning issues are categorised as either regional, rural or urban. The issues have been identified as a result of stakeholder interviews and community input either through previous community initiatives or through workshops carried out specifically for this project.

A series of possible Strategy responses to the issues are provided before recommending a preferred course of action.

This document is in draft form and is made available for further community input prior to finalisation. It recommends Local Planning Scheme provisions where possible to address individual issues consistent with the recommended preferred course of action.

FIGURE 1: REGIONAL CONTEXT



#### 1.2 LOCAL PLANNING SCHEMES

A Local Planning Scheme provides for the reservation or zoning of land for a particular use or class of uses. Schemes can be made flexible to allow for a number of uses in particular zones or rigid to limit the number of uses. The more flexible the Scheme the more open it is to the discretionary decision making of a Council. The more rigid a Scheme the less opportunity for a Council to use its discretion and the less opportunity to accommodate innovative or unforseen proposals which may have been otherwise acceptable except for the rigidity of the Scheme

Many responses to identified issues are outside the purview of a Local Planning Scheme. In some cases, to achieve satisfactory outcomes, support will be required through other statutes (local laws), council policies and voluntary community co-operation.

When finalised and approved by Council, a new Local Planning Scheme will be prepared or the existing scheme reviewed, to implement the recommended course of action contained in the Strategy.

Clause 2.1 of the Town Planning Amendment Regulations 1999 requires that except to the extent that a Local Planning Strategy is inconsistent with a Scheme, determinations of a local council under the Scheme are to be consistent with the Local Planning Strategy.

#### 1.3 LAND USE PLANNING HIERARCHY

Figure 2 indicates the regional and local land use planning hierarchy operating through each tier of government.

Each level of the planning framework focuses on different time scales;

#### <u>Strategic</u>

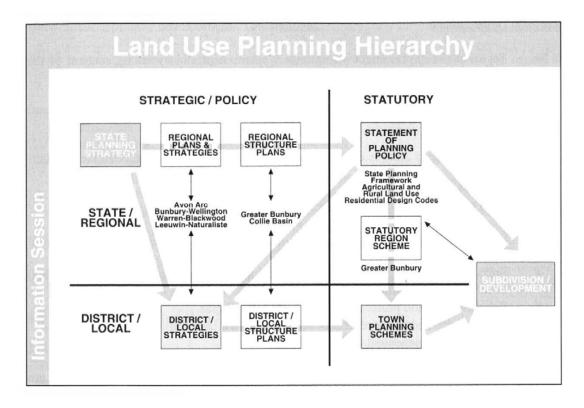
- Regional Plan 30 years
- Structure Plan 10-20 years

## Statutory

- Region Scheme provides zoned land for 10-20 years
- Local Planning Strategy 15 years
- Local Planning Scheme 5 years

In this case as some strategic planning levels are absent they have been effectively incorporated into this LPS. For example as there is no regional plan for the Strategy Area and its Sub Region, this LPS has looked at a longer term vision than the recognised 15 year term. Additionally as there is no region scheme programmed, zoning and reservation proposals take on a broader context consistent with the principles and recommended actions of the State Planning Strategy.

FIGURE 2: LAND USE PLANNING HIERARCHY



## 1.4 THE STATE PLANNING STRATEGY

The State Planning Strategy is the overarching planning document for the State. It sets out five key principles for planning in WA:

## **Environment**

 To protect and enhance the key natural and cultural assets of the State and deliver to all West Australians a high quality of life which is based on environmentally sustainable principles.

## Community

 To respond to social changes and facilitate the creation of vibrant, safe and selfreliant communities.

## **Economy**

 To actively assist in the creation of regional wealth. Support the development of new industries and encourage economic activity in accordance with sustainable development principles.

## Infrastructure

 To facilitate strategic development by making provision for efficient and equitable transport and public utilities.

#### Regional Development

• To assist the development of regional Western Australia by taking account of the special assets and accommodating the individual requirements of each region.

The State Planning Strategy designates Narrogin as a regional service centre and Pingelly and Wagin as local service centres.

The whole of the Strategy Area is considered as a "Productive Agricultural Area under High-Extreme Soil Salinity Risk".

The Strategic Objectives in the Strategy for the Wheatbelt Region are:

- Development of a range of expanded and consolidated towns linked by improved transport infrastructure.
- Encouragement of innovation in agriculture, environmental management and downstream processing of agricultural products.
- Rehabilitation and protection of productive farmlands.
- Maintenance and enhancement of vibrant, viable inland communities.
- Sustainable management of resources.

The principles espoused in the Strategy in relation to "Environment and Resources" are consistent with those of the WAPC's "Agricultural and Rural Land Use Policy" (see Section 1.5.2).

Actions listed which are relevant to the Strategy Area are:

- Adopt planning principles to provide for sustainable environmental management. This includes:
  - the rehabilitation of salt affected areas.
  - the revegetation of water catchments.
  - the protection of prime agricultural land.
  - the protection of landscape values.
  - the protection of basic raw materials near townsite.
  - the protection of heritage values.
- Investigate the use of performance based standards for rural land and for the application of these standards in Local Planning Schemes. These include:
  - the avoidance of land use conflict through the provisions of the Local Planning Scheme.
  - the encouragement and relocation of chicken and pig farms from the Perth Metropolitan Region.
  - the promotion of niche agricultural products including aquaculture (fresh and saltwater).
  - the recognition of tourism as a legitimate compatible land use with a range of land uses.
  - the promotion of public access to telecommunications such as "telecentres".

The Strategy recommends the adoption of innovative and flexible Local Planning Schemes to allow future economic development. This includes:

- An assessment of the current and future infrastructure requirements for the region to ensure new industries can develop.
- The implementation of the road network upgrades recommended in the MRWA's Roads 2020 Strategy.
- The need to investigate the establishment of a research centre in environmental management.
- A new approach to planning areas of low or declining population including the promotion of nodal urban settlement patterns in agricultural areas separated by agricultural/green belts.
- The flexibility to promote the diversification of local economies into markets such as downstream processing of agricultural products.
- The investigation of commuter rail links to Northam and a road freight link to Kwinana.
- The pursuit of heavy haulage bypass routes to the major centres.

#### 1.5 STATEMENT OF PLANNING POLICIES

A Statement of Planning Policy (SPP) is a statutory policy of the Western Australian Planning Commission (WAPC), prepared pursuant to section 5AA of the former Town Planning and Development Act 1928 (as amended) and is approved by the Commission, Minister, Cabinet and the Governor, prior to gazettal.

The SPP guides the planning and decision making activities of the:

- · Western Australian Commission;
- The Department of Planning and Infrastructure;
- Local Government; and
- The Town Planning Appeals Tribunal.

A local government is required to have due regard to a SPP when:

- Amending or reviewing Local Planning Schemes;
- · Preparing local planning strategies; and
- Giving advice to the WAPC.

A Local Planning Scheme in having due regard to an SPP, may include a provision that such a policy shall be read as part of the Local Planning Scheme.

SPP's relevant to the Strategy Area include:

- State Planning Framework;
- · Agricultural and Land Use Planning Policy;
- Environment and Natural Resources Policy (draft);
- Residential Design Codes;
- Public Drinking Water Source Policy;
- · Water Resources; and

Urban Growth and Settlement.

#### 1.5.1 State Planning Framework

The State Planning Framework is a Statement of Planning Policy (No.8) which applies to all land within Western Australia. It is an amalgamation of all planning policies, strategies and guidelines of the State that provide direction on the form and methods of growth and development

A number of strategic policies apply to, and will influence the LPS for the Strategy Area. Operational policies within the Framework that are relevant are general policies on subdivision and development, policies relating to specific uses for commercial, industrial, residential, open space and other uses. These policies address siting, development and management issues. Of particular relevance to a predominantly rural area, are policies relating to bushfire protection, hazard and safety reduction, land use buffers, and land capability.

The State Planning Framework provides for a local government to incorporate any provisions of the Framework by reference in a local scheme with the consent of the Minister, so that the selected provisions have the force of the law under the scheme.

## 1.5.2 Agricultural and Rural Land Use Planning Policy (SPP No. 2.5)

The State Government has recently released a Statement of Planning Policy No. 11 (now SPP No. 2.5) which applies to rural and agricultural land in the State.

SPP 11 requires Local Planning Strategies to address its four major objectives which are:

- Rural settlement, hierarchy and pattern.
- · Protection of significant agricultural land.
- · Management of natural resources.
- Minimisation of land use conflict (though zoning and subdivision control).

As it is a Statement of Planning Policy adopted under Section 5AA of the former Town Planning and Development Act, the provisions of the Policy are to be applied to the LPS and Local Planning Scheme which must incorporate the identification of Priority Agriculture Areas and other rural land uses and activities including rural-residential areas.

Identifying Areas of Agricultural significance.

SPP 11 provides a detailed process to identify areas of Agricultural Significance. (Miscellaneous Publication 15/2000. Department of Agriculture).

The key points are that the process:

- Must be undertaken in consultation with the community.
- Should be undertaken in preparation of a local or regional planning strategy.
- Takes into account not only soil capability but also suitability factors in identifying Areas of State/Regional Agricultural Significance.

Allows Local government to identify areas of local agricultural significance.

The LPS and Local Planning Scheme should:

- Simplify zoning of rural land.
- Designate Priority Agriculture for areas of state/regional or local significance.
- · Designate General Agriculture to other areas.
- Provide flexibility for all agricultural uses.
- Include provisions for agriculture related tourism.

Priority Agriculture areas once identified must be zoned as such in the Local Planning Scheme having been refined from Agricultural Priority Management Areas shown in the SPP 11.

## Settlement Strategy

The LPS must also include a settlement strategy. A settlement strategy for a rural area needs to:

- Plan a viable network of town centres.
- Carefully plan expansion of town boundaries.
- Provide areas for rural residential where appropriate.

To achieve settlement objectives it is normally necessary to direct population growth to support existing settlements as it enables the co-ordination of and the efficient and equitable provision of infrastructure and services and serves to protect areas of agricultural significance, extractive industries and other natural resources. It also provides the opportunity to maintain and enhance the values of the area as it provides a separation between agricultural and urban areas while providing for the expansion of urban areas as part of a planned settlement pattern. This can be assisted through the use of appropriately located, low density rural residential development.

### Plan and Provide for Rural Settlements

Two zonings are available; Rural Residential and Rural Smallholdings.

#### Rural Residential

- Provides a residential use in a rural environment.
- An expectation of basic services (power, roads, water).
- 1 ha to 4 ha lots depending on local conditions (Local Planning Scheme).
- Provision of reticulated potable water supply.

#### Rural Smallholdings

- Provides for a residential use in association with a rural pursuit.
- 4 ha to 40 ha lots depending on local conditions (Local Planning Scheme).
- Opportunities for home business, tourist and rural pursuits.
- Identifiable theme (conservation, permaculture).

- Potable water supply.
- Separate water supply for land and fire management.

In each case the following prerequisites are necessary:

- Requirement for a subdivisional guide plan.
- Identification of building envelopes.
- Restriction to one dwelling per lot.
- Compliance with local government environmental and health requirements.
- · An outline of acceptable agricultural uses.
- Consideration of landscape amenity.
- Preparation of a bushfire management plans.
- · Identification of emergency egress.

Typical provisions for rural residential and rural smallholding development include:

- Clearing restrictions.
- Tree planting/revegetation programme.
- · Stocking restrictions.
- Identification of building envelopes.
- Protection of natural features.

#### Minimising Land Use Conflict

Proposals to rezone subdivide or redevelop requires an assessment of the potential for land use conflict particularly between farming and residential activities.

In order to locate residential and rural residential activities appropriately adequate separation needs to be provided between conflicting land uses.

Adherence to an approved settlement strategy and the incorporation of performance criteria will assist this process.

#### Management of Natural Resources

Increasingly rural planning is affected by environmental legislation as it becomes integrated with the States' natural resource management objectives.

## Water

Planning for rural areas in particular requires the integration of Land Use Planning with Catchment and Water Resource Management, mineral and basic raw material protection, vegetation and landscape amenity. Provisions need to support Landcare work.

The protection of water resources needs to recognise;

- Gazetted public, drinking water source areas.
- · Water reserves.
- Underground water pollution control areas.

Wetlands.

Guidelines on Land Use Compatibility within Public Drinking Water Supply Areas have been prepared by DEWCAP.

#### **Minerals and Basic Raw Materials**

Planning for Mineral and Basic Raw Material Resource Areas requires, the following:

- Identification of mineral and BRM areas.
- Try to limit sterilization of resources.
- The encouragement of sequential land uses i.e. extraction, rehabilitation, rural residential.
- Provision for the extraction of resources.

The above protective measures may be incorporated in Local Planning Schemes through Special Control Areas.

### **Vegetation Management**

Under the Environmental Protection Act 1986, the clearing of native vegetation requires a permit from the Department of Environment and Conservation unless it is for an exempt purpose (i.e. these exemptions ensure that low impact day to day activities involving clearing can be undertaken). Any development proposal that will lead to the clearing of native vegetation will require consultation with the Department of Environment and Conservation to determine if a permit is required.

#### **Landscape Management**

The visual quality of a rural area is one of its primary assets.

Landscape management is concerned with the management of land, vegetation and water resources so as to maintain or improve their visual quality.

Changes to the landscape continually occur. Whether visual changes are perceived as positive or negative depends on numerous factors, including the viewer's perception and position, view duration, view distance, landform, soils, aspect and type of landscape alteration. The ability of landscapes to absorb change without loss of scenic value also varies and depends on slope, soils and vegetation cover. Landscape management thus involves extensive broad scale and on-site analysis of these factors, project impact evaluation and sensitive site planning, design and construction methods.

SPP No. 2.5 is supported by the WAPC's Policy D.C. 3.4

Policy D.0 3.4 indicates a general presumption against subdivision in rural areas, unless it is endorsed in a Local Planning Strategy or other endorsed planning strategy. There are some exceptions and provisions made, for conservation lots. In certain circumstances in the Wheatbelt Agricultural Policy Area (in which the Strategy area falls), homestead lots, are available to local authorities where there has been a decline in population over two intercensal periods and rural multiple occupancy lots.

Guidelines are provided for preparing an agricultural impact assessment. These relate primarily to:

- · Loss of productive agricultural land.
- Land use conflict.
- Land and environmental management and rehabilitation.

## 1.5.3 SPP Environment and Natural Resources Policy (SPP No. 2)

This policy seeks to use all levels of the planning system to achieve appropriate protection, management and use of the environment and natural resources in a proactive rather than reactive manner.

Its aim is to provide more certainty for proponents of developments regarding consideration of environmental issues and provide a reference to guide natural resource use, development and conservation.

The policy promotes land use decisions that acknowledge the often competing interests of the environment and economic and social considerations that affect our natural resources. It identifies elements of the environment and natural resources that are considered important and significant and requires these to be considered when making land use decisions.

The policy provides a clear link to the State Planning Strategy.

Section 5.1(xiii) of State Planning Policy No. 2 'Environment and Natural Resources Policy' states that planning strategies, schemes and decision making should consider any relevant accredited natural resource management strategy, or catchment management strategy prepared by catchment groups and endorsed by State Government Agencies, with a view of integrating implementation of appropriate and relevant parts through Local Planning Schemes and assessment of developments. Strategies that the Shire needs to consider within the context of section 5.1(xiii) include:

- Avon Natural Resource Management Strategy (2005)
- South West Regional Strategy for Natural Resource Management (2005)

Policy measures relate to:

- · Water resources.
- Air quality.
- Soil and Land quality.
- Biodiversity.
- Agricultural land and rangelands.
- Minerals, petroleum and basic raw material resources.
- Landscape.
- · Greenhouse gas emissions and energy efficiency.

## 1.5.4 Public Drinking Water Source Policy (SPP No. 2.7)

The objective of this policy is to ensure that land use and development within Public Drinking Water Source Areas (PDWSAs) is compatible with the protection and long-term management of water resources for public water supply.

SPP No 2.7 informs local governments of those aspects of State-level planning policy concerning the protection of PDWSAs which should be taken into account in planning decision-making.

SPP No 2.7 requires that:

- Local and regional planning strategies should identify PDWSAs based on advice from the WRC (now Department of Water).
- In Areas outside of the Perth Metropolitan Region, all priority source protection areas in PDWSAs should be shown as special control areas in region schemes and in local government schemes in accordance with the recommendations of any relevant land use and water management strategy published by the WAPC, or any water source protection plan approved by the WRC.
- The special control area provisions should provide for referral of applications to the WRC for advice and comment, and set out the relevant considerations in determining planning applications within these areas, guided by the WRC Water Quality Protection Note on Land Use Compatibility and Public Drinking Water Source Areas.
- Land uses and developments in all priority source protection areas that have the
  potential to impact detrimentally on the quality and quantity of public drinking water
  supplies should not be permitted unless it can be demonstrated, having regard to
  advice from the WRC, that such impacts can be satisfactorily managed.
- Planning schemes and decisions on land use and development should have regard for any adopted region scheme policy or relevant environmental protection policy on public drinking water supply.

The study area contains no PDWSAs.

## 1.5.5 Water Resources (SPP No. 2.9)

SPP No 2.9 relates to the overarching State Planning Policy 2, Environment and Natural Resources Policy, and provides clarification and additional guidance to planning decision-makers for consideration of water resources in their land use planning activities.

The objectives of the policy are to:

- protect, conserve and enhance water resources that are identified as having significant economic, social, cultural and/or environmental values;
- assist in ensuring the availability of suitable water resources to maintain essential requirements for human and all other biological life with attention to maintaining or improving the quality and quantity of water resources; and

promote and assist in the management and sustainable use of water resources.

The policy measures relate to:

- Surface and Groundwater Resources:
- Wetlands, Waterways and Estuaries;
- Total Water Cycle Management.

The policy defines water resources are defined as 'water in the landscape (above and below ground) with current or potential value to the community and the environment' (WRC, 1998).

Water resources that may be the subject of this policy include:

- wetlands
- waterways
- estuaries
- groundwater
- surface water
- irrigation dam
- floodplain
- foreshore
- stormwater
- existing and future surface and groundwater drinking water catchments and sources for public and private supplies
- wastewater

The strategy area lies within the upper reaches of the Avon, Murray and Blackwood Rivers and contains many the tributaries to the three rivers. The area also contains the small, but ecologically important Narrogin wetlands. These water resources have economic, social, cultural and environmental value to the local community and state as a whole. The SPP 2.9 promotes and assist in the management and sustainable use of these water resources.

## 1.5.6 Urban Growth and Settlement (SPP No. 3.0)

The aim of the SPP No 3 is to facilitate sustainable patterns of urban growth and settlement by setting out the requirements of sustainable settlements and communities and the broad policy in accommodating growth and change. The policy must be taken into account in preparing regional and local planning strategies, and planning schemes and amendments, and given weight in statutory decision making in relation to urban growth and settlement.

The objectives of this policy are:

- To promote a sustainable and well planned pattern of settlement across the State, with sufficient and suitable land to provide for a wide variety of housing, employment, recreation facilities and open space.
- To build on existing communities with established local and regional economies, concentrate investment in the improvement of services and infrastructure and enhance the quality of life in those communities.

- To manage the growth and development of urban areas in response to the social and economic needs of the community and in recognition of relevant climatic, environmental, heritage and community values and constraints.
- To promote the development of a sustainable and liveable neighbourhood form which reduces energy, water and travel demand whilst ensuring safe and convenient access to employment and services by all modes, provides choice and affordability of housing and creates an identifiable sense of place for each community.
- To coordinate new development with the efficient, economic and timely provision of infrastructure and services.

The policy measures include:

- Creating sustainable communities;
- Managing urban growth and settlement across Western Australia;
- Managing urban growth in Metropolitan Perth;
- · Planning for liveable neighbourhoods;
- Coordination of services and infrastructure;
- Managing rural-residential growth;
- Planning for Aboriginal communities.

This policy will be implemented through local planning strategies developed by Local Governments.

SPP No. 3 is relevant to major towns in the strategy area, particularly the significant centres of Narrogin, Pingelly, Wickepin and Cuballing. Almost half the total population of the Strategy area lives in these towns.

#### 1.6 ENVIRONMENTAL CONSIDERATIONS

Local Planning Schemes when amended, reviewed or replaced require assessment by the Environmental Protection Authority. Environmental and natural resource management legislation, strategies and policies relevant to the Strategy area, are:

- State Salinity Strategy
- Hope for the Future the Western Australian State Sustainability Strategy
- CALM Management Plans
- EPA Guidance Statement No. 33 Guidelines for Environment and Planning (August 1997) and the proposed new draft Environmental Guidance for Planning and Development (2005)
- Environment Protection Act 1986
- Contaminated Sites Act 2003

#### 1.6.1 Environmental Protection Act 1986

The Act provides for the Environmental Protection Authority, in order to prevent, control and abate pollution and environmental harm; to ensure the conservation, preservation, protection, enhancement and management of the environment.

In protecting the environment of the State, the objectives of the Act have regard for the following principles —

- The precautionary principle: Where there are threats of serious or irreversible damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.
- The principle of intergenerational equity: The present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations.
- The principle of the conservation of biological diversity and ecological integrity Conservation of biological diversity and ecological integrity should be a fundamental consideration.
- Principles relating to improved valuation, pricing and incentive mechanisms
- The principle of waste minimisation: All reasonable and practicable measures should be taken to minimise the generation of waste and its discharge into the environment.

Section 38 of the Act outlines who can refer a proposal to the EPA, under what circumstances and how the referral is to be made.

Any person may refer a significant proposal to the Authority except a proposal under an assessed scheme. In which case the proposal can only be referred to the EPA by the proponent. The Minister can, if it appears that there is public concern about the likely effect of a proposal on the environment, refer the proposal to the Authority.

A decision-making authority must refer a proposal to the EPA if it believes it to be a significant proposal or a proposal of a prescribed class. If the EPA considers that a proposal that is significant or of a prescribed class has not been referred to it, the EPA will require the proponent or a decision-making authority to refer the proposal to the Authority.

In the case of a proposal under an assessed scheme, the EPA can only require the referral of the proposal if it did not, when it assessed the assessed scheme have sufficient scientific or technical information to enable it to assess the environmental issues raised by the proposal.

Section 48C outlines the powers of the EPA in relation to the assessment of schemes referred to it. The Authority may require the responsible authority to undertake an environmental review of that scheme and report on it to the Authority. The EPA will instruct the responsible Authority on the scope and content of that environmental review. The Authority may also require any person to provide it with information. The responsible authority or person of which a requirement has been made is obliged to comply with the EPA's requirement.

The Authority may make such investigations and inquiries as it thinks fit; and consider existing reservations and zonings if the Authority believes there is scientific or technical information that a proposal framed in accordance with, one or more of those reservations or zonings is likely to have a significant effect on the environment.

## 1.6.2 Contaminated Sites Act 2003

The Act provides for the identification, recording, management and remediation of contaminated sites. The Act addresses previous problems arising from the absence of powers requiring people to report known or suspected contamination; vendors to disclose contamination when selling land; possible contamination to be investigated and inadequate powers to require remediation of contaminated sites.

Prior to the Act, responsibility for remediation generally fell to the landowner rather than the person who caused the contamination, and the general public has no guarantee of access to information about contaminated sites that may affect them.

The key provisions of the Act provide powers to find and fix contamination, a fairer hierarchy of responsibility and open access to information.

Where a development site is suspected to be contaminated, the WAPC and or EPA will require a report to be prepared to determine the extent of contamination and the means by which it will be addressed prior to the proposed development taking place.

The Contaminated Sites database is accessible via the Department of Environment and Conservation website free of charge. The data base holds information on known contaminated sites in Western Australia.

## 1.6.3 EPA Guidance Statement No. 33 - Guidelines for Environment and Planning (August 1997) and proposed new draft- Environmental Guidance for Planning and Development (2005)

This EPA Guidance Statement is a response to the need for environmental guidance for land use planning and development following the introduction of legislation in 1996 enabling the environmental assessment by the EPA of Local Planning Schemes and their amendments.

The Guidance Statement is intended as a resource document for local government, State government agencies, consultants, proponents and the public.

The main purposes of this Guidance Statement are:

- to provide information and advice to assist participants in land use planning and development processes to protect, conserve and enhance the environment
- to describe the processes the EPA may apply under the EP Act to land use planning and development in Western Australia, and in particular to describe the environmental impact assessment (ETA) process applied by the EPA to schemes.

This Guidance Statement has the status 'Draft' which means that it has been endorsed by the EPA for release for stakeholder and public review and comment. The period for public comment has now passed.

Prior to making an application to Local Government, proponents should consult Guidance Statement No 33 for advice on the environmental protection processes; referrals and environmental impact assessment processes; and the range of environmental factors that need to be considered in order to protect, conserve and enhance the environment.

## 1.6.4 State Salinity Strategy

Salinity is perceived as the greatest environmental threat facing Western Australia.

Salination is caused by changes in the delicate balance between surface water and groundwater systems.

In many agricultural areas of Australia, water tables are rising because perennial native vegetation has been replaced with crops and pastures that use less water. As it rises, the groundwater dissolves naturally occurring soil salts and brings them towards the surface.

The State Salinity Strategy (2000) sets out a strategy to manage salinity and outlines the management options and tools that are available to landholders across the south-west agricultural zone. It highlights the need for urgent and large-scale intervention on the hydrological system if the Strategy's goals are to be achieved.

The salinity strategy identifies land use planning, and specifically integrated planning at a catchment level, as an important component of salinity management. The Salinity Strategy requires the WAPC to promote measures to address salinity through its regional planning strategies and planning schemes.

In setting priorities for government and community action on salinity, the 1996 Salinity Action Plan designated various 'Recovery Catchments' where the need to protect high value public and private assets (such as water resources, natural diversity, towns and roads) justifies targeting resources and implementing more intensive management systems.

Of further relevance to the Strategy Area is the salination of wetlands. A rising water table can cause salination of freshwater wetlands in two ways. Low-lying swampy areas can become overwhelmed as saline groundwater rises up through their beds. Alternatively, salt that has been brought to the surface and deposited in surrounding farmland can be washed into the wetlands as surface run-off after rain.

In addition, clearing of native vegetation means that less rainwater is trapped by the vegetation and more runs off into the wetlands. There is simply more water about, so seasonal wetlands are wetter for longer.

Any attempt to address the problem of salination must tackle these three issues and the complex interactions between them. (CALM, 2002)

## 1.6.5 Hope for the Future the Western Australia State Sustainability Strategy

Sustainability of resources is a key principle of the State Planning Strategy. The Draft State Sustainability Strategy recognises the importance of the planning system as a mechanism to apply the principles of sustainability (p. 55). The Strategy seeks to explore opportunities for regional councils and local councils and statutory planning processes (such as Statements of Planning Policy and Environmental Protection Policies) to support natural resource management outcomes, including the possibility of adopting regional natural resource management strategies through Statements of Planning Policy. In the medium to longer term, the Sustainability Strategy considers that it may be desirable to give effect to the regional natural resource management strategies through various statutory mechanisms, such as Environmental Protection Policies and regional Statements of Planning Policy.

Agricultural sustainability is particularly relevant to the Strategy Area.

Agriculture continues to be an important economic driver for Western Australia. The value of the State's agricultural exports for 2000-01 was estimated at \$3,802 million, which represents 15% of the State's total export and 16% of national agricultural exports. (Govt of WA, 2002, p 95)

However, the 1998 Western Australian State of the Environment Report identified that the economic contribution of agriculture has come at the great cost of widespread land degradation associated with unsustainable farming and grazing systems. More recently, the 2001 Australian State of the Environment Report concluded that while strenuous attempts are being made to improve environmental, economic and social sustainability in many regions of established agricultural land use, serious doubts exist as to whether agricultural industries can finance the adoption of remedial and truly conservation-oriented farming systems.

The Department of Agriculture's submission on the State Sustainability Strategy provides a useful overview of the existing challenges to sustainable agriculture in Western Australia by considering the trends impacting on vibrant rural communities, profitable agricultural systems and conservation of the environment over the last 25 years as well as future challenges and emerging trends. These are summarised in Table 1 below.

Table 1: Trends influencing sustainable agriculture in Western Australia (Government of WA, 2002)

Vibrant rural communities	Profitable agricultural systems	Conservation of the environment	
<ul> <li>Depopulation of rural areas.</li> <li>Decreasing rural employment with increased mechanisation, comparatively low wages for the rural workforce and low diversity of job opportunities.</li> <li>Reduction of services, in rural towns.</li> <li>Increasing isolation for those remaining in rural communities.</li> </ul>	<ul> <li>Rationalisation of country towns into large regional centres.</li> <li>Weakening relationship between farm and food prices.</li> <li>Decreasing terms of trade.</li> <li>Deregulation of markets.</li> <li>Relative importance of agriculture in the nation's economy is declining.</li> <li>Introduction and spread of quality assurance schemes.</li> </ul>	<ul> <li>Salinity.</li> <li>Loss of soil structure.</li> <li>Water-repellence of some soils.</li> <li>Waterlogging.</li> <li>Wind erosion.</li> <li>Traffic hard-pans.</li> <li>Deterioration in remnant vegetation.</li> <li>Destruction of habitat.</li> <li>Nutrient run-off causing pollution problems.</li> </ul>	

Growth management also relates to water issues, to air quality issues and to land-use transport planning.

At the town planning scale, the State Sustainability Strategy supports improvements to public access to transport, the improvement of amenity and the creation of urban forms to support the development and the maintenance of a sense of community.

## 1.6.6 The CALM Managed Estate

The Department of Conservation and Land Management (CALM) (now incorporated into DEC) manages a marine and terrestrial reserve system throughout the State. It's two primary natural resource management objectives are to;

- Conserve biodiversities.
- Create sustainable community benefits.

To do this it may identify and acquire new conservation reserves to achieve comprehensiveness, adequacy and representativeness targets as well as protecting sites of special importance.

CALM also seeks to promote off reserve conservation that complements the reserve system as well as implement the Western Australian Salinity Strategy in partnership with landholders, the community and other agencies.

An ongoing objective for CALM is to prepare management plans for all of its estate.

As a major land manager CALM's objectives and programmes affect and are affected by adjoining land uses and landholders with whom it seeks co-operation in the achievement of common goals.

The CALM Managed Estate and Management Plans for the Strategy Area are discussed in Section 2.10.

#### 1.7 URBAN PLANNING

#### 1.7.1 Residential Codes

The revised Residential Design Codes (R Codes) were gazetted in October 2002. The R Codes provide the basis of controlling the siting and design of residential development throughout Western Australia.

The general objectives are:

- To provide for a full range of housing types and densities that meet the needs of all people;
- To provide for local variations in neighbourhood character;
- To ensure appropriate standards of amenity for all dwellings;
- To ensure provision of on-site facilities for all dwellings;
- To protect the amenity of adjoining residential properties;
- To encourage the conservation of buildings with heritage value; and
- To encourage environmentally sensitive design.

Although the codes are similar to those they replaced, they include "deemed to comply" criteria which means that development consistent with these criteria will be approved. Notwithstanding there is an opportunity for a local government to consider alternative proposals in the context of the designated performance criteria.

All code provisions (with the exception of the site area requirements set out in Table 1) are open to the exercise of discretion.

In considering whether to grant a discretionary approval, Councils should adopt a consistent approach taking into account:

- The Performance Criteria relating to the matter for which discretionary approval is sought;
- The relevant provisions of the Scheme; and
- The relevant contents of a Local Planning Policy prepared in accordance with the Codes.

A Council cannot refuse an application that meets Acceptable Development requirements unless there are more stringent Local Planning Scheme or Local Planning Policy provisions that are unmet.

Notwithstanding the above, the WAPC may approve the creation of a lot of a lesser area and the Commission or a Council may approve a minimum site area of a Grouped Dwelling on a site area less than that specified on Table 1 provided that the proposed variation would meet the following criteria:

- be no more than 5% less in area than that specified on Table 1; and
- facilitate the protection of an environmental or heritage feature; or
- facilitate the development of lots with separate and sufficient frontage to more than one public street; or
- overcome a special or unusual limitation on the development of the land imposed by its size, shape or other feature; or
- allow land to be developed with housing of the some type and form as land in the vicinity and which would not otherwise be able to be developed; or
- achieve specific objectives of the local government Scheme and where applicable, the Local Planning Strategy.

The Codes aim to obviate the need for the use of Local Planning Policies which incorporate generic provisions, such as those designed to protect privacy and to design for streetscape by incorporation of these aspects within the Codes.

However, Local Planning Policies may still be necessary to accommodate local differences of character and regional differences of climate and topography.

The Codes permit Local Planning Policies to be prepared to address local requirements for streetscape, building design, building height and boundary walls.

### 1.7.2 Liveable Neighbourhoods - Community Codes

The Liveable Neighbourhoods - Community Design Codes provide urban design guidelines for cities and towns.

It includes proposals to address:

- Western Australia's changing population.
- · Increasing environmental awareness.
- Reducing the cost of current procedures.

The Codes' principles of neighbourhood design are:

- Compactness so most people can walk to local centres in five minutes.
- Build streets where people can walk, cycle or take public transport rather than drive.
- Connect the streets in a simple pattern so people can choose different routes and make short trips to local facilities.
- Put windows and verandahs overlooking streets to deter crime.
- Provide opportunities for local employment in shops and businesses close to people's homes.
- Create a neighbourhood heart with shops, businesses and community facilities.
- Make town centres more sustainable by developing clusters of about six neighbourhoods with a wide range of services, facilities and jobs.
- Place public transport stops at town centres and neighbourhood centres.
- Offer a wide choice of housing and lot sizes and use a flexible layout so the area can be changed to meet future needs.
- Respond to the physical characteristics of the site to reinforce local character and protect natural features.
- Provide neighbourhood parks of different sizes and types for a variety of uses and with a five minute walk for most people.

The Codes will be implemented through the WAPC by encouraging the planning methods outlined in Liveable Neighbourhoods: Community Design Code when assessing subdivisions and structure plans.

The new approach will be used when new neighbourhoods are being planned in the Perth metropolitan area and country towns. It may apply to large urban infill sites or vacant areas on the urban fringe where two or more lots are being created.

## 2.0 THE STRATEGY AREA - PHYSICAL FEATURES

#### 2.1 THE REGION

The Strategy Area forms part of the Wheatbelt's Central South Region.

The Central South Region extends from the Darling Scarp in the west, through the Wheatbelt, to the near marginal lands in the east. The region covers 1.8% of the State, has 1.5% of its total population and comprises fifteen local government areas (See Fig. 1).

The Central South is widely recognised as a region (Australian Bureau of Statistics - Upper Great Southern Statistical Division). However, there are differences, due to climatic and historical factors, between the eastern and western parts of the region. These parts conform generally to the Hotham and Lakes Statistical Subdivisions.

The Strategy Area comprises the Shires of Pingelly, Wickepin, Cuballing and Narrogin and the Town of Narrogin towards the west of the Central South Region. (See Fig. 3).

The Region and Strategy Area is divided physically (See Fig.4). The northern portion is in the Avon Natural Resource Management Area, the western portion in the South West Management Area and the southern portion in the Blackwood Basin Management Area.

The physical divide is recognised in the statistical districts of Agriculture Western Australia which divides the area into the Central Agricultural SRD region and the South West Agricultural SRD region.

Narrogin is the commercial administrative hub of the Central South and serves the region as a manufacturing and service centre. Its location makes it a convenient stopover for travellers between Perth and Albany. Other major centres are Pingelly, Cuballing and Lake Grace which is located in the south-east of the region. Corrigin serves as a commercial centre for the northern part of the region. Wagin in the south of the region is probably more connected to Katanning in the adjoining Great Southern Region.

The rest of the local authorities in the region have smaller urban centres, mainly providing support services for the agricultural industry in their surrounding areas.

The last comprehensive plan prepared specifically for the Central South Sub Region was prepared by the Wheatbelt Development Commission in 1988. In early 2003 a Central South Action Plan was prepared by the Wheatbelt Development Commission.

Much of the physical description in this section has been extracted from the 1988 study supplemented where appropriate with ABS statistics and AGWA data.

FIGURE 3: THE STRATEGY AREA

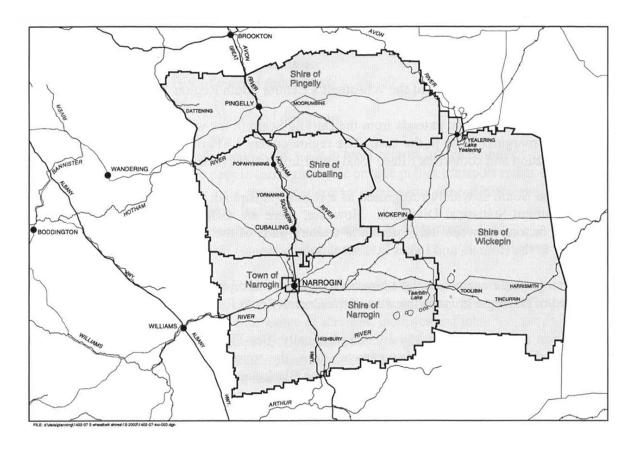
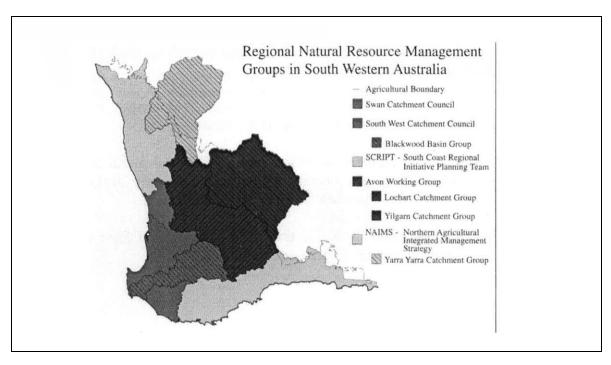


FIGURE 4: NATURAL RESOURCE MANAGEMENT AREAS



#### 2.2 CLIMATE

The Central South has a temperate Mediterranean climate with mild, wet winters and hot, dry summers. The western border of the region is within 80 kilometres of the coast and this causes many climatic factors including the movement of the anticyclonic belt which lies east to west across the continent for 6 months of the year to control the weather pattern and to show a south – west to north – east variation. Rainfall tends to decline from west to east from 600mm/annum to 400mm/annum and occurs mainly from May to October.

The hottest months are January and February and the coldest months are July and August.

FIGURE 5: AVERAGE ANNUAL RAINFALL



# 2.3 GEOLOGY

Most of the agricultural region of Western Australia including the Strategy Area is underlain by gneiss, granite and migmatite rocks. This has been a relatively stable part of the earth's crust for 2400 million years.

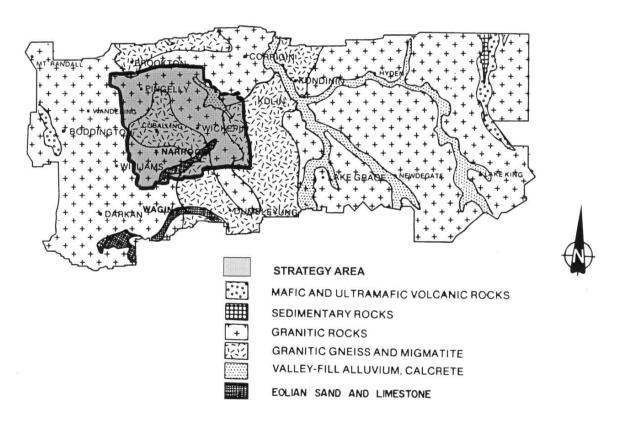
Geologically it is part of the Yilgarn Craton, a Precambrian crystal massif comprising granite and gneiss together with sinuous belts of metasedimentary metavolcanic rocks left as undigested remnants after extensive granitization. In the Wheatbelt System granite dominates and many of the townships originally relied on the availability of shallow groundwater around the margins of bald granite hills.

Suites of basic and quartz dykes have intruded into the gneisses, granites and migmatites. The most common rock type is dolerite which is a dark rock with a high proportion of iron and magnesium minerals. Quartz dykes are a predominant feature in some areas.

The western sector contains part of the Darling Scarp, which forms the rim of the plateau. Immediately to the east there is an area of flat-floored valleys with drainage towards the coast.

Beyond this, the major portion of the Central South is a plateau dominated by sandplains low hills with small salt lakes and bordering dunes in the shallow valley floors.

FIGURE 6: GEOLOGY



## 2.4 SOILS

Earth movements over hundreds of millions of years have uplifted the basement rocks and weathering has led to soil formation as the climate changed soils formed and eroded. (See Fig 7)

Overlying the Yilgarn Craton is a regolith veneer. The regolith is typically 5 metres and includes a laterite profile dominantly on upland parts of the landscape.

This has resulted from prolonged weathering and erosion which has produced a peneplain about 300 metres above sea level on which laterite has developed and is now being eroded. There are three zones; an upper ferricrete; an intermediate mottled zone and a lower clay layer (See Fig. 8). Silica sand is often found as pockets above the laterite. In the absence of laterite, sandy loams predominate as residual soils derived from granite.

FIGURE 7: SOILS

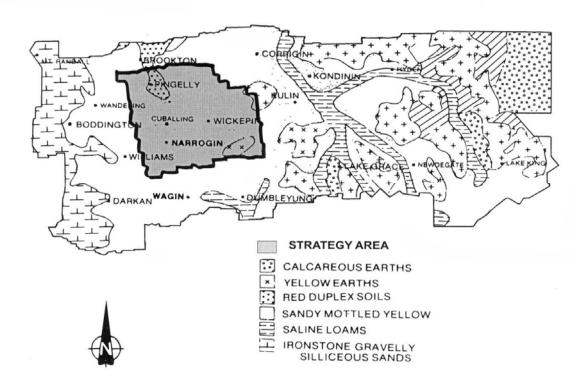
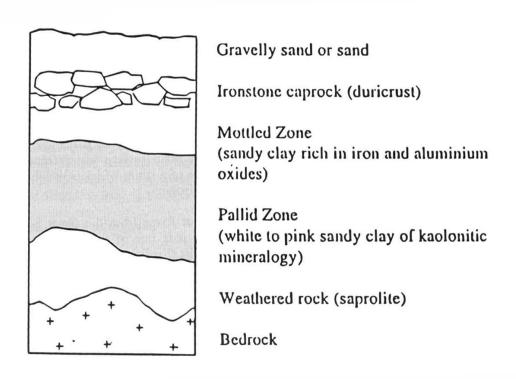


FIGURE 8: SOIL PROFILE



The lateritic profile (see Fig. 8) formed in the Tertiary period during a moist temperate tropical climate has since been eroded to varying degrees. Source: Lantzke (1993).

As a result the most extensive soils of the region have a relatively sandy topsoil and a loam subsoil. To the west, the soils contain more clay, whilst to the east they contain more sand and, in cases, are influenced by the presence of salt lakes. The soils of the region are generally infertile, requiring the addition of superphosphate and trace elements for pasture and cereal production. Agricultural use of these soils is predominately for wheat in the east, and for sub-clover based pasture for sheep production in the west.

### 2.5 SURFACE DRAINAGE

The strategy area falls within the upper reaches of the Avon, Murray and Blackwood Rivers (See Fig. 9).

In the Shire of Pingelly, the upper reaches of the Avon River effectively form the eastern boundary of the Shire with the Hotham River forming much of its southern boundary with the Shire of Cuballing. The town of Pingelly is at the headwaters of the Avon River South and is situated on the watershed between the Avon and Murray River Catchments. Many of the tributaries of the Avon River begin in the Shire of Pingelly, some being: Woodebulling Creek, Woyerling Creek, Sandplain Creek, Petercarring Brook, Avon River South and the Dale River South.

In the case of the Murray Catchment, the southern portion of the Shire of Pingelly, the Shire of Cuballing and the northern portion of the Shire of Narrogin, falls within the catchment of its tributary the Hotham River.

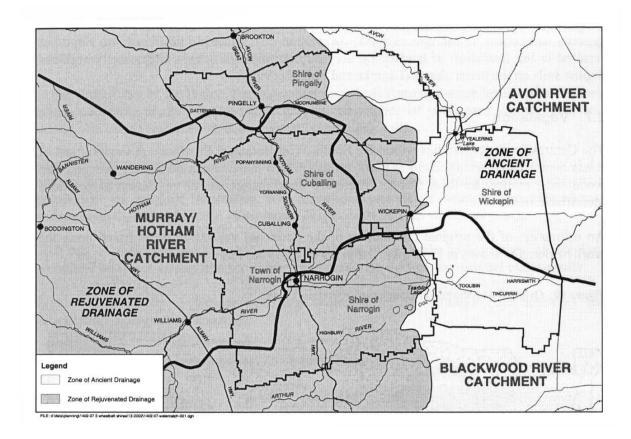
To the south west of Narrogin, the Strategy Area straddles the boundary between the Murray and Blackwood catchments.

The area to the east of Narrogin drains into the Williams River, whilst further south it feeds the Arthur River a tributary of the Blackwood.

The surface drainage pattern in the Shire of Wickepin is through the Avon River to the north and the Blackwood River to the south. Otherwise the main surface water features are Toolibin Lake in the south west of the Shire which is one of a series of lakes which extend south westwards into the eastern portion of the Shire of Narrogin.

Narrogin Wetlands extend north-easterly along the Arthur River from the Great Southern Highway about 20 km south of Narrogin. For its size it is one of the most productive waterfowl areas in the south-west. However, due to sporadic flooding and drying it cannot be counted on as an annual breeding area. Most important lakes are already conservation reserves, viz. Lake Toolibin, Lake Taarblin, Ibis Lake, Billy Lake, Nomans Lake and White Lakes.

FIGURE 9: SURFACE DRAINAGE



### 2.6 LANDFORM

In the Pleistocene period (2-10 million years ago) the sea level dropped and/or uplift of the south west of Western Australia occurred. This resulted in erosion of the lateritic mantle to varying degrees exposing the lateritic profile and in places, the bedrock below.

The extent of the dissection of this lateritic profile can be used to explain the development of the landform, soils and the vegetation. Where little or no erosion of the laterite profile has occurred, fossil soils have been preserved as sandplain or as "buckshot gravels" above breakaway hills. This is known as the Zone of Ancient Drainage. Where the laterite profile has been dissected to reveal the pallid zone, loamy sand and sandy loam over clay soils have developed. Where removal of the laterite profile has been complete the soils are shallow, gritty soils on granite or red loam on dolerite. This is known as the Zone of Rejuvenated Drainage. (See Fig. 9).

These are defined as follows;

The **Zone of Rejuvenated Drainage** is characterized by greater dissection of the landscape forming steeper, narrower valleys which contain rivers and creeklines that flow in winter. Small remnants of sandplain occur, often bordered by a scarp or breakaway. Large areas of sandy surfaced over yellowish clay soils occur in the area. Where the lateritic profile has been completely removed there are extensive areas of rocky red and grayish soils. The valley floors contain alluvial clays, loamy and sand.

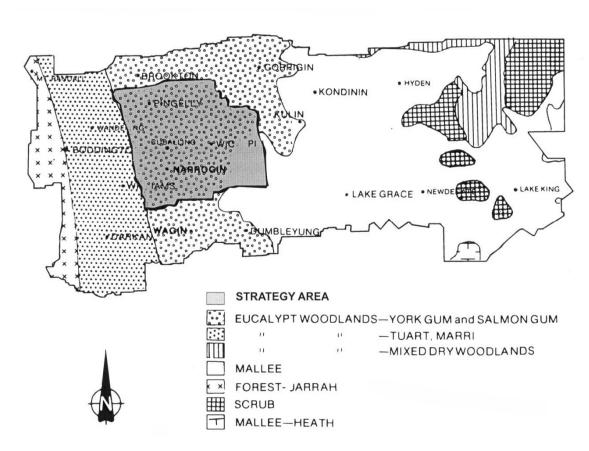
The **Zone of Ancient Drainage** consists of gently undulating plateau with wide divides, long gentle slopes and broad valleys that contain salt lakes. Large areas of yellow sandplain and gravelly soils occur on the upland areas. Dissection of the lateritic profile on the slope has resulted in the formation of hardsetting grey duplex soils with some loose, sandy surfaced duplex soils on the lower slopes (Lantzke and Fulton (1993).

### 2.7 VEGETATION

The Central South Region lies within the South-West Botanical Province. Although most of it has been cleared for agricultural purposes that which remains can be loosely grouped into woodlands, mallee, scrub or heath. There are three major natural vegetation associations identifiable in the region.

An estimation of the original distribution of the dominant vegetation types based upon the work of Beard is shown in Figure 10 (Hopkins et. al. 1996) (Sabtron 1997).

FIGURE 10: ORIGINAL DISTRIBUTION OF DOMINANT VEGETATION TYPES.



In the west, in the higher rainfall areas jarrah forest is dominant on ironstone gravels while mathwandoo woodlands with dry scrub understorey are found on loamy soils.

Flooded gum (Eucalyptus rudis) is common along the creeklines in the west. York gum (Eucalyptus loxophleba) with rough grey bark is often mixed with the low, bushy jam tree (Acacia acuminata) on the lower slopes, and features along the drainage lines and roadsides or as scattered clumps. Wandoo (Eucalyptus wandoo) with its pale silver grey or mottled creamy yellow bark, mainly occurs on the middle to lower slopes. Larger areas of native vegetation often indicate outcroppings of granite such as Boyagin Rock or breakaways -terracotta coloured hills of lateritic gravel with powder-bark wandoo (Eucalyptus accedens) and brown mallet (Eucalyptus astringens).

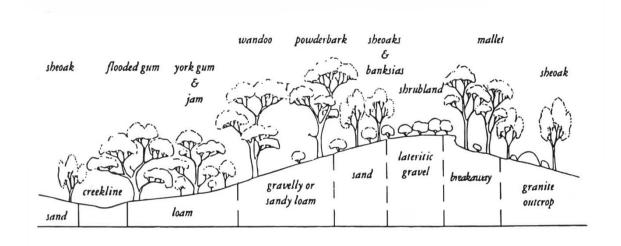
In the central part of the region, the vegetation sequences comprise scrub heath on sandplains, acacia casuarina thickets on ironstone gravels; woodlands of york gum, salmon gum and wandoo on learns and salt — tolerant vegetation on saline soils.

There are occasionally breakaways and sweeping views over the wide shallow channels of the ancient drainage lines and distant low cresting hills. Wandoo predominates as the main component of remnant vegetation with occasional stands of salmon gum (Eucalyptus salmonophloia) and red morrel (Eucalyptus longicornis) on flats with heavy soils.

The east is mostly dominated by mallee scrub on sandy soils with patches of eucalypt woodland on lower ground and scrub heath and casuarina thickets on residual plateau soils.

Figure 11 illustrates a typical landscape sequence in the Strategy Area showing the relationship of vegetation and soils.

FIGURE 11: TYPICAL LANDSCAPE SEQUENCE IN THE STRATEGY AREA



### 2.8 FAUNA

The remaining areas of natural vegetation in the Central South Region provide habitats for remnant populations of native animals. The Dryandra Forest is home to one of the few extant populations of numbats, the State's fauna emblem. Many of the lakes and wetlands in the region are important as water bird refuges. The Lake Cronin area has a unique frog population and the highest concentration of jewel beetles in Australia.

More common mammal species that are found in the forested parts of the region are the western grey kangaroo, western brush wallaby, southern brown and the short—nosed bandicoots, the mardo, bush rat and common ring-tail and brush-tail possums.

Some commonly found bird species are the emu, white-tailed black cockatoo, silvereye, grey fantail, scarlet robin, Port Lincoln ring-neck, red wattlebird, Australian raven, brown goshawk and the wedge-tailed eagle.

Endangered or rare species which occur in the area include the woylie, numbat, tammar, western mouse, red-tailed wambenger, mallee-fowl, honey possum and the white-tailed dunnart.

#### 2.9 LAND USE AND MANAGEMENT

The predominant land use in the Strategy Area is agriculture occupying approximately 90% of the total land area of the Strategy Area. (See Table 2). The CALM managed estate occupies about 6%.

Table 2: Land Use

Local Authority	Total Area '000 ha	Agriculture '000 ha	CALM Managed Estate '000 ha	Townsites '000 ha	Other (Roads, etc) (Est. 4%) '000 ha
Narrogin (Shire)	161.6	143.0	11.8	0.2	6.6
Narrogin (Town)	1.3	-	-	1.3	N/A
Wickepin	203.8	191.0	3.7	1.2	7.9
Pingelly	129.3	116.0	7.3	0.8	5.2
Cuballing	119.4	102.0	12.0	1.3	4.1

This has given rise to a number of land degradation issues. In the Shire of Pingelly (AGWA & Greening Australia, 1997) these were listed as:

- · Rising water tables and salinity;
- · Waterlogging;
- Wind erosion;
- Water erosion;
- Acidity and
- · Soil compaction.

Sandy soils such as occur in the Shire of Pingelly are highly susceptible to wind erosion and water erosion is considered to be a significant factor in the siltation of the Avon River and its tributaries.

There has also been a rise of saline ground water as a result of the clearing of native vegetation throughout the agricultural region with salinity increasing in the Avon River catchment much earlier than other wheatbelt regions which were cleared later. The wetlands of the wheatbelt have suffered enormous changes as a result of these salinisation processes, run off, siltation and eutrophication.

Increasing river salinity was quickly followed by the death of vegetation fringing lakes and wetlands in the catchment. The freshwater aquatic weed, Marsillea Sp. (nardoo) found in the Avon River began to disappear as a result of these changes and the appearance and increase of ribbonweed (Ruppia maritima) was recorded. This is a salt tolerant species (Sanders 1991).

The upper reaches of the Hotham River in the Shire of Pingelly mirror the Avon River in terms of salinity. The catchment has deteriorated significantly since development and now the headwaters of the Hotham River are a major contributor of salinity to the Hotham River and further downstream the Murray River.

During the last 20 years, stream and land salinity in the Blackwood River Catchment have continued to increase. Significant further spread of land salinity is expected within the catchment, with the area ultimately affected likely to be between a fifth and two fifths of the total land area. (Aquitech HydroPower 2002)

There is a trend of increasing water salinity from west to east within catchments. This reflects an increasing concentration of salts within the soil profile with diminishing rainfall.

Most of the wetlands in the upper Avon River catchment were fresh or near fresh until the mid 1930's. Lake Yealering on the border of the local authorities of Pingelly, Wickepin and Corrigin is reported to have become saline between 1936 and 1940 (Sanders, 1991). Originally, the wetlands were covered by sheoak, paperbark and tea tree, forming a dense canopy with low scrub below. Animal life in the area of the Avon was varied and quite different to that which occurs today.

As part of the State Salinity Strategy, the Department of CALM has undertaken a comprehensive biological survey of the agricultural areas.

Of about 4000 flowering plant species found in the Wheatbelt, more then 1500 grow low in the landscape, in riverine valleys, freshwater or primarily saline lands.

Areas affected by secondary salinisation also show major declines in biodiversity. Most lowland communities including tall woodlands, mallee and melaleuca shrublands, freshwater and naturally saline wetlands will be lost unless remedial action is taken. The wheatbelt will lose much of its landscape character with the loss of those communities and paddock trees.

Species richness declines with salinity. Most fresh wetlands contain about 50 invertebrate species compared with only four in the most hypersaline areas. As a rule of thumb doubling salinity halves the number of aquatic invertebrate species.

The death of shrubs and trees in many Wheatbelt wetlands due to salinity cause a 50% decrease in the number of waterbirds species using them. If salinity continues to increase only 16 species plus 3 or 4 species that use freshwater dams will persist in the Wheatbelt out of an original waterbird fauna of more than 60 species.

The biological survey conducted by CALM has identified 10 potential natural diversity recovery catchments one of which is Toolibin Lake.

CALM has also been planting areas of cleared and often unproductive land with maritime pine to lower the water table and help fight salinity.

Land management is administered on the basis of Natural Resource Management Areas. (See Fig. 4) The Strategy Area incorporates the Avon, Blackwood and South West Catchment Groups. (See Fig. 9).

Landcare groups have been established throughout rural areas of the Strategy Area. These comprise local farmers and often operate with the assistance of Agriculture WA or CALM. Approved projects are funded from the Natural Heritage Trust. Landcare groups operate independently of the local authorities in which they fall.

Landcare projects often involve fencing off and replanting vegetation in an attempt to stop or reverse land degradation. Protection and management of existing areas of native vegetation is very important. However, planting native trees and shrubs can remedy some land degradation problems but is a relatively expensive practice. (AGWA & Greening Australia, 1997).

Deep rooted perennial vegetation is being used in some areas to increase water use and to provide farmers with an additional source of income. Many farmers are looking at use of natural fertilisers, alley farming is increasingly changing the landscape, tagasaste is a possibility particularly on sandy soils. Olives, tea tree oil and eucalyptus oil industries are being trialed or developed. Tannins from acacia and eucalypt species; cut wildflowers and wildflower seeds; and value-added wood products are all possibilities.

Landcare Groups in the Strategy Area include the Facey Group, Wickepin and Toolibin Groups in the Shire of Wickepin and the East Hotham Woodebulling and Dartling Creek groups in the Shire of Pingelly.

CALM has a particular interest in ensuring compatibility between projects and adjoining area to, or affecting the CALM managed estate with its own management objectives.

## 2.10 CONSERVATION

A number of small conservation reserves exist in the Strategy Area (See Figure 12). These are important in maintaining the rural character of the countryside and conserving a fairly diverse flora and a smaller variety of animals which are able to survive in small areas. Small reserves and roadside verges are of particular importance to migratory or nomadic birds.

The department of CALM manages four major reserves in the Strategy Area. These are:

**Boyagin Nature Reserve**; 30 kms north west of Pingelly; covers 4844 hectares. Attractions are large granite outcrop with spectacular views and walk trails. Facilities include, barbecue and picnic areas, bushwalking and information.

The reserve represents upland country with seven district land types and has a rich animal fauna.

The vegetation is similar to that found at Dryandra except that most is of plateau and Powderbark slope types. The mammals are similar to those of Dryandra except that neither the Woylie nor the Red Tailed Wamberger has been recorded.

The reserve is separated by freehold cleared land along Boyagin Creek. Boyagin Rock is a popular picnic place.

Shire of Pingelly

PINGELLY

Shire of Pingelly

POPMYNINE SHIRE

CUBALLING

TOWN of Narrogin

NA

FIGURE 12: THE CALM MANAGED ESTATE

**Tutanning Wildlife Sanctuary** lies about 20 kms east of Pingelly. It is a small reserve of 2087 hectares.

Over 400 species of plants have been recorded. Several sandplains occur within the reserve, each with a distinctive flora. Other vegetation types are somewhat similar to those at Dryandra except that the understory is of Box Poison rather than Sandplain Poison.

As at Boyagin there are few areas of lower slope or valley vegetation. Areas of exposed granite and the associated plants are common. Tutanning is close to Wayerling Well where collections were made between 1904 and 1907 which give an insight into the changes which have occurred since then. A research station has been established to develop management techniques for wildlife sanctuaries.

**Dryandra Woodland**; 29 km north west of Narrogin; It is a series of discontinuous areas of bushland and covers about 29 000 hectares. Attractions include open woodlands, endangered mammal species, wildlife viewing, seasonal wildflowers, drive trails with audio and walk trails.

The woodland is the home of a large number of rare native mammals including the Numbat and Woylie.

The "Return to Dryandra" project includes the re-introduction of the Bilby, the marl (western barred bandicoot), the boodie (burrowing bettong) the mala (rufous hare wallaby) and the marnine (banded hare wallaby).

Dryandra Woodlands lies on the boundary between the Darling and Avon Botanical districts of the South West. It is a distinct transition zone between the jarrah dominant forests of the Darling Range and the more arid Wheatbelt.

Jarrah gives way to powderbark wandoo and brown mallet. Marri begins to disappear from the mid slopes and the valleys host stands of York gum. This transition is also marked by stark contrasts in the vegetation structure - tall open wandoo woodlands, dense sheoak forests, low dense heathlands and granite outcrops. The heathlands or kwongan are the most species rich vegetation associations. (CALM, 2002)

The Draft Management Plan for Dryandra Woodlands encourages adjoining farmers to create corridors of native vegetation for native mammals to migrate. (CALM, 2002).

The mammalian fauna is outstanding and 20 native species including 13 marsupials have been recorded including the Numbat, the Woylie, the Tammar and the Red Tailed Wambenger. Ninety seven species of bird have been recorded including comparatively rare species such as the Mallee Fowl and the Bush Bronzewing.

Of the three areas in the Narrogin-Pingelly-Brookton region which contain a wide variety of mammals and which were included in the National Parks Report (1962) - Tutanning (East Pingelly), Boyagin (West Pingelly) and Dryandra - Dydrandra provides the best chance of maintaining the full variety of flora and fauna of the region because it is much larger and more varied physiographically. It is most important that the area be protected and managed for conservation.

**Toolibin Nature Reserve** is located 55 kms east of Narrogin covering 497 hectares. This is the largest freshwater lake in the wheatbelt. When filled with water it attracts many waterbirds.

Facilities include barbecue and picnic areas, bushwalking and information.

Lake Toolibin is at the headwaters of the Arthur River. It is the only remaining Wheatbelt wetland where there are extensive stands of living swamp sheoak growing across the lake floor.

More species of Waterbirds breed in the Toolibin Reserve than any other single wetland in the south west. Until the first wave of clearing for agriculture (1890-1930's), freshwater wetlands were widespread in the south west but most of them have fallen victim to salinisation, waterlogging and inundation.

A clear contrast is available with nearby Lake Taarblin which has become saline. When trees began dying along the western shores of Lake Toolibin in the 1970s, this led to the formation of the Northern Arthur River Wetlands Rehabilitation Committee in 1976.

The Wickepin Land Conservation District Committee formed in 1985 led a major community effort to rehabilitate salt affected land and plant trees in the catchment.

The Department of CALM has purchased and rehabilitated land adjacent to the lake so that perennial vegetation now completely surrounds the lake. AGWA and CALM are encouraging the planting of trees and shrubs in the catchment. Bores and pumps have been installed to extract groundwater from under the lake and to test whether pumping on a larger scale could lower groundwater to a safe level.

In 1992 it was decided that the most effective way of co-ordinating the many actions needed to save Lake Toolibin was to draw up a recovery plan for the management of the whole catchment. Local farmers are actively involved and formed the Toolibin Catchment Group.

As well as tree planting around the Lake, selecting crops that use more water can improve the water balance for all land users in the catchment.

Success of these programmes also rests on social and cultural issues. Catchment boundaries do not necessarily reflect social boundaries and the problems facing land managers may differ across the landscape.

## 3.0 SETTLEMENT PATTERN

#### 3.1 ABORIGINAL SETTLEMENT

Aborigines of the Balardong, Wilmen and Nyauginyagi tribal groups lived in the region at the time of European settlement.

Detailed knowledge of their traditional lifestyles is incomplete, however, evidence of the extent of their occupation remains in place names and at a number of sites throughout the region (WDC, 1988).

There were thought to be at least 13 different Aboriginal Clans in the south-west region: collectively the people are known as Noongars. The word Noongar, or its linguistic equivalent, is identifiable as the word for Aboriginal (or person) in many of the vocabularies in this region. The people from the Narrogin district belonged to the Wiilman Clan.

Evidence of Aboriginal occupation and links to the area survive in the form of archaeological sites and the ever-growing interest of local Noongars in re-establishing cultural ties to the land.

European settlement had a dramatic effect on the aboriginal inhabitants of the region; conflict and introduced diseases reduced their numbers, while interaction with the settlers and the alienation of hunting grounds dispersed their society. Those who survived this contact established a co-existence with the settlers and as part of the workforce, they contributed to the early development of the region.

Government policies and the influx of population, particularly during the Depression further displaced those aborigines who had begun to find a place in this new society.

There has been a significant resurgence of interest in Noongar culture in recent years.

Local Noongar people have expressed a strong desire for areas to be set aside where they can legally engage in cultural activities, including hunting (CALM 1991b). The feasibility of permitting such activities on various categories of CALM-managed land within the southwest of the State, including Dryandra, is currently being investigated.

Quinns Block, within the Highbury State Forest, was identified by local Aboriginal people as a favoured location for future cultural activities, including hunting, camping, and passing on cultural knowledge (i.e. "the Noongar way") to the younger generation. It is also the largest of the Highbury Blocks and receives relatively little recreation use compared to those areas of Dryandra north of Narrogin (CALM, undated).

### 3.2 EUROPEAN SETTLEMENT

Europeans settled the area to the north of the Strategy Area in the 1830's leading to the establishment of the towns of York, Northam and Toodyay.

Some settlement subsequently occurred in the Williams area followed by an expansion of pastoralism eastwards, mostly as outstations for established farms in the Avon Valley to the north.

Gradually European settlement linked the settlements on the Swan and Avon River Valleys with Albany, the then colony's major port.

The 1840's was a time of low wool prices and the cost of labour and materials was very high. Exploration still occurred during this period as it was felt that better pastures would stimulate the economy but it was the arrival of convict labour and additional settlers, after 1849 that assisted the growth of the fledging settlements.

From the 1860s settlement gradually increased as colonists took up pastoral leases and then purchased farms. By the mid 1870's pastoral leases were extensive with woolgrowers settled as far east as Merredin and Bruce Rock. Land laws were changed to encourage smaller rural properties, closer settlement and large grain crops, particularly after 1887 when the need to lessen the amount of grain imported into the State to feed Perth and the Goldfields was recognised. The Homestead Act of 1893 and the Land Act of 1898 were introduced to establish wheat as a staple export of Western Australia.

The railway linking Albany to Beverley was completed in 1889 leading to the establishment of Narrogin which was declared a town in 1897. Katanning, Pingelly and Wagin were declared in 1898.

When the Great Southern Land Company began construction of the final section of railway linking Perth and the mail steamer port of Albany, it proved the stimulus for intensive farming and the development of farms along the railway route including Brookton, Pingelly, Cuballing, Narrogin and Wagin.

Following the gold rush in the 1890s, an available workforce and a State Government flush with funds resulted in land being released to the east pushing the Wheatbelt eastwards.

The action of the Government in taking over the railway from the Great Southern Land Company opened up previously tied up land.

The renewed interest in farming was perhaps most active following the turn of the century and was reflected by the heightened level of commercial and building activity in the town of Narrogin together with the extensive areas of farming land being opened up in the surrounding district.

By the 1920s, towns were established at Corrigin, Kondinin and Lake Grace.

The period since the early 1900s has been characterised by the growth and consolidation of the agricultural base of the area. This expansion and growth was interrupted by the events of the two World Wars and the depression of the 1930s.

In particular Western Australia's early period of prosperity ended with the collapse in world prices for wool and wheat in 1929. The depression years saw a rise in gold prices and the booming of the goldfields, as well as the change from handling bagged wheat to bulk handling.

Notwithstanding by the time of World War II, the Central South Region or Upper Great Southern as it was called, was a well established farming region. Pioneers having overcome considerable hardship, were becoming established residents. The older railway towns sported fine public and private buildings and newer towns were well established service centres.

The region's rate of expansion eastwards slowed in the 1950s and 60s, but its productivity and population grew.

As the regional centre for the Strategy Area and beyond, the Town of Narrogin has sustained a steady level of population growth over the post World War II period.

Throughout the south west of Western Australia the railways have had a major influence upon settlement patterns. Townships were anticipated along the routes of the proposed railways at relatively short intervals of 5 km (in the case of the South Western Railway). This spacing proved unrealistic as mobility improved, meaning that many small centres were shortlived. As farms expanded the requirements for the service centres decreased further.

## 3.3 RURAL SETTLEMENT

From the hunting and gathering of the region's original inhabitants to the modern agricultural economy of the present, human settlement in the Strategy Area has had a close relationship with the productivity of the land and climate. Advances in technology, particularly since European settlement, have continually altered this relationship and the landscape itself.

The recorded history of the Strategy Area is closely linked with the development of Western Australia's agricultural industries and because it is consistently productive, the region played an important part in the State's development.

The goldrush in the 1890's, while it temporarily deprived the area of a workforce and investment, was to lead to a rapid expansion of agriculture in the Strategy Area during the first decades of the 20<sup>th</sup> century.

Land was released and railways built to encourage returning diggers and other immigrants to push the wheatbelt eastwards. This eastward expansion of farming which continued to the 1940's, was assisted by the use of new varieties of wheat, improved fertilizers and by the development of machinery, which enabled the cultivation and cropping of larger areas.

Development in the western part of the region began to take a distinctly different form to that in the east, during this period. Wool became this area's major product as wheat yields were indifferent in the relatively higher rainfall, though oats and barley grew well and in the forested parts, a timber industry supporting more than thirty sawmills was established.

Machinery and scientific breakthroughs, supported by buoyant commodity prices, enabled individual farmers to increase their cultivated lands and yields, through increased clearing and better returns from once marginal soils. The amalgamation of properties into bigger farms is a process which has continued to the present.

Table 3: Number and Area of Farms

Local		1976	1	1983	19	86		1991	19	96		1999	Change in No.
Authority	No.	Area ('000 ha)	No.	Area ('000 ha)	No.	Area ('000 ha)	No.	Area ('000 ha)	No.	Area ('000 ha)	No.	Area * (1) ('000 ha)	1976- 1999
Narrogin	153	148	141	138	139	144	128	146	132	150	152	143	-1
Wickepin	145	185	134	200	127	199	122	191	118	201	100	191	-45
Pingelly	110	123	104	127	94	125	93	127	87	126	97	116	-13
Cuballing	117	100	101	86	97	83	87	84	81	82	87	102	-30
	525	556			457	551			418	559	436	552	-89
		farm size 059 ha				rm size 6 ha			100000000000000000000000000000000000000	rm size 37 ha			(2) **
Central South	2 348	3 261			2 041	3 324			1 851	3 399			(3) ***
		farm size 389 ha				rm size 9 ha			1 TO BE 15 2 2 2 2	rm size 36 ha			
Total WA	17 817	115 221			11 636	113 833			↑13 872 (13 205)	112 482 (20 196) (4)****			

- 1. Adjusted to agree with digitised areas for Local Government Authorities See Table 2
- 2. 26% increase in farm size 1976-1996
- 3. 32% increase in farm size 1976-1996
- 4. Excludes Kimberley and rangelands

From the mid-1970's the region's rural population has declined, partly as a result of a reduced labour requirement in agriculture but also because of lower commodity prices and poor seasons. In recent years diversification in the economy has occurred, with new crops, such as lupins and the manufacturing of stock feed for the live sheep.

During the last thirty years, population in the Wheatbelt has generally declined under the influence of increasing farming costs and decreasing real commodity prices. Improvements in the size and sophistication of farm machinery have also reduced the demand for farm labour inputs. This trend has been evident in the Central South Region.

There was an increase of approximately 4% in the total area farmed in the Central South Region during the period 1976/77 to 1996/97 and a 17% decrease in the number of agricultural establishments. In the State as a whole during this period, the area farmed decreased by 2.4% and the number of agricultural establishments decreased by 22%.

It can be seen from Table 3 that the average size of farms in the Central South has increased during the 1976/77 - 1996/97 period, by 32% and in the Strategy Area by 26%. In the eastern portion of the region, farm sizes (a<sup>y</sup>. 2360 ha) are double the size "of farms in the western portion (a<sup>y</sup>. 1280 ha). The average farm size in the Strategy Area is 1337 ha.

## 3.4 POPULATION CHARACTERISTICS

In 2000 there was an estimated 72,596 people living in the Wheatbelt Region which was 3.9% of the State's population and 14.1% of regional Western Australia's population. The Central South Sub Region comprises 28% of the Wheatbelt Region and contains approximately 25% of the Wheatbelt population. The population is spread across 21 towns and several smaller localities. (See Table 4).

The western portion of the Central South Region forms the Hotham Statistical Subdivision. It has approximately three times the population of the eastern portion or Lakes Statistical Division.

The size and distribution of the Central South population over the last 10 years is shown in Table 4. It should be noted that the 1986 Census was conducted during school holidays when many people were away from their usual residence. The estimated resident population figures have been adjusted by the Australian Bureau of Statistics to allow for this and for other factors. Therefore they are considered to be a more realistic measure of local populations.

In assessing future population growth for the Narrogin district, the WAPC forecasts that the Rural Areas are likely to remain at a constant and static level of population while the Towns of Narrogin, Pingelly, Wickepin and Cuballing have the potential to increase at a gradual rate. (See Table 4)

The Town of Narrogin with an estimated population of just over 4,700 is the largest urban centre in the region. However, there are other significant centres, such as Wagin, Pingelly, Wickepin, Corrigin and Lake Grace. Almost half the total population lives in towns scattered throughout the region. Table 5 indicates the distribution between town and rural population in the Strategy Area.

Table 4: Population Trend, Central South Region

	1971	1976	1981	1986	1991	1996	2001 (1)	2006 (2)	2011 (2)	2016 (2)
Brookton	A A STREET AND A STREET		1 210	1 116	1 098	973	1 023			
Corrigin			1 620	1 474	1 481	1 318	1 290			
CUBALLING			680	648	788	741	726	750	n/a	n/a
Dumbleyung			1 010	1 039	934	894	761			
Kondinin			1 280	1 204	1 126	1 186	1 012			
Kulin			1 280	1 186	1 119	966	892			
Lake Grace			2 040	2 168	1 885	1 819	1 567			
NARROGIN (SH)		870	810	698	871	860	774	900	n/a	n/a
NARROGIN (TN)		4 950	5150	5 105	5 028	4 626	4 712	4 760	4 760	4 800
PINGELLY			1 410	1 382	1 272	1 200	1 207	1 250	n/a	n/a
Wagin			2 400	2 226	2 092	1 979	1 840			
Wandering			490	409	426	364	336			
West Arthur			1 290	1 134	1 038	1 003	909			
WICKEPIN			1 020	963	964	860	746	870	n/a	n/a
Williams			1 180	1 168	1 073	1 040	942			
Central South			22 870	21 920	21 195	19 829	18 737	20 000	20 000	20 100
STRATEGY AREA			9 070	8 796	8 923	8 287	8 165	8 586	n/a	n/a

<sup>(1)</sup> Preliminary 2001 Census figures

Table 5: Town/Rural Population Distribution 2001

Local Authority	Total Population	Rural	Town	% Tow	n/Total
Narrogin (Town)	4 712	-	4 712	100%	
Narrogin			4 712		1
Narrogin (Shire)	774	532	242	31%	1
Highbury			200		90%
Narrogin town outskirts			42		,
Wickepin	746	220	526	70	0%
Wickepin			405		
Yealering			100		
Toolibin			-		
Tincurrin			11		
Harrismith			10		
Pingelly	1207	340	867	7:	2%
Pingelly			817		
Pingelly Heights			20		
Moorumbine			20		
Dattening			10		
Cuballing	726	305	421	58	3%
Cuballing			321		
Yornaning			-		
Popanyinning			100		
TOTAL	8 165	1 397	6 768	83	3%

850 people in the South Central Sub Region identified as being of indigenous origin in 2001 (4.5% of the total population). 88% of the population stated that they were Australian born. Of those born overseas the main countries were the United Kingdom and New Zealand (ABS, 2002).

<sup>(2)</sup> WAPC forecasts

The age structure in the Central South Sub Region is also undergoing significant change as the median age of people increases. In 1991 it was 30 years while in 2001 it is 37 years. There is also a noticeable absence of people aged 15-24 years in the Central South Sub Region, as many young move out of the region in search of employment and higher education opportunities. (WDC, 2003)

Although 2001 Census figures are currently unavailable it can be concluded from previous census figures that the Strategy Area's age structure, when compared with that for the State, is typified by a higher percentage of both males and females in the age groups 10-19 and by a lower percentage in persons in almost all categories over 19 years. The average age for the rural areas is growing.

The current population projections prepared by the WAPC show a steady increase in the Wheatbelt's population over the next 30 years which is estimated to reach 118,000 with the major growth areas being the local authority areas adjoining the Perth Metropolitan Region. If the Central South Region were to maintain its proportion of population growth, then the Sub Region population would grow to 29,000 over the 30 year period.

However, the Central South Region has declined from 21,920 in 1986 to 18,737 in 2001.

## 4.0 ECONOMY AND EMPLOYMENT

#### 4.1 THE WHEATBELT ECONOMIC PERSPECTIVE/OVERVIEW

In 1998/99 the Wheatbelt Region had 4,974 agricultural holdings covering 10.7 million hectares. Total agricultural production was valued at \$1.8 billion in the year, representing 42.5% of the States' total, comprising mostly of wheat, which was valued at \$997.3 million. Wool was valued at \$202.1 million and livestock disposals \$215.2 million.

According to the Wheatbelt Development Commission (1997), recent developments in reorienting the agricultural industry towards market driven production and increasing production efficiencies largely flowing from applied technology, are setting the framework for the next century in our region. The changing market focus of agriculture embraces diversification, with many new cereal and pulse crops being grown and a quantum leap in the variety of animal and plant production.

There has been some diversification in the Central South's economy during the past decade including emus, wine, olives, yabbies, furniture manufacturing, tree nurseries, mushrooms, cut flowers and tourism enterprises. This diversification has the potential to provide more employment opportunities in the region, reducing its reliance and the broad acre agricultural sector. There is also the potential for mining activity in the region at Wickepin and Newdegate, extracting kaolin (WDC, 2003).

The Wheatbelt's labour force has fluctuated over the last 10 years. However, as at June 2000, despite a decline in employment in the primary industry sector the numbers had decreased slightly to 38,330 close to the 1992 peak of 39,506 people.

Although experiencing some diversification in industry, the Wheatbelt's agricultural Forestry/Fishing sector employed 11,357 people in 1996, representing 36% of the Region's total workforce.

The Regions' unemployment rate (4.0%) has been consistently below the States' unemployment rate (6.2%). Unemployment figures in the Central South are much lower than the state average of 7%, ranging from 1.1% to 5.8% (Department of Employment, Workplace Relations and Small Business, December 2001). These low figures must however be balanced with the fact that many unemployed people in the Central South Sub Region leave the region and migrate to the City or coast in search of jobs (WDC, 2003).

Notwithstanding, considerable diversification of the Central South Sub Region economy and workforce has occurred in recent years. Further development of tourism, the processing of primary produce and diversification of manufacturing have the potential to provide more employment opportunities, which will address the current trend in population decline. (WDC, 2003)

## 4.2 AGRICULTURE

The predominant land use common to the whole of the Wheatbelt and fundamental to the economic health of the Strategy Area, is agriculture. The Central South Sub Region currently contributes 16.4% of the States' agricultural production by value (ABS, 2000).

Agricultural Western Australia statistical overviews place Pingelly and Cuballing in the Central Agricultural SRD Region and Wickepin and Narrogin in the South West SRD Region. Adjoining LGA's such as Williams is in the former with the LGA's of West Arthur and Wagin in the latter. This makes it difficult to readily obtain agricultural production statistics on a Sub Regional basis.

In the Strategy Area, agricultural production has increased annually from \$77.5 million in 1983 to \$115.3 million in 1999. (See Table 6)

The major contributors in 1999 were wheat (\$37m), wool (\$23m), sheep sales (\$12m), hay and pasture (\$7.7m), hay crops (\$6.6m), pig sales (\$6.4m), oats (\$6.1m) and barley (\$5.3m). New crops introduced since 1983 or minor products in 1983 where there are significant increases include lupins (all LGA's), canola (all LGA's), chick peas (Pingelly), triticale (Pingelly) and nurseries (Narrogin and Wickepin). While there have been steady, and in some cases, significant increases in the major produce of wheat, sheep sales, hay and pasture, hay crops and pig sales and more modest increases in wool, cattle sales and barley, there have been decreases in oats, poultry, eggs and milk. Table 6 summarises the proportional input of a range of agricultural products to total agricultural production in the Strategy Area in terms of \$ value and the change in that input between 1983 and 1989. Table 7 illustrates the change by local authority in the Strategy Area.

Table 6: Proportional Input of Agriculture Products to Total Agriculture Production 1983/1999 in the Strategy Area (\$'000)

	1983	% input	1999	% input	Change in input 1983-99	% input
Wheat	29 084	37.5	37 262	32.3	8 178	(5.2)
Barley	4 259	5.6	5 324	4.6	1 065	(1.0)
Oats	6 150	7.9	6 132	5.3	(18)	(2.6)
Triticale	45	-	85	0.1	40	0.1
CEREALS	39 538	51.0	48 803	42.3	9 265	(8.7)
Lupins	121	-	2 600	2.3	2 479	2.2
Field Peas	27	-	21	-	(6)	(0.1)
Chick Peas	24	-	230	0.2	206	0.2
Faba beans	12	-	18	-	6	-
LEGUMES	184	0.3	2 869	2.5	2 685	2.2
Canola	-		4 548	4.0	4 548	4.0
Hay crops	3 277	4.2	6 602	5.7	3 325	1.5
Hay and pasture	3 790	4.9	7 687	6.7	3 897	1.8
Vegetables	-		-		-	-
Fruit	-				-	-
Grapes - wine	-		3	-	3	-
Grapes	-		3	-	3	-
Nurseries	14	-	1 296	1.1	1 282	1.1
CROPS	7 081	9.1	20 139	17.5	13 058	8.4
Cattle sales	874	1.1	1 060	0.9	186	(0.2)
Sheep sales	6 337	8.2	12 430	10.8	6 093	2.6
Pig sales	3 163	4.1	6 367	5.5	3 204	1.4
Poultry sales	26	-	-	-	(26)	-
LIVESTOCK	10 400	13.4	19 857	17.2	9 457	3.8
Wool	19 676	25.4	23 259	20.2	3 583	(5.2)
Milk	29	-	-	-	(29)	-
Eggs	625	0.8	334	0.3	(291)	(0.5)
ANIMAL PRODUCTS	20 330	26.2	23 593	20.5	3 263	(5.7)
TOTAL AGRICULTURE	77 533	100.0	115 261	100.0	37 728	

Table 7: Change in Agricultural Production by Local Authority 1983 and 1999 (\$'000)

		Narrogin			Wickepin			Pingelly			Cuballing		Total Change
	1983	1999	Change	1983	1999	Change	1983	1999	Change	1983	1999	Change	83-99
Wheat	3 995	5 169	1 174	13 015	19 523	6 508	8 132	8 652	520	3 942	3 918	(24)	8 178
Barley	1 216	1 077	(139)	878	1 391	513	1 084	1 636	552	1 081	1 220	139	1 065
Oats	2 388	3 185	797	1 477	552	(925)	1 025	1 120	95	1 260	1 275	15	(18)
Triticale	8	-	(8)	22	-	(22)	-	85	85	15	-	(15)	40
CEREALS	7 607	9 431	1 824	15 392	21 466	6 074	10 241	11 493	1 252	6 298	6 413	115	9 265
Lupins	9	483	474	34	1 377	1 343	62	630	568	16	110	94	2 479
Field Peas	-	1	1	-	20	20	9	-	(9)	18	-	(18)	(6)
Chick peas	-	-	-	-	-	-	8	230	222	16	-	(16)	206
Faba beams	-	18	18	_	-	-	4	-	(4)	8	-	(8)	6
LEGUMES	9	502	493	34	1 397	1 363	83	860	777	58	110	52	2 685
Canola	-	1 669	1 669	-	1 206	1 206	-	580	580	-	1 093	1 093	4 548
Hay crops	1 332	4 711	3 379	990	550	(440)	398	309	(89)	557	1 032	475	3 325
Hay and pasture	1 393	5 023	3 630	1 146	793	(353)	609	827	218	642	1 044	402	3 897
Vegetables	-	-	-	-	-	-	-	-	-	-	-	_	-
Fruit	-	-	-	-	-	-	-	-	-	-	-	-	-
Grapes - wine	-	3	3	-	-	_	-	-	-	-	-	-	3
Grapes	-	3	3	_	P2.	-		-	-	-	-	-	3
Nurseries	14	576	562	_	720	720	-	-	-	-	-	-	1 282
CROPS	2 739	11 985	9 246	2 136	3 269	1 133	1 007	1 716	709	1 199	3 169	1 970	13 058
Cattle sales	299	59	(240)	199	732	533	201	152	(49)	175	117	(58)	186
Sheep sales	1 825	3 977	2 152	1 822	3 067	1 245	1 596	3 577	1 981	1 094	1 809	715	6 093
Pig sales	769	1 313	544	189	-	(189)	531	1 302	771	1 674	3 752	2078	3 204
Poultry sales	25	-	(25)	-		-	-	-	-	1	-	(1)	(26)
LIVESTOCK	2 918	5 349	2 431	2 210	3 799	1 589	2 328	5 031	2 703	2 944	5 678	2 734	9 457
Wool	6 070	8 265	2 195	5 524	5 723	199	4 649	6 289	1 640	3 433	2 982	(451)	3 583
Milk	26	-	(26)	2	-	(2)	-	-	-	1	-	(1)	(29)
Eggs	575	334	(241)	1	-	(1)	-	-	-	49	_	(49)	(291)
ANIMAL	6 671	8 599	1 928	5 527	5 723	196	4 649	6 289	1 640	3 483	2 982	(501)	3 263
TOTAL AGRICULTURE	19 944	35 866	15 922	25 299	35 654	10 355	18 308	25 389	7 081	13 982	18 352	4 370	37 728

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Agricultural employment as a proportion of rural population has declined in the Strategy Area and Table 8 indicates the change between 1986 and 1996.

Table 8: Agricultural Employment as a proportion of total employment in the Strategy Area\* 1986-1996

	POPULATION	AGRIC. EMPLOY.	% OF TOTAL
1986	963	322	33
1991	964	284	29
1996	860	264	31

Narrogin (Shire)							
	POPULATION	AGRIC. EMPLOY.	% OF TOTAL				
1986	698	383	55				
1991	871	376	43				
1996	860	377	44				

Pingelly									
	POPULATION	AGRIC. EMPLOY.	% OF TOTAL						
1986	1382	250	18						
1991	1272	225	18						
1996	1200	215	18						

Cuballing								
	POPULATION	AGRIC. EMPLOY.	% OF TOTAL					
1986	648	186	29					
1991	788	167	21					
1996	741	144	19					

Strategy Area								
	POPULATION	AGRIC. EMPLOY.	% OF TOTAL					
1986	3691	1141	31					
1991	3895	1052	27					
1996	3661	1000	27					

<sup>\*</sup> Town of Narrogin excluded.

# 4.3 MANUFACTURING

Manufacturing in the Wheatbelt has primarily developed to supply the local agricultural sector in addition to processing local commodities.

In 1998 there were 156 manufacturers located in the Wheatbelt. The number of people employed in the manufacturing sector in 1998/99 was 1,277 compared with 929 in 1997/98.

The combined turnover for manufacturing companies in the Wheatbelt was \$175.9 million in 1998/99 an increase from \$121.1 million in 1997/98.

In the Central South Sub Region in 1986 there were 58 manufacturing establishments employing 235 people (WDC, 1989). This represented 2.4% of the workforce significantly lower than the States' then manufacturing employment of 11.3%.

In Narrogin in 1986 there were 16 manufacturing establishments employing 104 persons, 2 in Pingelly, 5 in Cuballing and 1 in Wickepin. Those firms manufacturing wood products are located in proximity to the Dryandra Forest.

Western Power has built a demonstration integrated wood processing facility in the Shire of Narrogin. Once the facility is commissioned it will process locally harvested oil mallees producing eucalyptus oil, activated carbon and generating electricity to feed back into the grid. The facility will use the oil mallees as fuel and will generate electricity while producing eucalyptus oil and converting wood to activated charcoal through a process developed by the CSIRO. If the demonstration facility proves successful, Western Power may look to commission a larger wood processing facility in the area one in Wickepin and two in Pingelly.

#### 4.4 MINING

There is little existing mining activity in the Strategy Area. Nevertheless, feasibility testing has been carried out for the Ockely Wickepin Kaolin Mine, situated approximately 10km east of Wickepin. Should kaolin mining go ahead, the mine is expected to have a life expectancy greater than 30 years.

Laterite which is a potential source of gravel is found in areas to the south west and north east of Narrogin and to the west, northwest and east of Cuballing.

The areas east of Highbury appear to have potential for construction sand and some of the playa lakes, west of Toolibin may have potential for gypsum.

The catchment areas associated with the Arthur River, east of Highbury and the catchment areas of the Hotham River and its tributaries, to the north of Yornaning and east of Cuballing respectively, may have potential for construction industry clays.

An area a few kilometres east of Narrogin town is under tenure for its kaolinitic clay potential. Some Exploration Licences (probably focusing on gold) are located at the south eastern and eastern border of the Shire of Narrogin.

Sandplains, containing limonitic pebbles in places, appear to be fairly widespread in the southern half of the Shire of Wickepin. Colluvium and minor alluvium containing silt, sand and gravel are common in the northern portion of the Shire in areas north and south of Pingelly and in the western portion of the shire and the catchment areas of south easterly trending river drainages, extending from Lake Yealering (just outside the Shire of Wickepin) to north of Dudinin, may have potential for construction industry clays.

A number of areas around Uleling Hill (approximately 20 km east-southeast of Wickepin) are known to contain high-grade kaolin deposits, some suitable for use in the manufacture of paper. These areas are already under tenure for their kaolin potential.

A small area of an Exploration Licence (mostly within the Shire of Wickepin) at the south-eastern corner of the Shire of Cuballing is currently being actively investigated for its kaolinitic clay potential.

More information on the nature of these deposits is available in the Geological Survey of Western Australia publication Mineral Resources Bulletin 19.

Proposed mining development needs to recognise the Mining Code of Conduct and the Farmers Mining Code.

#### 4.5 CONSTRUCTION

In 1999/00 there were 701 dwelling approvals and total construction approvals were valued at \$101.4 million in the Wheatbelt. At the time of the 1996 census the Wheatbelt construction industry employed about 1,400 people.

The majority of dwelling approvals (372) were in the Shires of Gingin, Northam (Shire and Town), Chittering, Dandaragan and Toodyay.

Non residential approvals were mainly in the Shires of Gingin and Moora.

Building activity in the Strategy Area between 1997-2002 is listed in Table 9.

Table 9: Building Activity 1997-2002

Local Authority	Dwellings	Other	Total	
Pingelly	28	91	119	
Wickepin	12	31	43	
Narrogin (Shire)	5	6	11 *	
Narrogin (Town)	74	505	579	

<sup>\* 2001/2</sup> only

#### 4.6 COMMERCE

Employment in commerce in 1996 in the Wheatbelt Region accounted for 4,445 people in retail and wholesale trades, 487 in finance and insurance and 1,093 in the provision of property and business services.

At the last retail census in 1991 there were 679 retail establishments in the Wheatbelt Region. Estimated retail turnover was \$235.3 million.

In 1987 there were 149 wholesale trade establishments and 371 trade outlets in the Central South Sub Region. This sector employed 1,205 persons making it the second largest employer in the region. Retail establishments in the Town of Narrogin numbered 85 with a further 3 in the Shire of Narrogin, 13 in the Shire of Wickepin and 21 in the Shire of Pingelly.

In 2002, commercial establishments in the Town of Narrogin had increased to 192 including retail, service industry, other commercial and general industry (Town of Narrogin, 2003).

### 4.7 COMMUNITY SERVICES

In 1996 in the Wheatbelt Region, education, health and community services employed 4,095 people.

There has been a 23% decrease in the total student population of the Central South Sub Region in the past 15 years. Two district high schools (Dumbleyung and Williams) have closed and two Primary Schools have closed.

Table 10 lists the schools currently operating in the Strategy Area and their student numbers between 1986 and 2001.

Table 10: School Enrolments

Narrogin	TOTAL FULL TIME STUDENTS				
	1986	1991	1996	2001	
East Narrogin PS	339	361	307	237	
Narrogin PS	399	416	409	389	
St Matthews PS	123	168	191	192	
Narrogin Senior HS	796	814	790	848	
WA Agricultural College	108	112	120	114	
TOTAL	1 765	1 871	1 817	1 780	
Wickepin					
Tincurrin PS	33	35	28	7	
Wickepin PS	86	92	78	68	
Yealering PS	32	54	46	30	
TOTAL	151	181	152	105	
Pingelly					
Pingelly District HS	357	318	291	226	

As can be seen numbers have decreased in Pingelly and Wickepin and remained stable in Narrogin which serves as the Regional High School.

Narrogin has a regional hospital, Pingelly, a district hospital and Wickepin a health centre. There are a number of medical practices, Senior Citizens Centres, Aged Persons Housing, Nursing Homes and Hostels in Narrogin and Pingelly.

Sporting facilities are of a high standard in all main centres with Narrogin recently completing a major recreational centre.

## 4.8 TOURISM

The Strategy Area is within the W.A. Tourism Commission's "Heartlands Region". This corresponds to the Wheatbelt Development Commission's Region.

The Tourism Research Review published by the Commission estimates that 733,000 domestic visitors stayed overnight in the Heartlands Region in 2000 with an average stay of 3.2 nights, spending a total of \$152 million.

In addition there were 1,464,000 day trips to the region, 52% of which were for the purpose of holiday/leisure and 27% were for the purpose of visiting friends and/or relatives. In addition 22% took a day trip for business reasons. 31% of visitor nights were in commercial accommodation and 69% in non commercial accommodation.

As the Heartlands Region covers 43 local authorities including coastal areas it is difficult to derive proportional figures for the Strategy Area.

The WATC's Tourism Development Register for June 2002 records only one development proposal for the Strategy Area being the Drydandra Woodlands Interpretative Centre.

Facilities at the Dryandra Woodland include camping, picnic and barbecue areas, toilets, drinking water, the Dryandra Village, guided tours, bushwalking and information. The Dryandra Woodland Village can accommodate up to 60 people and was established in the late 1920's as a Forest Department settlement for the harvesting of mallet bark for the tanning industry.

A 25 kilometre radio drive trail is the first of its kind in Western Australia. Short range, solar powered transmitters are used to broadcast commentaries as you move from site to site along the trail.

The Dryandra Woodlands is one of the Central South's three major tourist attractions, attracting 30,000 visitors/year compared with 66,000/year to Wave Rock at Hyden.

There are few other physical tourist attractions in the Strategy Area. However there is the potential for the area to attract visitors through special events utilising its magnificent sporting facilities and taking advantage of the climatic and seasonal factors.

The standard of accommodation in the Greater Dryandra ranges from the basic camping area at Dryandra Woodland to an RAC four star rated motel in Narrogin. Currently there are 31 accommodation establishments in the region with a total of 354 rooms available. In addition all towns with the exception of Cuballing have caravan parks, which offer powered sites and camping facilities. (WDC, 2003)

There are 15 commercial attraction providers in the Greater Dryandra region and 12 attractions that can be broadly grouped as Parks, Reserves and Historic Sites. The regions attractions provide a wide range of nature-based and cultural experiences for the visitor.

A significant number of festivals and events occur throughout the year in the Greater Dryandra Region.

There are 34 establishments that provide sit down food and beverage facilities in the Greater Dryandra Region, including licensed restaurants, cafés and fast food outlets.

The Greater Dryandra and Central South Tourism State of the Industry report, January 2003 (WDC, 2003) proposes a restructuring of tourist services with a parent Dryandra Visitor Centre in Narrogin with satellite information centres at Cuballing, Pingelly, Wandering and Wickepin.

The MRWA Brochure "A guide to roadside amenities and rest areas" distributed at the Shire of Narrogin, excludes the Great Southern Highway as a tourist route.

## 5.0 DEVELOPMENT AND INFRASTRUCTURE

### 5.1 TRANSPORT

### 5.1.1 Regional Roads

The Strategy Area has good road access through the Great Southern Highway and with good connections to Albany Highway, Brookton Highway and Great Eastern Highway as they radiate from Perth.

Roads 2020 the Regional Road Development Strategy (MRWA 1997) identifies road network requirements for rural Western Australia over the next 25 years.

Figure 13 illustrates the major road links in the Strategy Area and their status as described in the Roads 2020 report. Traffic volumes are subject to seasonal variations such as grain carting and tourist increases.

A potential clay/kaolin mine east of Wickepin if commenced would produce 60 road train loads/ day between the mine site and Bunbury.

#### 5.1.2 Rail

The existing rail network is shown in Figure 13. An abandoned railway formerly ran from Narrogin to Williams in the south-west. The infrastructure for this railway has largely been removed, although the land use is still designated for railway purposes.

The main north to south rail line through Narrogin is the Great Southern Railway, which runs from Kwinana to Albany via Northam. Narrogin also provides railway access for the region to the east to Wickepin, Kulin and Corrigin.

### 5.1.3 Freight

By far the largest road freight task in the Wheatbelt Region involves the transport of grain (approx. 3.9 million tonnes in 1994/95). Fertilisers, fuel and general freight add to the overall freight task.

The usual process is for all the grain to be transported from the farms to the grain receival points by road. While the majority is then transported by rail, 20% of the regions' grain is transported by road from the grain receival points to either a railhead or port. (See Figure 14)

The CBH grain segregation policy (which entails specific grain types only being received at nominated bins) may cause an increase in the distance that some farms transport their grain to a receival point with a corresponding decrease in distance to port or railhead.

There is several CBH receival point located in the Strategy Area. The grain is destined for Kwinana. Narrogin's receival point provides a link to other CBH receival points located to the east of Narrogin. Grain from the Williams region is transported to Narrogin via road as there is no rail facility available.

FIGURE 13: MAIN ROAD TRANSPORT CORRIDORS

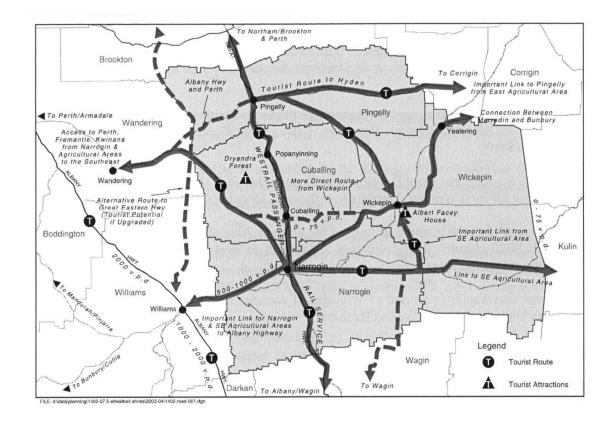
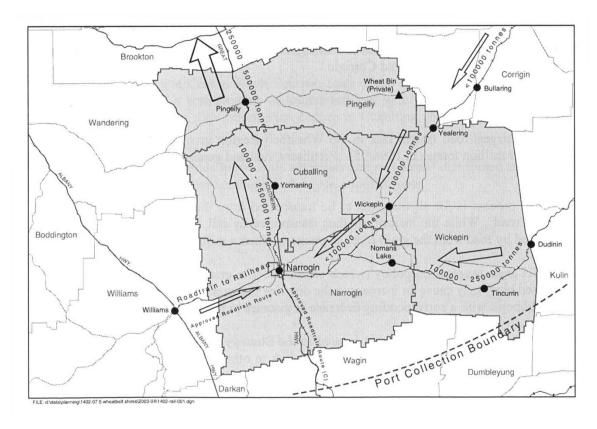


FIGURE 14: GRAIN RECEIVAL FACILITIES AND OPERATION RAIL NETWORK



There are up to 6 train trips through Narrogin per day. This is in the form of two train trips associated with transporting of grain and the two return trips and 2 additional trips for maintenance purposes. The maintenance is for wagons and locomotives from the Albany area to the Avon workshop.

The draft copy of the "Wheatbelt Regional Transport Strategy" discusses the restoration of the southern link from Narrogin to the Bunbury-Kwinana railway over the Darling Ranges. This link would provide shorter travel distance and time than the Great Southern Railway route, making rail more competitive with road freight. It argues that this route would have the added bonus of carting grain and other commodities from the south-eastern Wheatbelt Region to Kwinana. Restoration of such a rail linkage would however have impacts on, for instance, the Port of Albany.

Westrail has only 11 trains for grain haulage throughout the State but has the capacity to work seven days a week and cart 7 million tonnes /year.

## 5.1.4 Air/Port

There is no regular air service in the Wheatbelt Region. The major ports servicing the region are Fremantle, Kwinana and Bunbury.

# 5.1.5 Transport Issues

A number of Issues relating to transport and freight haulage were identified in the MRWA Roads 2020 report. Those relevant to the Strategy Area and to this Local Planning Strategy were;

- The increasing number of road trains and the effect on road safety and conditions.
- Improving road signage.
- Provision of more cycleways, footpaths and pedestrian crossings.
- Bypass roads for all country towns.
- Roadside vegetation.
- Improving passenger train and bus services.
- Establishing a competitive rail system for the transport of freight.
- Recognition of how the road and rail system interface.
- Priority should be given to upgrading roads that feed the rail system.
- No new links could be justified due to cost.
- Recognition that road transport is more efficient for the carting of fertiliser.
- Rail freight rates have been reduced to compete favourably with road freight rates for grain.
- The introduction of a rebate scheme for farmers delivering 95% of their grain harvest to receival points.

## 5.2 WATER SUPPLY

Water is supplied to the Wheatbelt Region through three independent schemes. The Goldfields and Agricultural Water Supply Scheme supplies the greater eastern portion of the Region; the Great Southern Towns Water Supply Scheme supplies the south western portion and a network of local schemes supplies the western area, closer to the Perth Metropolitan area. The Water Corporation administers all of these schemes.

All the Shires within the Strategy Area are serviced with potable water from the Great Southern Towns Water Supply Scheme. (see Fig. 15). The towns do not have local water supply sources with the exception of the Narrogin Bottle Creek Dam.

#### 5.3 SEWERAGE

The Towns of Narrogin and Pingelly each have a wastewater scheme operated by the Water Corporation. Both are licensed by the DEWCAP. Wickepin has a Council operated waste water scheme.

About 40% of the effluent at Narrogin is reused by the Shire for public grassed areas and 100% is being used by Pingelly. Discussions are in progress with the Shire of Narrogin to increase the amount of reuse.

Infill sewerage works has been programmed for Pingelly for 2005/2006.

The Waste Water Treatment Plant (WWTP) locations and buffers need to be planned to ensure compatible land uses are located within the buffer area. This is an important issue for both the Corporation and the community.

## 5.4 ENERGY

The Strategy Area is supplied with power from a substation at Narrogin. The Network consists of a 22kv main line from which 12.7kv single phase spurs tee off to supply the rural community. (See Fig. 16). The supply to the Shire of Pingelly comes from Western Power's Narrogin substation. Typically rural distribution networks are characterised by having limited ability for provision of bulk loads and are not as reliable when compared to urban distribution systems.

Western Power provides for normal load growth when planning reinforcement in the electricity network. The load growth for the Shires of Narrogin, Pingelly and Wickepin is small. There will be significant work required to provide for any bulk load in the Shires of Pingelly or Wickepin. In general it will be easier to supply a large load the closer it is located to the Narrogin substation. The imposition of commercial loads on the 12.7kv systems will in most cases require the installation of 22kv three phase. The planning horizon for the identification of distribution system requirements is 5 years.

Western Power is in the process of upgrading supply to Pingelly that will provide for growth until 2007. This network will utilise existing lines and no new lines will be built.

Currently there are no major works identified for either the Shires of Narrogin or Wickepin.

Currently there is no piped gas available to the Strategy Area.

Table 11 lists infrastructure availability for each town in the Strategy Area.

Beverly Corrigin Perth Metropolitan Area Brookton W&S EXTN's Brookton NB EXT Bullaring Pingelly Pingelly Wandering Wandering Pinjarra Popanyinning Kulin Cuballing DB EXT Boddington Dudinin Waroona Kulin Narrogin Williams Boddington Harrismith Timcurrin Williams Legend WD EXTN CONDUIT Study Area

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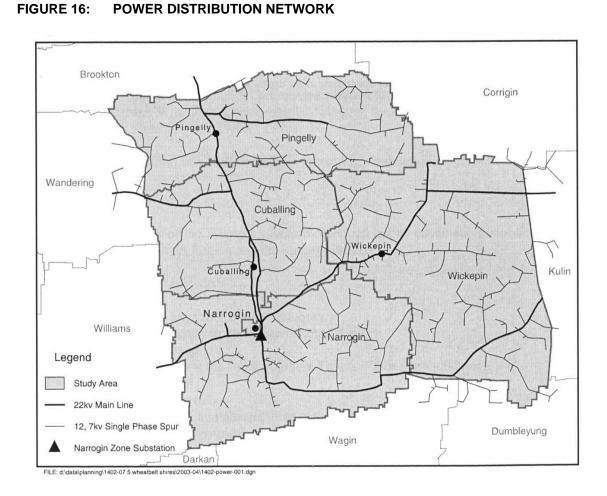
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FIGURE 15: GREAT SOUTHERN TOWNS SCHEME WATER SUPPLY

Water Corporation Water Supply

Water Corporation Water Supply & Sewage Scheme

Water Corporation Water Supply, Other Authority Sewerage



Moulyinning

Dumbleyun

Dumbleyung

Table 11: Existing Town Infrastructure

Town	Power Supply	Water Supply <sup>(1)</sup>	Sewerage	Waste Management
<b>Narrogin (Town)</b> Narrogin	22 kv power supply from the south.	Great Southern Towns Water Supply System.	WWT Scheme 40% recycling of effluent use.	Landfill site to NW of Town
Narrogin (Shire) Highbury Yilliminning	22 kv power supply from the south.	Great Southern Towns Water Supply System.		
<b>Wickepin</b> Wickepin Yealering	Rural network. Limited ability for provision of bulk loads.	Great Southern Towns Water Supply System.	WWT operated by LA.	Landfill site - 40% recycled Landfill site
Toolibin Tincurrin Harrismith	3			Two other landfill sites for rural areas
<b>Pingelly</b> Pingelly	Rural network. Limited ability for provision of bulk loads.	Great Southern Towns Water Supply System.	WWT Scheme 100% reuse of effluent. Infill sewerage scheduled for 2005/6.	
Moorumbine Dattening	Supply to be upgraded from Narrogin substation.	No scheme water.		
Cuballing Cuballing Yornaning Popanyinning	Rural network. Limited ability for provision of bulk loads.	Great Southern Towns Water Supply System.		

<sup>(1)</sup> The Water Corporation is currently undertaking major capital works on the GSTWS scheme to ensure that it has sufficient capacity to meet future water demands.

## 6.0 PLANNING CONSIDERATIONS AND ISSUES

#### 6.1 INTRODUCTION

A Local Planning Strategy provides the physical basis to implement or to allow the implementation of a local authority's strategic objectives through its Local Planning Scheme.

In this instance where the Strategy Area comprises five local authorities we have reviewed relevant regional as well as local authority reports. These have included previous studies primarily focusing on economic issues prepared by the Wheatbelt Development Commission, in particular the findings of the recent report of the Central South Action Group as well as consideration of the objectives of Strategic Plans prepared by the Town of Narrogin and the Shire of Wickepin which themselves have resulted from input from their respective communities. These have been supplemented by our own workshops and investigations with Council representatives and officers and Government Agencies.

This has enabled the identification of planning issues to be addressed in this Local Planning Strategy.

These have been categorised as regional, rural or urban. Preliminary planning responses to address the issues are summarised at the end of this section as a basis for the formulation of the strategy.

### 6.2 THE WHEATBELT REGION

In 1995 the Wheatbelt Development Commission prepared an Economic Development Vision and Strategy for the Wheatbelt Region entitled "Shaping the Future" which is relevant to the planning for the Strategy Area. (WDC, 1997)

This study took the form of a SWOT analysis (strengths, weaknesses, opportunities, trends).

### 6.2.1 Strengths

Many of the strengths of the Wheatbelt Region described in this document do not necessarily apply to the Central South Region and the Strategy Area.

Those that are relevant include:

- Good transport links to Perth and Bunbury.
- Reasonable proximity to Perth International Airport.
- Rail access for freight.
- Reticulated water via the Great Southern Towns Water Supply Scheme.
- · District high school.
- · Regional health service.
- A series of research and development centres for dry land agriculture.
- A wide range of government and agency services.
- High level of sophistication and services of primary industry.
- Increasing demand for the region's food products by changing Asian markets.
- Quality of life appeal of the region.

 A growing awareness of natural resource degradation and commitment to landcare and cleaner production.

#### 6.2.2 Weaknesses

- Narrow production focus (maybe a strength).
- · Lack of whole of region identity.
- Natural resource degradation i.e. clearing, salinity, loss of biodiversity.
- Perception of regional decline.
- Small dispersed population base.
- Government service provision related to population numbers, not need.
- Lack of entrepreneurial leadership, marketing, business skills.
- Aging infrastructure network.
- · Basic delivery service.

# 6.2.3 Opportunities in the Wheatbelt

- Further development of region's world class agricultural industry.
- Economic diversification through tapping the potential for local downstream processing and value adding to raw materials and primary produce.
- Building a series of communities with a critical mass, capable of sustaining a long term development through diversification of the economy and adding value.
- Taking advantage of people's wishes to pursue semi-rural lifestyles.
- Development of completely new industries based upon comparative advantages found within the region.
- Development of World Best Practice education and training which reflect the Wheatbelt's economic niches, to be marketed both nationally and overseas.
- Development of Agribusiness skills to facilitate business development.
- Identification and development of opportunities arising from the region's location physically adjoining Perth and within the same time zone as many parts of Asia.
- Building on the strong, innovative attitude prevalent in the region, to encourage new ideas, products and businesses.
- Potential to encourage sustainable use of natural resources and implement mechanisms which will counter environmental degradation.
- Development of new, ecologically sustainable primary production practices.
- Developing a "quality of life" marketing and development approach for the region with the emphasis on employment growth.
- Expansion of existing primary production research staff and facilities.
- Development of a market focus for the region.

# 6.2.4 Trends within the Wheatbelt

- Changing lifestyles are leading to a more mobile population base with less loyalty to the local community.
- People have moved from small towns to Sub Regional centres, and from Sub Regional centres to cities.
- Urban issues tend to dominate the political agenda, as the State's population is predominantly urban based.

- Average age of farmers is increasing (currently quoted at 57 years), indicating less young farmers actively involved in the agricultural industry.
- Development of larger, viable farming businesses are altering the pattern of farm succession which causes social change.
- Current government policies support service and infrastructure delivery to existing and growing population centres, rather than to areas of wealth creation and potential wealth creation.
- Saline degradation of once productive land is challenging and threatening the agricultural sector in some areas (estimated to be 17% of the Wheatbelt by 2010 if no action is taken).
- Large scale removal of natural vegetation is affecting the environmental sustainability and biodiversity of the region (approx. 93% of Wheatbelt region has been cleared of natural vegetation).
- Over exploitation of environmental resources for short term results.
- Lifestyle appeal of the coastal areas over the inland, influencing population base movements.
- Higher expectations of material well-being and increased expectation of services comparable with the rest of Western Australia (especially in the growth areas near the metropolitan area).
- Diversification of agricultural practices and a more rapid response to changing market demand and prices.
- Growing acceptance of importance of post-harvest handling and downstream activities.
- Pressure for sustainable, environmentally acceptable practices in all major industries.
- Growing awareness of off-site environmental impacts of production.

Such trends and expectations provide the broad framework for the development of strategies and visions for the Strategy Area.

## 6.3 CENTRAL SOUTH ACTION PLAN

At a Sub Regional level, the Wheatbelt Development Commission recently conducted a survey of community groups to identify priority issues for the Central South Region (Central South Action Plan, WDC, 2003).

Problems identified included a lack of promotion of the Sub Region's lifestyle, the need to lobby for more regional headworks, a lack of opportunities for post-compulsory education and training, retention of medical personnel, a lack of public transport facilities, retention of young people and a lack of housing for seasonal workers.

The results from the WDC survey are indicated in Figures 17 and 18.

It is evident that attracting new industry and the diversification of the economic base are priority issues with lifestyle issues (improvement not promotion) being of less concern possibly due to respondents already feeling that their quality of life is more than satisfactory and requires less attention.

FIGURE 17: CENTRAL SOUTH ACTION PLAN: PRIORITY ISSUES IDENTIFIED BY COMMUNITY GROUP SURVEYS

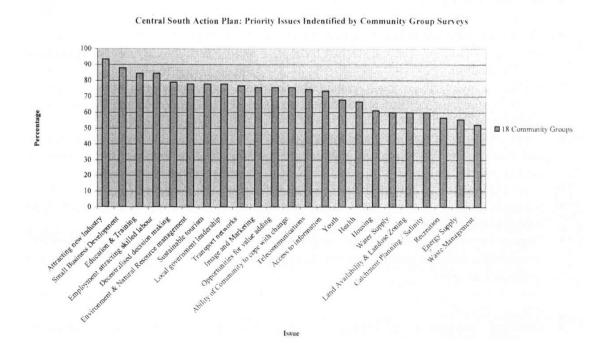
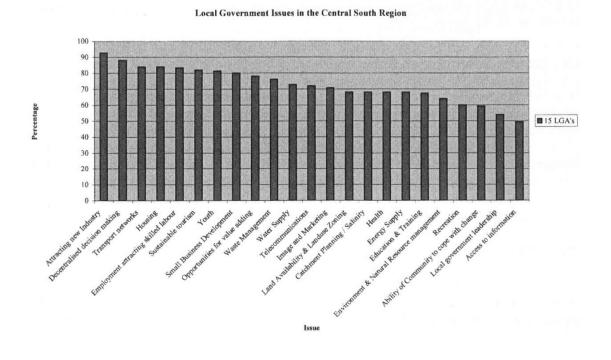


FIGURE 18: LOCAL GOVERNMENT ISSUES IN THE CENTRAL SOUTH REGION



Notwithstanding, it is evident from other surveys conducted by the individual shires and through their Strategic Plans that the community wishes to seek a balance between development objectives and the maintenance of lifestyle values. It is therefore incumbent on this LPS to provide the planning framework to assist in achieving this balance and to ensure that the pursuit of economic goals does not jeopardise current lifestyle attractiveness.

#### 6.4 LOCAL AUTHORITY STRATEGIC PLANS

#### 6.4.1 Town of Narrogin, Strategic Plan

Local authority strategic plans, where formulated provide a specific framework for the formulation of the Local Planning Strategy.

The Town of Narrogin Strategic Plan for 2001-2005 sets goals which have implications for the region and therefore provides a framework for the Local Planning Strategy. The stated objectives of the Strategic Plan are as follows:

Mission Statement: To protect and enhance our unique country lifestyle.

Country lifestyle means:

- Friendly and caring with a human dimension and opportunities for everyone;
- Safe and healthy, with traditional country values; a relaxed lifestyle and a sense of history;
- A place with fresh air and open spaces where you can see the stars at night.

To achieve this scenario the following challenges are recognised in the plan:

- Ensure Narrogin benefits fully from the opportunities of economic growth and development without losing the characteristics of country lifestyle and natural environment which make the Town such a special place;
- Position the Town to continue to grow as a regional service centre, value-adding to existing enterprises as well as expanding into new areas;
- Address Town boundary issues which limit land availability and hence economic development;
- Define the Town's direction in relation to tourism, including the opportunities presented by the Dryandra woodlands;
- Find solutions to major environmental issues such as reducing salinity and managing waste;
- Foster the viability of the agricultural sector and neighbouring towns and take a regional role in contributing to these areas;
- Address the loss of youth from the Town;
- Be proactive in planning for the needs of an ageing population;
- Co-ordinate the energy and enthusiasm of the many community groups who aspire to achieve great things for the Town and the State;

- Enhance rapport, communication and sense of partnership between Council and the community; and
- Commit resources to achieve the Vision, Mission and the physical infrastructure needs of the Town.

# 6.4.2 Shire of Wickepin, Strategic Plan

Councils Mission statement is to provide leadership and a range of services and develop opportunities to meet social, economic, physical and environmental aspirations in partnership with the community.

The following objectives have been adopted in the Shire of Wickepin's Strategic Plan in order for Council to achieve its mission.

The actions proposed in the Strategic Plan to achieve these objectives, which can be assisted by this local planning strategy and a subsequent Local Planning Scheme are listed below:

- To develop and maintain quality services and infrastructure. Progressively implement the townscape plans.
- To ensure the protection and improvement of the environment.
  - Continue to support and encourage actions taken in relation to environmental problems.
  - Support the Facey Group in the protection of remnant vegetation, salinity, control, etc.
  - Review and adhere to the principles of the Roadside Vegetation Conservation Plan.
  - Investigate and foster actions to deal with waste disposal and recycling issues.
- To promote the development of a viable and diversified local economy.
  - To actively support the development of tourism opportunities in the Shire.
  - Support activities that lead to diversification and sustainability of the rural industry.
  - Actively support extractive industries not to the detriment of the environment.
  - Through planning and development ensure the availability of land for residential and industrial purposes.
  - Investigate the availability of land presently available, for various uses, including industrial, and plan to meet the expected future requirements.
  - Assist with the provision of resources for housing and other infrastructure for local businesses, in conjunction with other authorities.
  - Investigate the initiatives adopted by other communities for the expansion of the local community.
- To provide and encourage the use of a variety of recreational, educational and cultural facilities.
  - Provide and maintain walk trails for recreation and tourism purposes.
- To provide efficient, effective and accountable governance.
- To promote the shire as a focal point in the development of the greater region.

- Support efforts to achieve additional funding from sponsorship and other sources for the regional concept of the Facey Group.
- Maintain support for the continued development of the Albert Facey Homestead and precincts as a regionally significant tourist attraction.
- Develop a plan that recognises that there may be opportunities to provide housing to attract people who work in Narrogin and who may be encouraged to become residents in the Wickepin Shire and for employees at the Kaolin Mine should it be established.
- Maintain support for Lake Yealering care group in the development of eco/camp and lake surrounds as a regionally significant tourist attraction.

## 6.5 ISSUES AND PLANNING RESPONSES

The Local Planning Strategy can support the above objectives through providing a decision making and statutory framework for town planning matters as addressed in its Local Planning Scheme.

It needs to be recognised though that a Local Planning Scheme is a regulatory and largely passive document in that in itself it generally responds to the initiatives of others unless Council initiatives such as the prioritisation of tourism or heritage are adequately resourced.

Such resourcing could take place through Council's Strategic Plan and where supported by the Scheme will assist in providing positive direction towards the achievement of Council's long term goals such as those listed above.

The planning issues raised through the above documents and our own workshops conducted with each local authority have been considered in terms of regional, rural and urban planning issues. These are listed below together with our preliminary responses.

# 6.5.1 Regional Issues and Planning Responses

# <u>Issue</u>

- No clear identity for the Region.

## Response Options

- Formulate common regional goals independent of local government boundaries
- to promote regional culture.
- Transport improve connections, particularly to the Peel Region and coastline. Tourism develop (or improve) tourism product/identity unique to the Region.
- Ensure that regional tourism strategies/recommendations where possible are supported by this Strategy and the Local Planning Scheme.

# <u>Issue</u>

- The need to attract new industry.

# **Response Options**

 Ensure that regional marketing strategies/recommendations where possible are supported by this Strategy and the Local Planning Scheme.

- Lack of major infrastructure need to upgrade to enable establishment of new industry and business.
- Concentrate/prioritise efforts to upgrade infrastructure within Pingelly, Cuballing, Wickepin and Narrogin to provide capacity for business expansion.
- Ensure the availability of land build-up to enable/facilitate business opportunities to commence and evolve.

#### Issue

The maintenance and enhancement of community values.

## Response Options

- Ensure that individual local government strategic plans are supported by this Strategy and the Local Planning Scheme.
- Improve and promote the availability of lifestyle choices through a range of residential lot sizes from town centre living, aged persons dwellings, enterprise parks, mobile home parks, rural-residential and hobby farms.

#### Issue

- The management of population growth/decline.

# Response Options

- Consolidate existing settlement nodes.
- Develop a settlement hierarchy to guide growth and investment e.g.
  - o Regional Service Centre >10,000 people (Northam/Albany).
  - o District Service Centre 2 10,000 people (eg. Narrogin).
  - Local Service Centre 500-2,000 people (eg. Wickepin, Pingelly, Cuballing).
  - Village Centre/Hamlets <500 people.</li>

# 6.5.2 Rural Issues and Planning Responses

# <u>Issue</u>

- The protection of agricultural pursuits from competing land uses.

# **Response Options**

Protect prime agricultural land. Is a single rural zone - e.g. General Agriculture adequate?
 (SPP No.11 - requires priority agricultural areas to be identified - none identified for this strategy but if local significance is established/justified an area could be included e.g. where intensive agriculture is priority - could be zoned specifically).

# <u>Issue</u>

Land management

# **Response Options**

- Review means to improve land management requirements through the planning system e.g. development application/subdivision application.
- Creation of environmental corridors (greenways) (in LPS) along major drainage lines as conditions of subdivision/development, Landcare.
- Provide for arterial drainage schemes in Local Planning Scheme to support salinity reduction strategies.

## Issue

- The appropriateness of existing farm structures and lot sizes and scope for subdivision/amalgamation.

## Response Options

- Incorporate flexible subdivision policy developed with WAPC to better suit specific farming needs.
- Support Landcare initiatives.

## <u>Issue</u>

- The minimisation of land use conflict between rural, intensive agriculture and non-rural uses.

# Response Options

 Local Planning Scheme to provide performance standards/assessment criteria for intensive agriculture and non-agricultural (e.g. rural residential) uses to ensure broadacre agriculture is maintained.

#### Issue

Landscape Protection.

# **Response Options**

 Review/introduce development control provisions in respect to location and appearance of buildings consistent with rural character of the area in the Local Planning Scheme.

# 6.5.3 Urban Issues and Planning Responses

# <u>Issue</u>

- The management of urban growth/decline.

# **Response Options**

- Encourage development/infilling of existing townsite lots until demonstrable demand for town expansion.
- Define areas suitable for rural living/rural residential.

# Issue

The management of the urban/rural interface.

# **Response Options**

- Plan low density residential, conservation greenbelt around each town.
- Rationalise the Town of Narrogin's green belt across the Town/Shire boundary.

# <u>Issue</u>

- The cost of providing infrastructure and services to sustain rural communities.

# **Response Options**

Increase development potential in areas where there is spare infrastructure capacity.

# <u>Issue</u>

- The capability for a Local Planning Scheme to allow flexibility for commercial enterprise without adversely affecting the amenity of the area.

# **Response Options**

- Ensure sufficient/suitable land is available for industry, commerce and tourism.
- Review zones to increase flexibility while maintaining security/certainty for investment.

# <u>Issue</u>

- On-going townscape improvement.

# Response Options

- Review development control provisions for improved landscaping and amenity.

## Issue

- Heritage protection.

# Response Options

 Protect/provide encouragement for protection of heritage - buildings, infrastructure etc. in LPS and Local Planning Scheme.

# 7.0 THE STRATEGY

#### 7.1 INTRODUCTION

Analysis of the foregoing data and community input together with workshops held with individual local authority personnel has provided the basis for the formulation of this Local Planning Strategy. The LPS responds to community objectives, the planning issues identified there from, and the State Planning Framework. (See Figure 24 - Strategic Development and Land Use plan at end of this section).

It is evident from the analysis that the Strategy Area, though little known to many Western Australians, and irrespective of a stable or declining population in some areas, continues to be an important farming area with vibrant communities who value and appreciate the largely crime free, secure and country lifestyle opportunities provided in the area.

Notwithstanding though there is a general community feeling that the return from the State on the areas' economic contribution is inadequate in terms of the provision of health and education and the availability of infrastructure. This diminishes its ability to compete with larger metropolitan centres and places an unfair restriction on the areas' ability to attract more people which would provide the economic critical mass to justify such an investment. This is recognised by the Wheatbelt Development Commission.

"Much of the region's vision is reliant on timely, effective planning to act as the catalyst for necessary infrastructure provision and government priority. Historically, planning within Western Australia has been based upon population numbers rather than the region's capacity to generate wealth and employment. People of the Wheatbelt therefore need to lobby for a planning mechanism based on a suite of relevant measures, rather than continue to accept the status quo in planning procedures and priority areas."

Accordingly this Strategy relies upon local initiative and commitment for its success.

Consistent with the main purpose of the Strategy it looks at the longer time span of 10-15 years. Importantly it views the local authorities which make up this Strategy Area as a single planning unit, a concept which if adopted by the participating local authorities will significantly enhance the prospect of achieving planning objectives while optimising costs through the sharing of resources.

"State planning needs to be undertaken from a more strongly economic perspective, using the combinations of skills, resources, technology, management, governance and business practices which, when combined, give particular strategic and competitive advantages in trade and development, as the core competencies upon which to base planning assumptions." (WDC, 1995)

The Strategy Area also needs to make better use of existing infrastructure and plan a more sustainable system of inputs and outputs consistent with the State's sustainability objectives.

It requires local parochialism to take a back seat to regional and rational economic judgements in the interests of the future of the Strategy Area. The focus in the Strategy is therefore to ensure that the planning framework (this LPS and the subsequent Local Planning Schemes) facilitates strategic as well as community objectives.

Unlike traditional planning documents and in keeping with the economic realities facing rural areas of WA, it seeks to integrate economic planning objectives and priorities as identified by the regional development agency, the WDC, as a basis to encourage investment.

To do this the Strategy proposes greater flexibility than the traditional zoning schemes which means more discretionary decisions by Councils. It is essential therefore that these decisions are based upon the principles espoused in this Strategy and are accepted in this spirit by each local authority.

The objectives adopted for the Strategy are:

- the establishment of an identity for the region which promotes the above values and is attractive to new industry and existing and new residents;
- the management of population growth/decline;
- the facilitation of economic development in accordance with the above principles;
- the protection of prime agricultural land including support for existing broadscale agriculture;
- the facilitation of new agricultural uses in rural areas subject to proposals meeting acceptable performance criteria;
- the incorporation of natural resource land management practices in development and subdivision proposals; and
- the maintenance and enhancement of the attractive features of a country lifestyle.

To facilitate the above objectives, planning proposals are to be supported statutorily in the local authority Local Planning Scheme including the use of Local Planning Policies which relate to subdivision, changes in land use, development, urban design and landscape, economic growth and sustainability.

## 7.2 A COMMITMENT TO REGIONAL PLANNING AND A REGIONAL IDENTITY

The State Government need not be the only tier of Government with regional planning responsibilities. The opportunity for local authorities to prepare a composite regional or sub-regional Local Planing Strategy for several LGA's together with expanded opportunities under the Local Government Act 1996 provides the mechanism for LA's to enter arrangements to achieve regional objectives.

Importantly it needs to be recognised that the most effective means to create a regional identity is to promote and enhance Narrogin as the regional centre.

Promoting Narrogin as the administrative and commercial hub of the Region will help to unify the Region and make it more easily identifiable. Regional centres, such as Narrogin and their outlying areas are strongly interdependent. The prosperity of the outlying areas directly affects regional centres through the demand for goods, services and labour. Regional centres are dependent upon the support and receptiveness of the outlying areas.

The benefits of a well established, vibrant regional centre have been identified by the WDC will provide as follows:

- An adequately sized market to justify the establishment and development of a variety of business services and organisations;
- A sound base for the future development of more sophisticated goods and services;
- A focal point for the marketing and promotion of the Region;
- A greater perception and awareness of the entire Region throughout the State and the nation;
- The attraction of skilled people to the Region;
- Assistance in the distribution of information, knowledge and understanding of improved technology throughout the Region;
- A pool of knowledge and expertise for the development of organisation and management skills;
- A secure administrative base for State and Commonwealth agencies, regional businesses and community services;
- For the smaller towns, a higher level of nearby services, creating greater incentive for the retention of population. (WDC, 1989, p 60)

The more facilities Narrogin can offer and the more diversified its economic base, the greater potential for flow-on benefits to the other local town centres in the Strategy Area. In particular these town centres should be promoted as satellites to a greater Narrogin in which rural residential development is to be promoted. As a result this Strategy supports industrial development in and on the outskirts of Narrogin, and identifies some areas for rural residential development as well as in the satellite towns.

Because of the potential conflict between rural industry and rural residential development the Strategy identifies sectors of preferred uses around the outskirts of Narrogin. (See Figure 25)

To enhance the prospects of achieving regional status, the Strategy Area should be extended and considered to include the natural catchment for Narrogin. Figure 19 indicates a catchment area based on a 50 km radius (30 minutes drive) west, north and south and a 100 km radius (1 hour drive) east of Narrogin.

This catchment contains a 2001 population of 14 000 - 15 000 persons.

The Strategy Area needs to be better linked particularly to the Peel Region and the holiday area of Mandurah to the west so that it becomes more accessible and more importantly, is perceived to be more accessible.

Tourism activities need to be planned regionally and incorporate a regional approach such as the Greater Dryandra theme to promote the key attractions as part of a wider circuit and experience.

Within the Strategy Area, tourist and event activities need to be focused. Physically the triangular road base between Pingelly, Wickepin and Narrogin and the major entry roads to these foci, is an identifiable and manageable tourist precinct (See Fig. 20).

# 7.2.1 Strategic Actions

The LGA's of the Strategy Area can through this LPS:

- Formulate common regional goals independent of local government boundaries.
- Support regional tourism strategies/recommendations where possible.
- Support regional marketing strategies/recommendations where possible.
- Ensure individual local government strategy plans are consistent with this Strategy and the Local Planning Scheme.
- Ensure that strategic major links to the region are developed.
- Promote the concept of a wider region as depicted in Figure 19.
- Promote Narrogin as the regional centre primarily for commercial and industrial opportunities.
- Promote the rural triangle of Narrogin/Pingelly/Wickepin for tourism events and as the watershed for the Swan Coastal Plain.
- Promote the major towns for lifestyle opportunities.

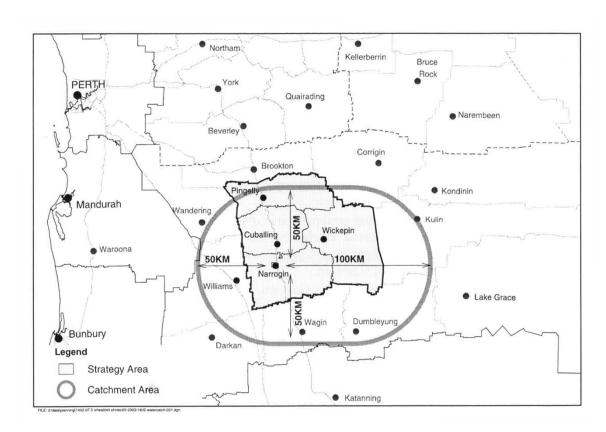


FIGURE 19: REGIONAL CATCHMENT

# 7.3 THE FACILITATION OF ECONOMIC DEVELOPMENT

# 7.3.1 The Attraction of New Industry

A priority issue identified in the Central South Action Plan was the need to attract new industry. This Strategy therefore identifies sufficient land for residential, commercial and industrial development and identifies the availability of infrastructure and its limitations.

A marketing strategy targeted towards the attraction of new industry was prepared by the Wheatbelt Development Commission for the Shires of Pingelly, Wagin and West Arthur in 1999. Many of the strategies involved beneficial taxation arrangements for regional areas, Government funding arrangements for rural areas, a more flexible and streamlined bureaucratic process in dealing with development proposals and the need for local retention of capital through community banking and revolving loan funds.

The WDC Strategy recommends the use of changes within the Local Government Act, which have created potential for authorities to enter partnering arrangements and proactively attract new industries into their area. Such an addition of entrepreneurial responsibilities for local government should consolidate this sector's involvement in economic activities. The entry of local government into joint venturing and partnership arrangements will give it more of a market focus and result in a redirection of local government resources into marketing, "quality of life services" and industry development.

To ensure that this new sphere of activity does not heighten parochialism and allow investors into the region to play one local government group off against another these partnerships need to be entered into on a regional basis.

Potential industry sectors that have been identified in the WDC project for the Region include:

- existing business and associated businesses that complement potential expansion and growth of this sector;
- value added agricultural industries (grain and wool, canola, poultry, skeleton weed scanners, increase head of cattle, tannery);
- · information technology industries;
- industries that can adapt to telecommunication, eg. telemarketing, data processing, customer support services;
- accountants and other professional services (architects, lawyers, consultants and other professionals who service industry clients;
- builders (to accommodate the value added industries);
- warehousing industries (chemical companies, furniture, product, nurseries, hardware);
- aquaculture (processing for aquaculture products such as yabbies and fish);
- new agricultural industries including mallee oil, olives, grapes;
- tourism focusing on the Region's cultural, social and geographical history and features. The tourism industry may include farm stays, cottage industries or bed and breakfast service providers:
- aged persons;
- the manufacturing sector; that is those manufacturers who complement existing
  industries or who may require large blocks of land in carrying out their manufacturing
  activities. Such companies may include chemical companies, pool manufacturers or
  the pre-fabrication industry or light manufacturing industries such as canning and food
  processing;
- · events organisers; and
- service providers to industry.

# 7.3.2 The need for Upgraded Infrastructure

Significant infrastructure upgrade costs cannot be justified under current State Government policy.

Though the area is well serviced by a scheme water supply, the absence of major power transmission lines north and east of Narrogin restricts high power consumers to Narrogin or Highbury or the corridor between, unless the major Muja to Kalgoorlie line can be accessed.

The WDC suggests that either, alternative financing arrangements or alternatively less expensive water supply arrangements will need to be developed to have a major bearing on the nature and location of industry and urban expansion in the Region.

"The Wheatbelt has a large number of small energy consumers, few of which consume quantities sufficient to take advantage of the economies of scale afforded by deregulation. Furthermore, the region is without a major generation source and power is transmitted relatively long distances to reach consumers. Should transmission be costed on a full cost-recovery basis, the price of grid power to consumers in the region is likely to increase significantly."

"Saddled with ageing infrastructure and a monopolistic power generator moving towards full cost recovery, ownership and responsibility for maintaining and improving the region's energy infrastructure will be an issue of increasing importance to the region."

"Alternative energy production has many possibilities worthy of further investigation. These include solar, coastal wind generation and the possibility of generating energy through synergised use of industry by-products."

"The Strategy Area's separate communities may give some potential for the development of a conglomerate of small sustainable energy cooperatives, capable of supplying immediate neighbourhoods." (WDC 1995 p. 36)

Generally, there is a desire throughout most of the region to see rail better utilised and upgraded as a freight carrier. One of the longer term transport visions for the Wheatbelt will be for rail freight to become an economically viable option for the region and for much of the heavy haulage currently traversing through and damaging regional road networks to be placed on rail.

New communications technology provides the opportunity to overcome some infrastructure deficiencies.

# 7.3.3 Strategic Actions

- Market the region as an entity to attract new industry.
- Initiate and seek funding for alternative energy projects.
- Upgrade communication links to attract new service industry.
- Utilise the objectives and strategic actions of the Strategy as a promotional tool.
- Increase the flexibility for mixed use residential/commercial areas in the Local Planning Scheme.

• Increase the opportunity for composite residential/light industry operations.

#### 7.4 THE MANAGEMENT OF POPULATION GROWTH/DECLINE

Rationalisation and increased mechanisation of agricultural industries during the last two decades has caused much of the Wheatbelt region to experience a period of population decline.

It is a requirement of the WAPC's SPP No. 11 for this LPS to include a settlement strategy. The settlement strategy not only needs to recognise the above trends but also the wider influence of the growth of the Perth, South West and Peel regions.

It is evident that the Strategy Area within this environment is on the one hand experiencing strong economic growth based primarily on agricultural production, modest town development (mainly Narrogin) and rural population ageing and decline.

The growth of Perth has resulted in the recognition of the Avon hinterland as an area for expansion as evidenced by the Avon Arc Study carried out by the Department of Planning and Infrastructure for the local authority areas to the north of the Strategy Area. No similar study has been considered for this Strategy Area which lies to the immediate east of the Mandurah/Pinjarra area and is within one hours drive of Armadale in Perth's South East Corridor, a similar relationship as Toodyay is to Midland in Perth's Eastern Corridor.

It is conceivable that in the longer term, the Strategy Area may become more attractive to a growing disillusioned metropolitan population as the Swan Coastal Plain becomes more populated.

Notwithstanding, and in the interim we believe that a strong position be adopted by the local authorities in the Strategy Area, to focus growth into a clear settlement pattern, modest as it may be in the short term so as to enhance the attractiveness of the area for possible longer term expansion.

Development and consolidation of existing settlements has economic, social and environmental benefits. Not only is this an efficient use of natural resources such as land, infrastructure and energy but also assists in supporting social services such as hospitals, libraries, shops and community facilities.

While growth is modest, no expansion of the current townsites should be contemplated. The emphasis should be on infill development either recycling existing houses or utilising vacant lots. The periphery of Narrogin should be planned for the long term expansion of the townsite or for the location of new industry.

Each local authority needs to recognise a settlement hierarchy in which each centre serves a particular purpose and in which each achieves a critical mass to achieve that purpose.

Fundamental to the success of this Strategy is the recognition of the Town of Narrogin as a Regional centre with the capacity to accommodate industrial and residential expansion with the surrounding towns seen as satellites where local industry, rural residential and hobby farms are encouraged.

The focusing of major regional services in Narrogin will not only benefit Narrogin but wider areas. This does not preclude surrounding Shires to invest in aged care centres and other facilities outside of their municipality in Narrogin, if they see a benefit to the long term interest of their ratepayers.

Consistent with this theme each recognised settlement should be planned for a target population. (See Table 12)

In the Strategy Area the targets are based on an assumed capacity of the current townsite areas and do not reflect historic trends. To reach these targets and fill existing townsite capacity would almost certainly require the introduction of a major industry (or several) into the area. A settlement hierarchy for the Strategy Area to contribute to this target is set out in Table 12 below and is illustrated in Figure 20.

A doubling of townsite population would raise the regional catchment illustrated in Figure 19 to 25 000. This would be sufficient to justify the higher order services sought in a district centre including a second supermarket, a cinema and possibly a discount department store.

Table 12: Settlement Hierarchy

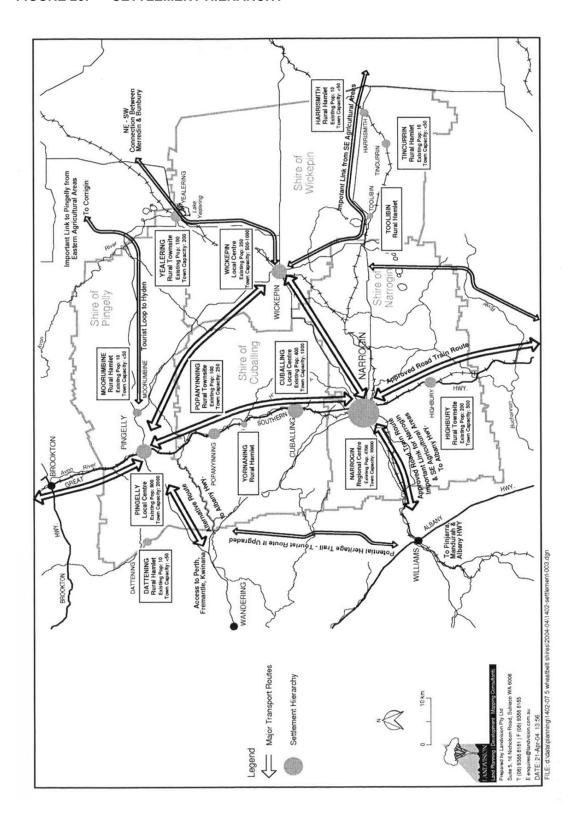
		Existing Population	Townsite Capacity	Townsite Target
District Centre:	Narrogin	4 700	10 000	10 000(1)
Local Centres:	Pingelly	800	3 000	2 000 <sup>(2)</sup>
	Wickepin	350	1 500	500-1 000
	Cuballing	400	1 000	1 000
Rural Townsites:	Highbury	200	200	500 <sup>(3)</sup>
	Yealering	100	500	200
	Popanyinning	100	250	250
Rural Hamlets:	Moorumbine	10	<50	<50
	Dattening	10	<50	<50
	Harrismith	10	<50	<50
	Tincurrin	10	<50	<50
	Toolibin	0	<50	Subject to policy plan
	Yornaning	0	<50	Subject to policy plan
Total		6690	16450 - 16500	14500 - 15000

- Includes partial development of urban expansion areas indicated in the Strategy Plan.
- (2) Includes supplementary rural residential zones.
- (3) Includes special rural subdivision in the Shire of Narrogin.

# 7.4.1 Strategic Actions

- Adopt the settlement strategy and plan for each designated townsite in accordance with the settlement hierarchy in this Strategy.
- Investigate infrastructure options to allow for expansion in existing townsites.
- Ensure special rural subdivision supports and is consistent with the settlement hierarchy.

FIGURE 20: SETTLEMENT HIERARCHY



# 7.5 PROTECTION OF BROADACRE AGRICULTURE/ENCOURAGEMENT OF DIVERSIFICATION

It is a primary objective of the WAPC's SPP No. 11 to protect prime agricultural land. Provision is made in the SPP to effect this protection through a specific zone.

Additionally proposals for diversification of the agricultural land that are soundly based are to be encouraged. The State Planning Strategy encourages the relocation of significant numbers of chicken and pig farms from the Perth region. It also encourages opportunities for downstream agriculture processing. Given that these uses do not require land with high capability for agriculture they could be located in areas where the land capability is unsuitable for traditional agriculture practices.

In the Strategy Area, particularly the eastern portion, the agricultural pattern is largely set by economic realities, lot sizes and climatic factors.

The eastern part of the Strategy Area has a generalised agriculture land capability rating between medium to high and is suitable for broadacre agriculture. Due to the existing land use pattern and ownership, topography, low vegetation cover and low rainfall, the area is considered unsuitable for rural subdivision and is generally not under pressure for subdivision and a specific agricultural protection zone is not needed.

In the western portion of the Strategy Area some intensification of land use may occur in time.

This position is supported by the WDC in its 1995 report which recognises that in appropriate areas, particularly those closer to the major markets that manufacturing and value adding from foodstuffs need to play an increasingly significant role in the future vision for the region. This includes:

- Development of tourism products.
- Relocation of horticultural industries.
- Introduction of viticulture.
- · Pasture crops, hay production and orchard fruits.
- Meat production pigs/live cattle trade.
- Commercial cultivation of native flora.
- New tree crops.

Lots within the western portion of the Strategy Area are primarily the traditional homestead lot of 75 hectares (160 acres). For the purposes of intensive agriculture these would generally provide a reasonably viable area including an appropriate buffer without the need for subdivision.

In the western portion of the Strategy Area land uses may change from the current primary agriculture focus to other rural industries and rural living developments. Land uses that may be considered appropriate include intensive agriculture (horticulture and animal husbandry operations), experiential tourism (farm stays, ecotourism, etc.), natural environment and greenway conservation, rural industries and appropriately sited rural living cluster settlements.

To enable and encourage these initiatives in accordance with the principles of the WAPC's SPP No. 11, it is recommended that the rural areas of the Strategy Area be designated "General Agriculture" with a wide range of discretionary uses. Council's discretion to be exercised in respect to new agricultural uses to be based upon the new uses compatibility with existing uses and/or the opportunities to contain potential adverse impacts to an acceptable level within the subject land.

The Local Planning Scheme should therefore include performance standards/assessment criteria for intensive agriculture to ensure that continuing broadacre agriculture on adjoining land is not jeopardised. This would include consideration of the potential for conflict through the use of aerial sprays, around the clock use of heavy machinery and chemical treatments.

Where subdivision of land is needed to facilitate the above, it will be supported by the local authorities.

Should enclaves of intensive agriculture occur requiring re-subdivision/amalgamation of properties then an Intensive Agriculture Zone can be considered.

In other words, rural planning needs to be proactive in encouraging new industry rather than be based solely on historic and existing land uses.

# 7.5.1 Rural Smallholdings and Rural Residential

The subdivision of land for rural lifestyles and other uses that may conflict with agriculture practices is a major planning issue. Careful planning is required to secure the value and quality of rural land and ensure it is maintained for present and future agricultural use.

It is, however possible to accommodate rural lifestyle opportunities and hobby farms provided that there is sufficient separation between these uses and/or management to minimise their impacts.

This separation between rural lifestyle, as well as hobby farms, rural industry and intensive rural activities could be achieved by creating enclaves for either use, or alternatively by ensuring that there is sufficient opportunity for separating these uses on adjoining land.

Currently the demand for rural smallholdings in the Strategy Area, either for residential purposes or as hobby farms, is limited and as a result none of the local authorities have or need a formalised rural strategy.

Notwithstanding, and in accordance with the proposed settlement hierarchy, the Strategy recommends that this type of development be focussed on the established towns, preferably those with a reticulated water supply. Those not on scheme water would need to adequately demonstrate the availability of a potable water supply.

Except for the smaller rural townsites, rural residential development is not favoured contiguous with the townsite boundaries (particularly residential zones) unless the TPS provides for significant development opportunities within the townsite as it may close options for town expansion. The Strategy considers that areas within 2-3 km of these settlements would be more appropriate for rural residential and rural smallholdings. In anticipation of rural smallholdings zones being created the Local Planning Scheme is to include provisions for a Rural Smallholdings Zone, as well as performance standards/assessment criteria for rural smallholdings proposals.

Rural Residential and Rural Smallholding areas should:

- not be in areas identified for urban (including industrial) expansion;
- be located where future residents will have access to urban services and employment opportunities;
- be located close enough to the major towns for the efficient provision of services;
- be based on an assessment of the demand for and availability of constructed road access, water (where required), electricity, telecommunications, and basic community services;
- avoid individual lot access directly off a highway or other major road;
- be planned having regard for landform analysis and land suitability assessment;
- · avoid areas of very high or extreme bushfire risk;
- avoid areas with prospects for mining or extraction of basic raw materials; and
- avoid environmentally sensitive areas.

# 7.5.2 Strategic Actions

- Each Local Planning Scheme to include a presumption against subdivision of rural land unless it can be demonstrated that it will not jeopardise broadacre agriculture
- Each local authority to adopt an Intensive Agriculture Policy to guide it in determining relevant applications. Where there are no adverse impacts outside of the subject land, intensive agriculture is to be considered permitted development in the Local Planning Scheme.
- Each local authority to adopt a Rural Smallholdings Policy which sets out the need for extensive physical, environmental and social investigations as a precursor to an appropriate rezoning.
- Each local authority is to require an amendment to its Local Planning Scheme to take place before any further subdivision of land for rural residential or rural smallholding purposes.

The provisions of WAPC's Policy DC 3.7 Fire Planning need to be recognised in any proposal for rural residential development/subdivision.

The shire overlaps two Natural Resource Management Regions the South West and Avon Catchment Regions. The South West and Avon Catchment Councils facilitate NRM across these two regions through their NRM regional strategies and investment plans.

NRM issues identified by the South West and Avon NRM regional strategies that have relevance to land use planning include the following:

- Exposure of acid sulfate soils
- Protection of biodiversity
- Erosion and sedimentation
- Vegetation clearing and its effects on environmental values and hydrology

- Habitat destruction and fragmentation
- Eutrophication and other pollution of surface and groundwater
- Groundwater allocation
- · Protection of wetlands
- Floodplain management
- Air quality
- Greenhouse gas emissions
- Floodplain management
- Groundwater quality
- Surface water quality
- Expansion of urban development onto agricultural land and areas of basic raw materials
- Protection of water quality and minimization of erosion through water sensitive urban design
- Preventing mismatches between land use and land capability
- Regional transport planning to determine priority roads warranting intervention to protect from rising watertables and salinity

The LPS therefore recognises the need to improve the integration of NRM issues, considerations and principles into the Shire's land use planning decision making.

#### 7.6 SUSTAINABLE AGRICULTURE AND NATURAL RESOURCE MANAGEMENT

Through maintaining consistency with the State Planning Framework and in the absence of regional plans for the area, this Local Planning Strategy can serve as an instrument towards achieving the State's sustainability objectives.

Past farming and land management practices throughout the State have contributed to a number of land degradation problems. These problems can have a devastating effect not only in terms of loss of quality land for farming but also on the natural environment. The long-term effect on the natural environment is unknown but given the changes so far, including the loss of biodiversity and destruction of land and buildings, a pro-active approach in terms of land use and management is required to stop and reverse these impacts.

Some of the land degradation issues affecting the Wheatbelt and other areas of the State include:

- Rising water tables and salinity;
- Waterlogging;
- Wind erosion;
- Soil acidity;
- Soil compaction;
- Clearing;
- Plant diseases;
- Fire risk:
- Weed invasion;
- Stream bank erosion:
- Siltation of rivers and river pools;

- Nutrient loads in natural wetlands:
- Feral pests; and
- Die back disease.

## The LPS therefore recognises the need to:

- Better incorporate sustainability principles into statutory planning, especially integrated land use and transport planning.
- Identify opportunities through planning processes and procedures to implement the State Sustainability Strategy.
- More effectively involve local government in sustainability planning.

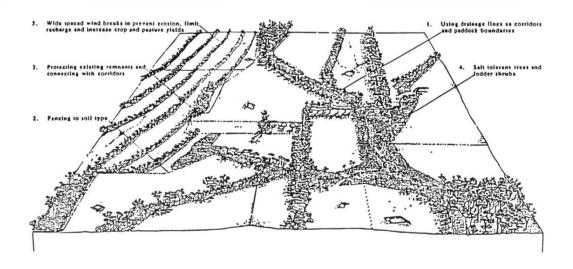
While there is considerable awareness of the need to act on these issues and the landcare movement has supported action in many areas, it is becoming increasingly obvious that the incremental change approach adopted has not resulted in the significant change at the scale necessary to achieve sustainable agriculture. There is an expectation that sustainable agriculture in the future would look very different from the agriculture of today.

A report prepared for the Shire of Pingelly (AGWA and Greening Australia 1997) incorporated a stylised representation of a Central Wheatbelt farm illustrating a mosaic of agricultural, natural and semi-natural systems to address some of these problems. (See Fig. 21)

## Key elements are:

- Reinstated drainage lines used as conservation corridors and field boundaries.
- Coincidence between soil types and management unit.
- Protection of existing remnants in vegetation corridors.
- Productive revegetation of land affected by secondary salinity.
- Alley farming: a network of wide spaced shelterbelts (10-15 x their height apart) to prevent wind erosion, limit recharge of groundwater, increase crop and pasture yield and act as conservation corridors.

# FIGURE 21: SCHEMATIC FARM LAYOUT INCORPORATING SUSTAINABLE LAND MANAGEMENT PRACTICES.



When all of the existing and possible future challenges to agriculture are considered, it is easy to be overwhelmed by the scale of the changes necessary to address land degradation. As the Australian Natural Resource Atlas suggests;

"The task of improving catchment health, particularly reducing the predicted future impacts of salinity, is a massive undertaking. A sustainable long-term solution implies significant and major changes in catchment landscapes. If we look at this task in short time frames, it is easy to become overwhelmed. History tells us that societies do not achieve such massive changes in landscape in short time frames without social disruption." (Govt of WA, 2002)

This requires the increased involvement of local government in planning for natural resource management generally, including issues of agricultural sustainability, particularly regional drainage, biodiversity conversation, regional revegetation programs and water quality.

Although local government has statutory planning powers that could be used to support the implementation of the regional natural resource management strategies it requires significant funding from State/Commonwealth governments to make any meaningful improvements.

The Strategy provides a framework for identifying land degradation issues as a basis for seeking appropriate grant monies.

Objectives for agricultural sustainability are to:

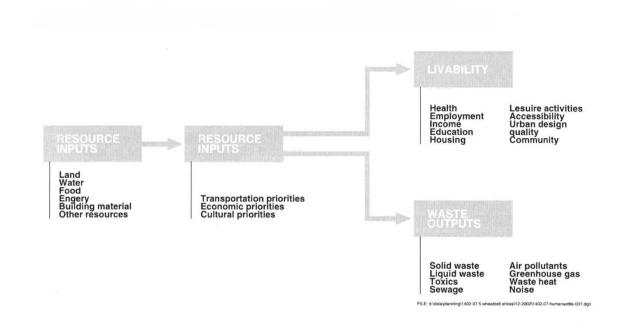
- Develop and identify agricultural systems designed to maintain or improve the condition of the States' natural resources.
- Facilitate the widespread adoption of best management practices that minimise environmental impact while improving profitability.
- Facilitate land use changes within agriculture.

Figure 22 shows the Extended Metabolism Model developed for the 1996 and 2001 Australian State of the Environment Reports. This model suggests that for settlement to be sustainable, resource consumption (such as land, energy, water and materials) and waste (solid, liquid and gaseous) must be reduced, while simultaneously improving liveability (in areas such as income, housing, health, education and community). This model gives substance to the *Settlement efficiency and liveability sustainability principle*.

However this will be difficult to achieve as current trends in agriculture and other pressures in rural communities have resulted in the depopulation of rural areas. Technological advances and reduced profitability have also resulted in reduced employment opportunities in rural towns. To ensure sustainability a number of challenges facing rural communities of the Strategy Area will need to be addressed. In particular there is a tension between the desire to repopulate and revitalise rural communities of the Strategy Area when current economic conditions are encouraging larger farm businesses to grow and consolidate by buying out smaller farmers.

In many areas "sustainable agriculture" will be as much about industry restructuring as about agricultural systems and agronomy. This raises larger questions about the acceptable rate of community change and the desirable form of rural communities.

FIGURE 22: EXTENDED METABOLISM MODEL OF HUMAN SETTLEMENTS (GOVT OF WA 2002)



Currently it appears that the economic and social components of sustainability are in direct opposition to each other under traditional fanning systems. Consequently the challenge exists to develop agricultural operations or activities that maintain and revitalise rural communities through new, diversified, low impact crops and farming systems with employment and environmental benefits.

Regional development programs exist to address a range of environmental, social and economic needs. However, there are few that are able to integrate all three.

## The WDC considers that:

"Economic activity within the Wheatbelt region will always be determined by the way in which the region's scarce resources are used and managed. The vision for resource use is therefore based upon the need to manage resources for the achievement of maximum, sustainable, economic activity. The region's aim is to use its water, soil and biological resources in a sustainable, profitable and productive manner."

"Research and development (R&D) will become increasingly significant for the region, allowing for a better matching of resource usage width market opportunities. More resources will need to be allocated to new and innovative R&D, linked to markets and focused on the development of more sustainable fanning systems, conservation of biodiversity and world best practice industries and efficiencies."

"The imperative, intelligent use of natural resources affects the Wheatbelt in two ways. Firstly, programmes and activities which address loss of biodiversity and natural vegetation, need to be created and/or supported. Many people now recognise the extent of environmental change and damage in the Wheatbelt. The

basic problems of steadily-rising water tables, spreading salinity and widespread damage to both the natural and built environment, are not being adequately addressed."

"Secondly, there is an obvious need to develop new agricultural production practices which place a high value on sustainability, environmental nurturing and an appreciation of long-term management structures."

"Attitudinal and management changes will be essential to most future economic activity in the region." (WDC, 1995)

The need for this change will become increasingly evident as environmental and planning legislation become more integrated, particularly in relation to rural planning. This Strategy therefore recommends that the Local Planning Scheme incorporates a Natural Resource Management Policy which allows for the assessment of proposed changes in land use, development and subdivision in terms of likely impacts on natural resources.

Groups have formed to work together to prevent further deterioration and to improve the environment. Many of these groups are based on a holistic approach of catchment management, where issues are focused on natural features and not arbitrary lines such as local government boundaries. To improve the condition of the natural environment all users of the land, including landowners, local government, government agencies and the general community, need to work together for a common goal.

Accordingly, land management responses of a broader nature such as vegetation corridors and arterial drainage schemes for the amelioration of salinity should be recognised in the Strategy and should be implemented where possible through the Scheme and in co-operation with Landcare programmes. "Arterial drainage", "dams and structures" which effect property outside individual landholdings need to be considered as "development" and should require a planning application to ensure equity and co-ordination across property boundaries.

A conceptual network of vegetation corridors are indicated in Figure 23. They have been selected because of the prominence of the watercourse, the evidence of salinity, or their interconnectivity to provide a rural corridor network.

These proposals extend the concept proposed in the Avon Arc Regional Plan along the Avon River as well as the proposed Special Control Area along the Hotham River in the draft Local Planning Scheme for the Shire of Cuballing.

Tributaries of the major rivers and other watercourses have cultural and environmental value in their own right. The exact function of these corridors needs to be developed and refined over time at the local level involving broad community input, in particular that of the catchment management groups operating in the Strategy Area.

Management agreements including incentives to the affected landowners and funding will need to be sourced to enable the concept to be implemented.

# 7.6.1 Strategic Actions

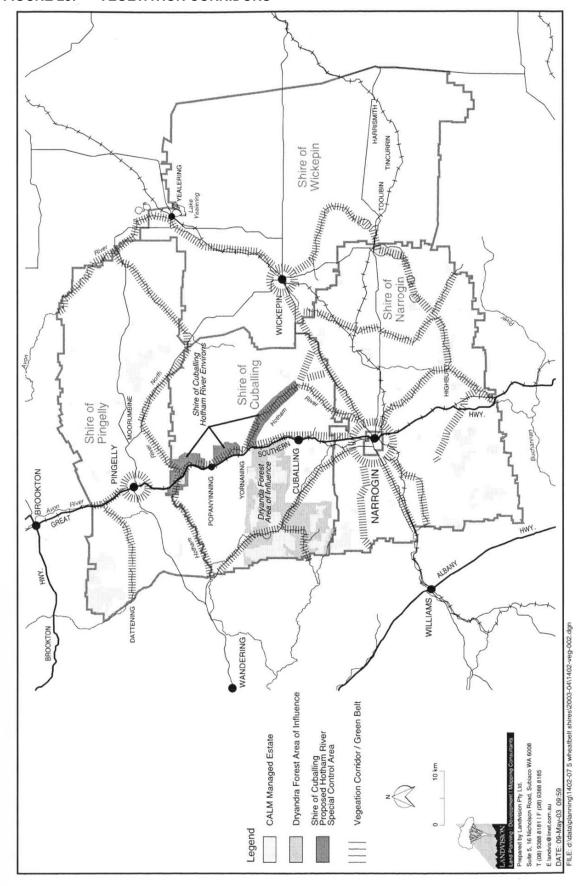
Adopt a Natural Resource Management Policy which:

- Provides for the assessment of rural development, land use and subdivision proposals in terms of their impacts on natural resource management.
- Provides for the identification of areas of land degradation and the establishment of vegetation corridors and arterial drainage schemes for which grant money can be sought.
- Request Department for Agriculture and Food in consultation with the Department of Water and the Shire to develop a strategic framework that coordinates the approach to surface and sub-surface water management in the Shire.
- Request the Department for Agriculture and Food, South West Catchment Council and Avon Catchment Council to provide:
  - the Shire with information and mapping suitable for identifying those areas affected by or at risk of land degradation; and
  - guidance on best practice remedial options for addressing land degradation.

The above information and mapping to be made available to the Shire's Land Conservation District Committee and/or local catchment groups to facilitate use by farmers in farm management planning activities.

- Request the Department for Agriculture and Food to advise the Shire when the Biosecurity Bill has been proclaimed and to discuss the possible implications for the Shire.
- Consult with Western Australian Local Government Association (WALGA) to request the South West Catchment Council and Avon Catchment Council to give consideration to providing resources to prepare a local biodiversity strategy consistent with WALGA's Local Government Biodiversity Planning Guidelines, to facilitate the protection and management of natural areas. The request should give consideration to pursing a regional approach to the preparation of a local biodiversity strategy given the large scale clearing of native vegetation that has occurred in the past.
- Request the South West Catchment Council and Avon Catchment Council to provide support and funding for the ongoing implementation of the Shire's Land Conservation District Committee's Five Year Plan.
- Identify opportunities to seek the support of and funding for natural resource management activities from the South West Catchment Council and Avon Catchment Council where these are complimentary to the provision of services by the Shire.

FIGURE 23: VEGETATION CORRIDORS



#### 7.7 THE MAINTENANCE AND ENHANCEMENT OF THE REGIONS' LIFESTYLE

This Strategy seeks to enhance the attractiveness of the Strategy Area as a place to live and work while improving natural resource management and maintaining country lifestyle values.

On the one hand it confines and limits development to established and designated settlement nodes, but on the other, makes provision for expansion in a planned and co-ordinated manner where there is demand. (See Sec 7.4)

Consistent with this and stated community objectives, the 1995 WDC report states that:

"Whilst steady population growth is an objective for the Wheatbelt, it must be tempered with the need to retain the unique characteristics and appeal of these country communities. Growth should be managed and sustainable, consistent with the communities' long term visions".

"Local government and communities therefore need to understand and use strategic techniques to manage such growth and development, to maintain and enhance their positive traits and appeals".

## 7.7.1 Maintenance of the Rural Character

Opportunities to pursue a number of different lifestyles should be offered within the Strategy Area either within the urban settlements, rural residential nodes, rural smallholdings or in rural areas. This opportunity for lifestyle choice attracts a mix of people, creating a rich and diverse culture in the region. Rural residential developments and rural smallholdings should be directed to designated areas to ensure wider community, environmental and economic benefits. The location of rural residential development should be based on a range of criteria, including that the development will not negatively affect agricultural land uses or adversely affect the cost of providing services.

The landscape amenity of the Strategy Area is one of its primary assets. The integrity of this landscape can be destroyed by poorly sited and designed developments. The revegetation of cleared areas should address landscape considerations to ensure that the resulting landscape develops its own recognisable and appealing character.

Development or changes of land use should be designed to have no negative visual impact and a positive overall impact as for as practical to an observer. This is not to say that changes cannot occur, but rather the development or change in land use should be similar in form, scale and structure to the existing landscape.

The focus initially should be on controls on development on prominent points and along the major transport routes.

The Strategy recognises the major transport network as a landscape amenity corridor and Councils should adopt a general Landscape Management Policy as well as specific guidelines for development within the corridor. The corridor should be recognised as such in Councils' Vegetation Management Plans and programmes initiated to maintain and enhance its visual amenity where possible.

Visual management guidelines adopted by CALM for the Dryandra Forest are also relevant to rural landscapes and are listed in Table 13.

# **Table 13: Visual Management Guidelines (CALM)**

- Alterations to the natural landscape should be subtle, remaining subordinate to natural elements by borrowing
  extensively from form, line, colour, texture and scale found commonly in the surrounding landscape.
- Site-specific visual resource factors should be carefully identified and evaluated before any management activities are undertaken.
- Facilities and activities that utilise and yet disturb little of the natural environment should be encouraged, for example, walking tracks and small picnic sites.
- Degraded landscapes, for example, gravel pits, should be rehabilitated after use.
- Where structures are required they should be sympathetic in design, materials and colour to complement surrounding landscape elements and be carefully sited away from major natural focal points, out of viewer sightlines and where vegetation or landform screening can be utilised.
- Prescribed burning operations should incorporate prescriptions and techniques that minimise the visual impact.

#### 7.7.2 Maintenance of Urban Character

Narrogin, Wickepin and Pingelly are all classic, legible railway towns where there is easy access to the town centre in a rural setting. However each has a high percentage of vacant and/or absentee owner land within their boundaries. As there is no evidence of excess demand, the original townsite framework should be maintained and in-filled and possibly contained within a green belt to reinforce demarcation between urban and rural.

A variety of choice and lifestyles and housing should be offered within the urban areas of the Strategy Area where it is economically, socially and environmentally viable. Quality and innovation in design of settlements should be encouraged so that the landscape and streetscape character are maintained or enhanced.

Non-sewered areas within Pingelly and Narrogin should be allocated to low density residential use. Other areas should be considered for medium density residential to provide more variety within the town boundaries.

All towns need to review their townscape plans and programme uncompleted works to provide the image currently sought through these plans.

Alternative heavy transport routes for Narrogin and Pingelly need to incorporate appropriate entry points which provide a positive aspect to each of the respective towns.

Within the proposed settlement hierarchy described is Section 7.4 each settlement needs to plan for appropriate infrastructure to service its proposed function.

Individual plans have been prepared for each of the major town centres (See Sec. 7.9).

# 7.7.3 Strategic Actions

- Rural settlement to be supported where consistent with the settlement hierarchy.
- The protection of the rural landscape to be incorporated in Local Planning Scheme provisions and the Rural Smallholdings Policy.
- Adopt a Landscape Policy.
- Ensure that Vegetation Management Plans maintain the visual amenity of the major transport routes.
- Examine infrastructure upgrade options to encourage town development.
- Increase residential options and density in selected town areas to make infrastructure upgrades viable.
- Review townscape plans to revitalise town centre streetscapes.
- Provide a "green belt" comprising parks and recreation and low density residential development around the major towns as a transition between town and rural areas and to assist in managing town salinity.
- Provide for long term heavy vehicle routes to improve town amenity.
- Prepare Strategy Plans for the individual major towns.
- Prepare town centre design guidelines for each town centre.

# 7.8 LOCAL PLANNING SCHEME RECOMMENDATIONS

The number of zones within urban areas need to be confined to a minimum to allow mixing of compatible uses.

Currently there are a number of zones in each of the Local Planning Schemes of the local authorities comprising the Strategy Area that are very precise and consequently restrictive (See Table 14).

While this creates a certainty and security it also serves to stifle innovation.

The Strategy proposes that the number of zones be made more flexible, and that council discretion be increased, subject to compliance with the principles of this LPS, and that the zones be adopted uniformly in each local authority Local Planning Scheme as an explicit acceptance of the regional planning framework advocated in this LPS.

Table 14: Local Planning Scheme Zones - Current and Proposed

	Town of Narrogin	Shire of Narrogin	Shire of Wickepin	Shire of Pingelly	Proposed Local Planning Scheme
Residential	Single	Residential	Residential	Residential	Residential R2/R5, R12.5/R20, R30
	Other				
Central Business	Shops and Offices	Rural Townsite	Town Centre	Town Centre	Central Business Town Centre
	Car Park Other commercial				Rural Townsite Rural Hamlet Commercial/Light Industry
Industry	Light Industry  General Industry Public Utilities	Industrial	Industrial	Industrial	Mixed Use Composite Residential/ Light Industry General Industry Public Purposes
Community	School  Community Recreation			- F	Civic/Community (with subscript)
Rural	Rural Rural Residential	Farming Special Rural	Rural Special Residential	Farming Rural Residential	General Agriculture Rural Smallholdings Rural Residential
Other Areas	Additional Use Special Use Development Areas		Special Use	Additional Use	Additional Use/Restricted Use Special Use
¢.	Significant and Historic Places				Special Control Areas/Local Planning policies

The Strategy proposes the following generic zones

- Central Business Zone (Narrogin only) to include retail and commercial uses with residential development (R30) as a "D" use at ground level but as a "P" use at first floor level above commercial development.
- Town Centre Zone (Pingelly, Wickepin) to allow a combination of retail, commercial and residential uses as above.
- Rural Townsite Zone (Highbury, Yealering) as above but to include the possibility for mixed use and/or light industrial uses subject to adequate lot sizes and for Moorumbine, Dattening, Harrismith, Tincurrin, Toolibin. Planning to be in accordance with an adopted policy plan, where appropriate uses are specified
- Commercial/Light Industry (Narrogin only) to accommodate office, showroom, warehouses and light industry in support of the Central Business Zone.
- Mixed Use Zone (Pingelly only) as above subject to the retention of existing residences where appropriate.
- Residential Zone three R codes ranges are proposed which correspond to low, medium
  and high density development as perceived in rural towns. This will ensure the overall
  maintenance of the character of the area but provides flexibility for additional
  development. Each has a split coding providing an average and a maximum
  residential density.

The proposed code ranges are:

Rural residential and

R2/R5

unsewered urban areas

Sewered Urban Areas

R12.5/R20 CBD, town centres and R20/R30 with bonuses available for aged persons

adjoining areas and special purpose dwellings.

It is proposed that the higher code be made available only in sewered areas. A provision in the Scheme will allow a 25% maximum only of each street block to be developed at the higher density.

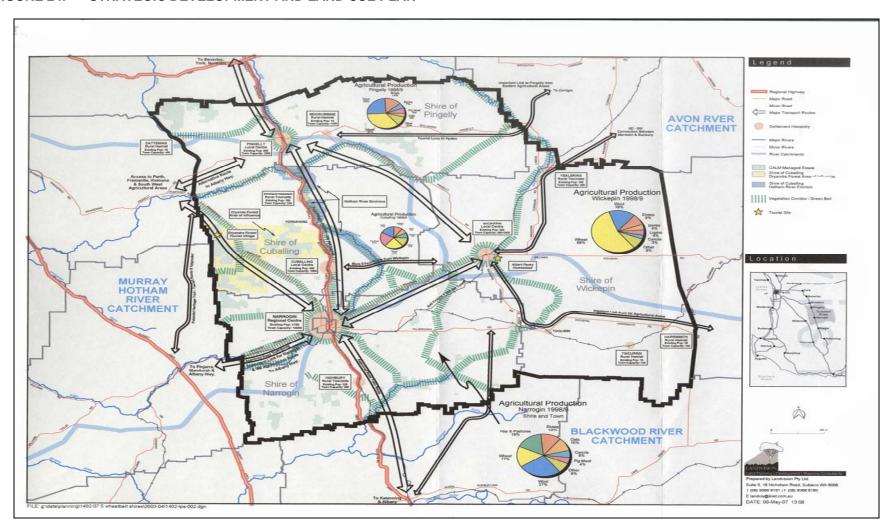
- Industrial Zones; (Mixed Use, Light Industry and General Industry) to accommodate those operations, that due to off site impacts or space requirements cannot be located in the Town Centre Zones.
- Composite Zone;- (Residential/Light Industry) a specially planned zone with lots accommodating both land uses to allow occupants to live and work on the same property.
- Civic/Community for School, Community and other public purposes.
- Rural Zone- General Agriculture, Intensive Agriculture (only if several properties involved), Rural Smallholdings, Rural Residential.
- Additional Uses/Restricted Uses.
- Special Use Zone this is to accommodate one off specific uses, which may include civic uses and other public purposes as well as tourist uses and landmarks.

In addition to the above strategic and generic land use zones each local authority within the Strategy Area needs to adopt specific local planning policies to address local issues. Table 15 lists potential policies for each local authority.

Table 15: Recommended Local Planning Policies

	w	Р	N (SH)	N (T)
General				
Subdivision roads and footpaths	✓	✓	<b>✓</b>	✓
Landscaping and visual amenity	✓	✓	<b>✓</b>	✓
Tourism development	✓	✓	✓	✓
Outbuildings	✓	✓	✓	✓
Transportable and second hand relocated dwellings	✓	✓	<b>✓</b>	✓
Outdoor storage of materials/vehicles	✓	✓	<b>✓</b>	✓
Signage	✓	✓	<b>✓</b>	✓
Temporary accommodation	✓	✓	<b>✓</b>	✓
Road side stalls	✓	✓	<b>✓</b>	✓
Urban				
Townscape and urban design guidelines	✓	✓		✓
Heritage Guidelines	✓	✓		✓
Development Areas				✓
Factory Unit Buildings		✓		✓
Aged/dependent persons - ancillary accommodation		✓		✓
Residential development in CBD				<b>✓</b>
Fencing materials				✓
Off-street parking				✓
Cash in lieu parking				✓
Rural				
Intensive agriculture in general agriculture areas		<b>✓</b>	✓	
Feedlots		✓	✓	
Piggeries		✓	✓	
Viticulture		✓	✓	
Aquaculture		✓	✓	
Industry in rural areas		✓	✓	
Vegetation corridors and management	✓	✓	<b>✓</b>	✓
Rural residential/rural townsite development guidelines	✓	✓	<b>✓</b>	
Rural hamlets development guidelines/policy plans	✓	✓	<b>✓</b>	
Rural industry and buffers	✓	✓	<b>✓</b>	
Mining/extractive industry	✓	<b>√</b>	<b>√</b>	
Additional dwellings on rural zoned lots	<b>✓</b>	<b>✓</b>	<b>✓</b>	

FIGURE 24: STRATEGIC DEVELOPMENT AND LAND USE PLAN



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# 8.0 SHIRE OF PINGELLY - RECOMMENDATIONS

The following applies to the Shire of Pingelly and is additional to the Strategic Recommendations above.

The Shire of Pingelly has had a reasonably stable population despite a declining rural population.

The Council over the past years has commissioned reports on natural resource management for rural areas; a marketing strategy to attract new industry and a townscape plan to improve the town environs.

Potential industry sectors that have been identified for the Region include;

- Value added industries linked into the agricultural base of the region.
- Information technology industries.
- Industries that can adapt to telecommuting, for example, "back office" operations such as telemarketing, data processing, customer support services.
- Light manufacturing industries such as canning, food processing.
- Specialized training courses, for example, pilot training; and
- Inland ports/warehousing.

Individual industries identified include;

Aquaculture

Inland Ports/Warehousing

Food Processing

Freeze drying and packaging

Agricultural processing (grains and wool)

Grain handling

**Tourism** 

Wool screening/topping plant

Woollen mills (weaving)

Carpet manufacture

Cottage industries

Intensive meat/pig production

I.T.

Pilot training

Downstream processing of wool, wheat, barley, canola

Cereal crops Manufacture noodles

Food canning

Auto electricians

At a workshop held by Council in 2001 the following issues were listed as being in need of addressing in a Local Planning Strategy.

- Vision for the Shire of Pingelly and Townsite.
- Where would the Councillors like to see the Shire in 15-20 years?

- Expansion of Industrial area.
- Permissibility of Mechanical Businesses in residential zones.
- Incorporation of land care principles into scheme.
- Introduction of special control areas.
- · Recreation Planning implications.
- General views of subdivision of agricultural land.
- Other.

Other views directed to the Consultants were;-

- To allow for more flexible land use.
- Expansion/flexibility of industrial land (to be used for larger blocks if needed).
- Increase in population through strategic options e.g. rural residential blocks I/4acre upwards, smaller blocks in town.
- Location for a mobile home park.

An issue is the limited availability of a power source adequate for major industry. The lack of an adequate power supply almost certainly precludes a major industry siting in Pingelly and in any event this LPS recognises Narrogin as the regional centre as the appropriate location for heavy industry.

The Strategy recommends that Pingelly positions itself as a low key, cottage style town based upon diversified agricultural pursuits which take advantage of the relatively small lots available in most of the municipal area, 75 hectare lots in the rural environs and its reasonable proximity to the Perth market.

The encouragement of a diversified agricultural base incorporating sustainable agriculture practices should therefore be pursued and the area promoted accordingly.

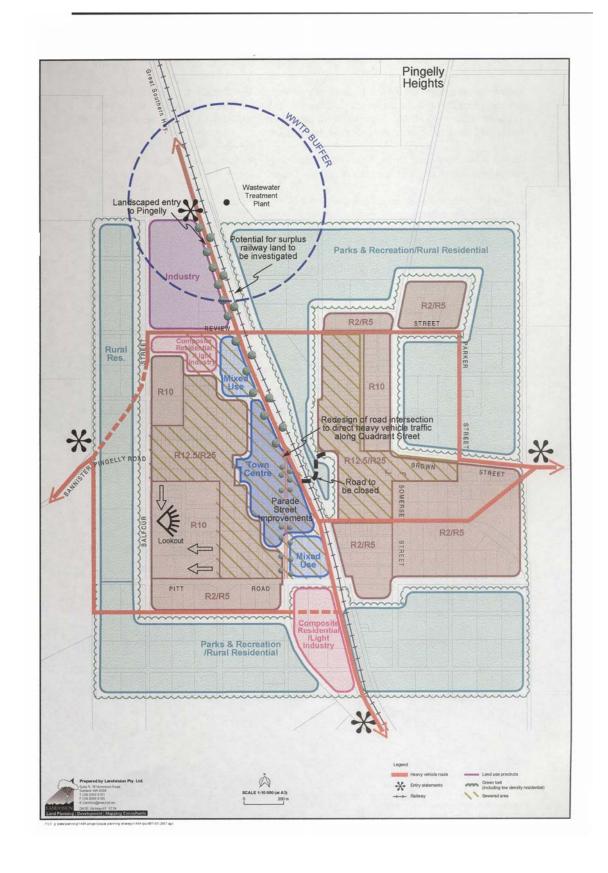
The Town of Pingelly is a classic railway grid layout. The perimeter of the townsite comprises parks and recreation reserves and low density rural residential development where vegetation protection will be prominent. This area generally provide a transition between urban and possibly further low density rural residential and rural development (See Fig. 25). However, provision is made for three residential development areas to allow for town expansion in a north, west and easterly direction.

Additionally the major routes around and through town need to be reviewed to improve the presentation of the town, safety and access. The main north-south route is to be diverted along Quadrant Street parallel to the railway to allow for townscape improvements in the main street. The provision of heavy haulage bypass routes are proposed to encircle the town. The Southern east-west route is to include investigation into a new stretch of road to be constructed through a proposed composite residential light industry zone.

Two such zones are proposed, one to the north-west of the town and one to the south. The zone will allow residences and small businesses to co-locate on the same lot. Provisions to the zone will ensure residences will be confined to one part of the lot and face a residential streetscape and the businesses will face an appropriate commercial streetscape.

There appears to be some demand in country towns for this type of zone where businesses do not have sufficient patronage to support the cost of commercial premises in the town centre.

FIGURE 25: PINGELLY TOWNSITE - LOCAL PLANNING STRATEGY



Residential densities are raised to encourage medium density residential development in sewered areas through the use of split codes. It is proposed that the higher code will only be available in sewered areas. A provision in the Scheme will allow a 25% maximum only of each street block to be developed at the higher density.

Rating procedures need to be reviewed to encourage the disposal at a reasonable price of vacant land for which there has been no payment of rates.

To attract investment in the area, Council needs to reactivate its townscape programme to enhance the attractive features of the town and its setting.

The major initiatives should include:

- The Park Street/Quadrant Street/Parade Street intersection.
- The rejuvenation of Parade Street.
- The creation of a town square.
- The completion of Pioneer Park.
- Entry statements.

There will be a presumption against the subdivision of rural land unless it can be demonstrated that the subdivision will not jeopardise the use of the land for broadacre agriculture.

Rural subdivision generally should not be necessary as the prevailing lot size is suitable for most intensive agriculture uses (including buffers) as well as broadacre agriculture. Farm stay operations should be encouraged in appropriate locations through the provisions of the Local Planning Scheme.

A Rural Strategy has not been prepared for the Shire of Pingelly and a formal strategy is not considered necessary.

Further subdivision (hobby farms) does not seem to be in demand but if contemplated should occur where it will support the settlement hierarchy and where services are available. Special rural development near Pingelly townsite should not jeopardise options for long term town expansion of the town.

Moorumbine and Dattening should be confined to their current townsites unless a reliable water supply becomes available. Special rural zones could be clustered around these areas if there was a demonstrated demand.

Further the Strategy recommends the adoption of Local Planning Policies as indicated in Table 15.

#### 9.0 SHIRE OF PINGELLY – RURAL RESIDENTIAL STRATEGY

#### 9.1 INTRODUCTION

Council's Local Planning Strategy (LPS) was prepared in 2003/2004 and was approved by the WAPC in 2007 at the same time as Council's Local Planning Scheme No. 2 (the scheme).

This addition to the LPS is proposed to reflect changes in the Shire since May 2004. In particular it addressed the need for identification of appropriately located areas for rural residential development.

#### 9.2 MANAGED GROWTH

The LPS was prepared at a time when the Shire was not under any pressure for growth and reflected a position to generally retain the status quo in Pingelly. Table 16 below indicates building statistics between 2004 – 2008.

Table 16: Building Statistics 2004 - 2008

BUILDING STATS					
Year	Total Licences	Dwellings	Resid	Rural	
04/05	24	7	6	7	
05/06	20	8	7	1	
06/07	37	13	12	1	
07/08	76	19	12	7	

The figures for the first three months of 08/09 are slightly higher than the previous year with a similar breakdown.

The Council has experienced a growing demand for rural residential lots in the area however this demand has been unable to be met due to the lack of suitably zoned land. Council considers that provision for such demand in the LPS now would be prudent.

#### 9.2.1 Background

Pingelly's Local Planning Scheme No. 2 and WAPC's Development Control (DC) Policy No. 3.4, which provides the framework for the subdivision of rural land, assumes a general presumption against subdivision of rural land unless it is specifically provided for in a local planning scheme, an endorsed local planning strategy or an endorsed local rural strategy.

In accordance with the requirements of DC Policy No. 3.4 Council has identified an area of land, which it believes to be appropriate for rural residential development and seeks to include the area in it's LPS. The identified area is within a 3km radius of the town site of Pingelly (See Figure 26).

The land is currently zoned "General Agriculture" and as outlined in the LPS, an amendment to the Scheme is required before any subdivision of land for rural residential or rural smallholdings purpose would be possible.

Furthermore and as recommended in the LPS, the Shire of Pingelly has adopted a Rural Smallholdings Policy that sets out the need for extensive physical, environmental and social investigations as a precursor to a rural residential rezoning. The policy states that when considering proposals for rural residential development, Council will have due regard to the following:

- Settlement Pattern
- The protection of the environment in site selection and design
- Potable Water Supply

- Effluent Disposal
- Tree Preservation/Planting
- Livestock Management
- Fire Management

Accordingly the area identified as suitable for rural residential development, as denoted in Figure 26, (the "Rural Residential Investigation Area") will still need to undergo a detailed physical and planning analysis by the landowner before Council considers initiating an amendment to the Scheme.

However the incorporation of this area in the LPS flags to affected landowners the opportunity to subdivide as well as to other rural property owners that at this stage this will be the only area that will be favourably considered for Rural Residential development in the Shire's municipal area.

#### 9.2.2 LPS Objectives

In accordance with the objectives of Council's LPS, this amendment to the LPS has been prepared to manage population growth and to provide a guide to future rural residential development around the Pingelly townsite.

The management of urban growth/decline was identified as an issue in the LPS (see Section 6.5.3), wherein response options were listed as:

- At a regional level;
  - Consolidate existing settlement nodes;
- At a local level;
  - Encourage development/infilling of existing townsite lots until demonstrable demand for town expansion; and
  - Define areas suitable for rural living/rural residential.

From a land management perspective response options included the creation of environmental corridors (greenways) along major drainage lines.

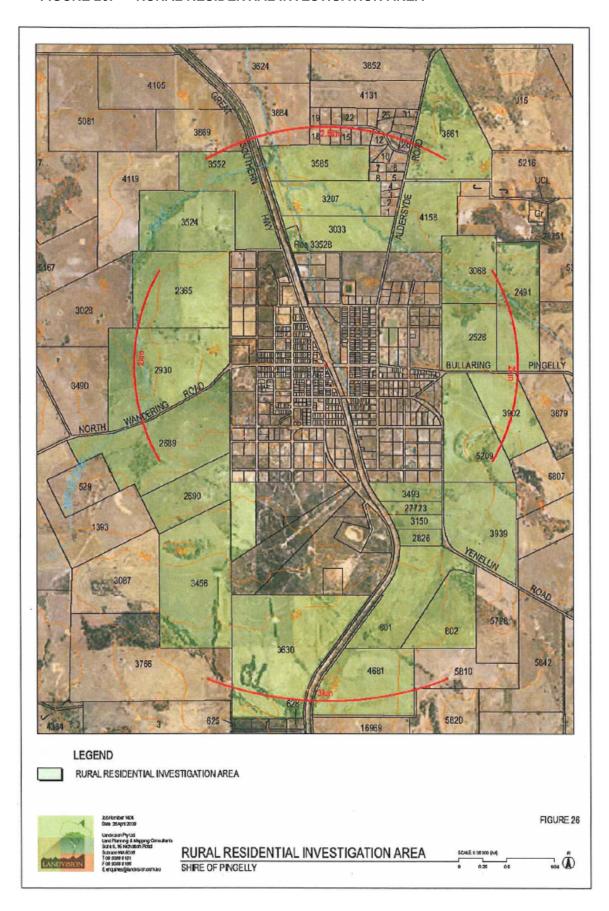
The LPS specifically recommends that Rural Smallholdings and Rural Residential development be focused on established towns. A strategic action outlined in the LPS, for managing population growth/decline is to ensure that special rural subdivision supports and is consistent with the settlement hierarchy in which Pingelly is identified as a Local Centre. Accordingly Rural Residential development around Pingelly townsite will support the LPS strategic actions through a strengthening of the settlement hierarchy of the area.

However a concern expressed in the LPS was that contiguous rural residential development to the townsite might inhibit town growth. This concern evolved from a then existing Town Planning Scheme, which limited the potential for growth within the Pingelly townsite itself, and as a result contiguous development may have resulted in a long term shortage of urban land. The recently approved Scheme provides ample opportunity for town expansion within the existing zoned residential land in the townsite (see Figure 27 and Table 17). There is also the prospect for considerable urban growth through the potential rezoning of existing Rural Residential zoned land within the townsite to Residential R2.5 (see Figure 27 and Table 18).

#### 9.2.3 Future Growth of Pingelly Townsite

An investigation into the potential residential capacity of the current townsite has been carried out. This investigation found that the Pingelly townsite is capable of providing an extra 1070 residential lots as low to medium densities (R2.5 to R25). This does not include the possible amalgamation and redevelopment of smaller townsite lots coded R12.5/R25 nor the possible residential development in the Town Centre zone. These extra lots could hypothetically accommodate more than a doubling of the current population of Pingelly. Additionally this amendment to the LPS identifies two areas, one in the norther sector and one in the western sector to be included in the Development-Residential zone. This complements the existing Development-Residential zone in

FIGURE 26: RURAL RESIDENTIAL INVESTIGATION AREA



the eastern sector as a mechanism to allow for urban expansion in three directions within the existing townsite. The details of the investigation are described below.

# 9.2.4 Potential Development or Redevelopment of Existing Residential Zoned Land, and inclusion of Unallocated Crown Land and land zoned for Public Purpose in the Development-Residential zone

There is opportunity for managed townsite growth through development or redevelopment of residential lots within the density provisions of the Scheme. A realisation of the maximum zoned densities on lots which are currently largely undeveloped, and which have lot dimensions which allow for appropriate road frontages for new lots, could result in the creation of an extra 122 residential lots subject to the availability of scheme sewerage (see Figure 27). These extra residential lots can be provided through low to medium density developments, which complements the rural character of Pingelly. Table 17 shows a break down of the potential for development or redevelopment of residential lots by their current density zoning and their location in the townsite.

Table 17: Urban development and redevelopment opportunities in residential lots.

Townsite			Total								
Development	North	West	South	West	South	n East	North	n East			
Opportunities (Realisation, where possible, of the maximum denisity)	Existing	Potential	Increase								
R2/5	-	-	8	30	16	50	9	36	33	116	83
R10	3	37	-	-	4	4	-	-	7	41	34
R10/20	-	-	16	54	32	91	29	72	77	217	140
Residential Development (R25)	-	-	2	271	2	74	2	306	6	651	645
Total	3	37	26	355	54	219	40	414	123	1025	902

9.2.5 Potential for the Creation of Lots through the Rezoning of Townsite Rural Residential Lots and Unallocated Crown Land to Residential R2.5. The rezoning and redevelopment of 126.2 ha of land currently zoned Rural Residential and unallocated crown land within the townsite to Residential with an average density of R2 and a minimum density of R2.5 has the potential to create an extra 122 residential lots in the townsite (see Figure 27). The land has a grid road layout, contains few houses, and is generally vacant or in some cases used for small scale agricultural purposes. The lot dimensions, grid road network and undeveloped nature of this land make the redevelopment of the land highly feasible. A 40 metre minimum frontage is proposed for such subdivision to maintain a low density environment, together with setbacks associated with R2 development. An average density of R2 (5000m² lots) is however sought. Table 18 shows a break down of the potential for subdivision within Rural Residential lots and Unallocated Crown Land by sector in the townsite.

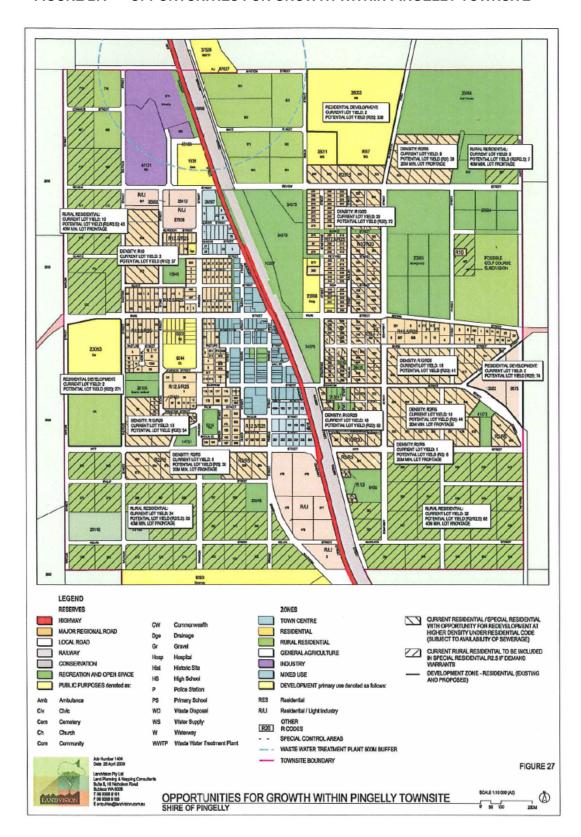
Table 18: Lots created through the rezoning of Rural Residential zoned land.

	Sector							Total			
	North	West	South	West	South	East	North	East			
	Existing	Potential	Increase								
Rezoning of Rural Residential and Unallocated Crown Land to Residential R2.5	10	43	24	65	22	65	2	7	58	180	122

#### 9.2.6 Identification of Suitable Land for Rural Residential

The LPS establishes a set of criteria for land suitable for Rural Residential and Rural Smallholdings for the Scheme.

FIGURE 27: OPPORTUNITIES FOR GROWTH WITHIN PINGELLY TOWNSITE



#### Rural residential land should:

- Not be in areas identified for urban (including industrial) expansion;
- Be located where future residents will have access to urban services and employment opportunities;
- Be located close enough to the major towns for the efficient provision of services;
- Be based on an assessment of the demand for and availability of constructed road access, water (where required), electricity, telecommunications, and basic community services:
- Avoid individual lot access directly off a highway or other major road;
- Be planned having regard for landform analysis and land suitability assessment;
- Avoid areas of very high or extreme bushfire risk;
- Avoid areas with prospects for mining or extraction of basic raw materials; and
- Avoid environmentally sensitive areas.

The area identified by the Council for possible future rural residential land use ("the Rural Residential Investigation Area") satisfies all these criteria. It is physically suited to a rural residential development, has an attractive undulating landscape and is mostly cleared, but with patches of remnant vegetation.

While the area identified adjoins the townsite, which provides benefits in terms of availability infrastructure, employment opportunities and community facilities, it does not constrict expansion opportunities within the town, as growth opportunities within the town are significant under the current proposed Scheme provisions as indicated above.

Notwithstanding a development limit of 100 rural residential lots to be created is to be applied to the area within the lifespan of the Pingelly Local Planning Strategy.

The Rural Residential Investigation Area (RRIA) is well serviced by the existing primary road network. It forms an oval shape based on the road of the Great Southern Highway, Bullaring/Pingelly Road and North Bannister/Pingelly Road. The RRIA lies within 3km of the Great Southern Highway and 2km from either the Bullaring/Pingelly Road to the east of the town site or the North Bannister/Pingelly Road to the west of the town site. The total area of the land identified by Council is 1454 hectares.

The drainage of the land is away from the townsite into three watercourses. These watercourses predominantly lack vegetation. Development of the RRIA would be a vehicle for the rehabilitation of these watercourses consistent with the natural resource management revegetation objectives of the LPS. Similarly redevelopment in the townsite is to carry a revegetation condition to support Pingelly's townsite salinity program.

The single existing rural residential estate, Pingelly Heights, in the north east sector, abuts the RRIA. Development of the RRIA would facilitate a contiguous line of development and a more logical land use structure in this sector.

It is prosed that lots would vary in size between 1 ha and 4 ha. Depending on the physical characteristics of the land, its proximity to the townsite, and its proximity to a road providing direct access to the Pingelly townsite. Where lots can be connected to scheme water and only when they are adjacent existing residential areas in the, special residential lots will be considered with a minimum lot size of  $4000\text{m}^2$ . The potential lot yield based upon a 2ha average lot size is indicated in Table No. 19 and Figure 28. The area abutting the rifle range to the south of Pingelly will need to establish buffer requirements before rezoning to R2.5 is considered.

Table 19: Potential Lot Yield for Rural Residential Development outside of the townsite by Sector.

I				Sec	ctor					Total	
ı	North	West	South	West	South	n East	North	East			
١	Existing	Potential	Increase								

Lot yield	4	152	5	199	10	186	8	190	27	727	700
with an											
average											
lot size of											
2ha											

In order to stimulate revegetation of the watercourses within the RRIA, Council will add as a special condition of development a requirement to revegetate, with native species, a portion (minimum 10%) of the developed land but which may be increased to form practical vegetation corridors. In the case of developments on properties containing watercourses, the revegetation requirement will be carried out along the watercourse. On land with remnant vegetation the revegetation requirement may need these areas to be supplemented to form vegetation corridors. Within the townsite, revegetation will be assigned in selected areas in accordance with Council's Townscape Plan.

#### 9.2.7 Infrastructure

The Shire has sought advice from the major infrastructure service providers in respect to the above proposals.

#### Water Corporation

The Water Corporation seeks to protect community water and waste water assets. Figure 27 indicates the buffer around the wastewater treatment plant. Nor further subdivision of land is proposed in the area through this Strategy. The Water Corporation previously recommended the incorporation of the buffer area in a Special Control Area, in the Shire of Pingelly's Town Planning Scheme but this was not supported at the time of preparation of the Scheme.

In relation to future water supply the Water Corporation advise that:

'Pingelly townsite is provided with water via the so-called 'NB Extension' (Narrogin-Brookton Extension) from the Great Southern Towns Water Supply Scheme. The Pingelly Tank has a current storage capacity of 4.5ML. The tank is refilled from the Cuballing Tank and/or the Wickepin Tank to the south via the NB Extension pipe. The supply to the Pingelly Tank is boosted by a pump station at Popanyinning. The Pingelly Tank is also used to augment supply to the Brookton town to the north because the local Brookton borefield, which is used for augmentation in summer, is unreliable.

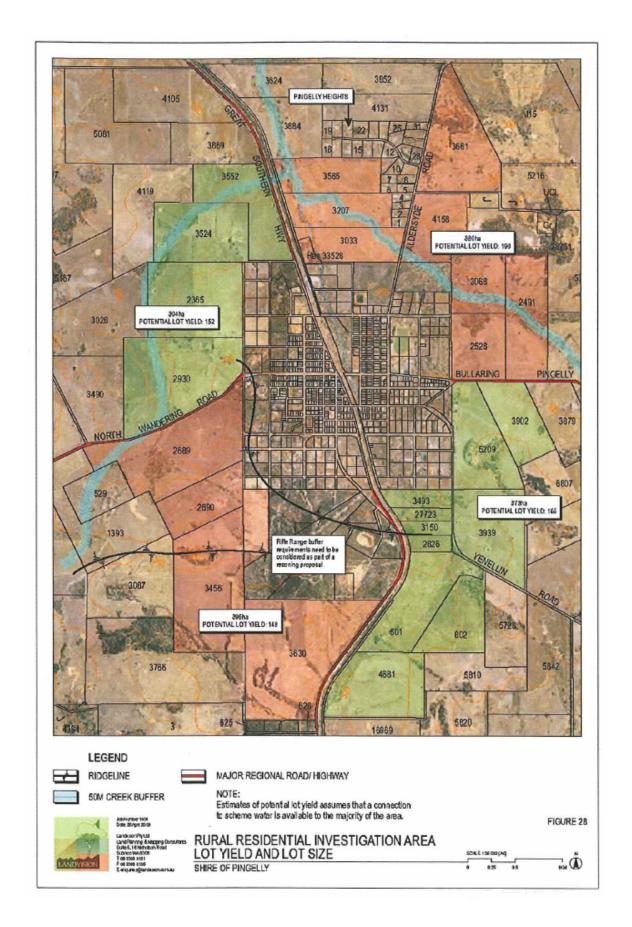
The Pingelly Tank currently has little spare capacity to cope with additional growth in and around the town. Extensions from the Pingelly townsite water system to service town expansion beyond the current limits will require upgrades to the storage capacity at Pingelly (tank duplication or replacement), upgrades of the NB Extension from the Cuballing Tank and installation of water mains to service the subdivisions.

Water services are currently not available to much of the Rural Residential Investigation Area described in the LPS. It may be technically possible to extend water services to some subdivisions in close proximity to the edge of the town, subject to available capacity at the time of subdivision. The Shire and/or the subdivider will need to approach the Corporation to establish the feasibility of extending water mains to these subdivisions.

The pressure head drops off with increasing distance from the Pingelly tank. Some lowerlying areas (generally up to about 340-345 AHD) and landholdings immediately adjacent to the existing serviced townsite area may be able to be provided with adequate water pressure from Pingelly Tank, subject to more case by case verification.

Some rural residential subdivisions may require installation of booster pumps to ensure adequate water pressure and/or the installation of separate high level tanks.

FIGURE 28: RURAL RESIDENTIAL INVESTIGATION AREA LOT YIELD AND LOT SIZE



The Corporation will consider individual rezoning and subdivision proposals and will advise the Shire and prospective developers on the feasibility and costing of water supply options on a case by case basis.

In order to determine whether the full extent of the townsite expansion proposed in the Local Planning Strategy can be realised, a review would need to be undertaken of the water supply scheme to determine the feasibility and cost of amplifying the system.

#### Western Power

Western Power had no objections to the proposals contained in the amended Local Planning Strategy.

#### 9.2.8 Rural Subdivision - Homestead Lots

In addition to the above, this amendment sets out the circumstances for Council support for homestead lots.

Homestead lots are to be favourably considered in the rural areas in accordance with WAPC Policy DC 3.4 to encourage the retention of local residents.

This amendment to the LPS proposes an amendment to the Scheme as follows:

Homestead lots will be considered where:

- (a) The homestead lot has an area between 1 and 4 ha, or up to 20 ha where it is desirable to respond to the landform or to include existing outbuildings or water sources;
- (b) There is an adequate water supply for domestic, land management and fire management purposes:
- (c) The homestead lot fronts a constructed public road;
- (d) The homestead lot contains an existing residence; and
- (e) A homestead lot has not bee excised from the farm in the past.

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# The Shire of Pingelly Local Planning Strategy certified for advertising on 12 July 2005. Signed for and on behalf of the Western Australian Planning Commission an officer of the Commission duly authorised by the Commission pursuant to section 57 of the Western Australian Planning Commission Act 1985 for that purpose in the presence of: Witness 27 AUG 2007 Date . **ENDORSEMENT** The Shire of Pingelly hereby endorses the Local Planning Strategy, at the Ordinary meeting of the Council held on the day of SHIRE PRESIDENT Endorsed by the Western Australian Planning Commission on 27 March 2007. an officer of the Commission duly authorised by the Commission pursuant to section 57 of the Western Australian Planning Commission Act 1985 for that purpose in the presence of: Witness Date

**ADVERTISING** 

## **APPENDIX ONE -**

**MUNICIPAL INVENTORY** 

### PLACE LIST

Site No	Category No	Theme	Place Name	Location		
12	3	Occupations	4 Shops (Quality Meats/Pingelly	Parade Street, Pingelly (btwn Pasture & Hal		
			Pharmacy/Jag's Cafe/R & J's Drapery)	streets)		
05	2	Community Efforts	Apex Club	13 Park Street (cnr Queen Street), Pingelly		
25	2	Occupations	Atkins' Cottage	Mourambine Road, Mourambine		
38	2	Community Efforts	Baptist Church	Sharow Street, Pingelly		
21	2	Occupations	Beambine Homestead	Mourambine Road, Mourambine		
49	3	Occupations	CBH Bins	Quadrant Street, Pingelly		
53	5	Demographic Settlement	Cemetery	Review Street, Pingelly		
06	3	Community Efforts	Council Chambers	17 Queen Street, Pingelly		
10	3	Transport & Communications	Crane	Railway Reserve, Pingelly		
39	3	Community Efforts	CWA Building	Parade & Sharow streets, Pingelly		
46	3	Community Efforts	District Hospital	34 Stratford Street, Pingelly		
03	3	Occupations	Disused Shops (3)	Park Street, Pingelly		
16	2	Occupations	Exchange Tavern	Pasture & Quadrant streets, Pingelly		
15	2	Occupations	Fmr Commercial Bank of Australia	Parade & Pasture streets, Pingelly		
02	2	Occupations	Fmr Commercial Building	Park Street, Pingelly		
01	2	Community Efforts	Fmr Road Board Office	Park Street, Pingelly		
32	2	Occupations	Fmr Union Bank/Newsagency	Parade Street, Pingelly		
42	5	Demographic Settlement	fmr Kulyalling School House	8 Eliot Street, Pingelly		
20	3	Occupations	Hardware Shop	Parade Street, Pingelly (btwn Park & Pasti streets)		
19	3	Occupations	Hot Bread Shop	Parade Street, Pingelly (btwn Park & Pastur streets)		
08	3	Community Efforts	Hotel Pingelly	Quadrant & Park streets, Pingelly		
55	2	Occupations	Ingram's Cottage	Mourambine Road, Mourambine		
54	5	Demographic Settlement	Lonely Grave			
45	5	Community Efforts	Masonic Lodge	Stratford Street, Pingelly		
11	3	Outside Influences	Memorial Park	Pasture & Parade streets, Pingelly		
14	2	Community Efforts	Museum, Fmr School & later Court House	Parade Street, Pingelly		
04	3	Community Efforts	Park Lodge	19 Park Street, Pingelly		

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### **PLACE LIST**

Site No	Category No	Theme	Place Name	Location	
27	3	Community Efforts	Pingelly District High School	Park Street, Pingelly	
34	2	Occupations	Pingelly Hardware and Rural Supplies	Park & Parade streets, Pingelly	
13	2	Community Efforts	Pingelly Town Hall	Parade & Hall streets, Pingelly	
17	3	Community Efforts	Pioneer Park		
18	1	Transport & Communications	Post Office	Parade & Pasture streets, Pingelly	
09	2	Transport & Communications	Railway Station	Quadrant Street, Pingelly	
23	3	Community Efforts	Rectory - St Patrick's Church	Mourambine Road, Mourambine	
51	3	Demographic Settlement	Residence	25 Brown Street, Pingelly	
50	3	Demographic Settlement	Residence	28 Raglin Street, Pingelly	
35	3	Demographic Settlement	Residence	36 Pitt Street, Pingelly	
47	3	Demographic Settlement	Residence	43 Stratford Street, Pingelly	
37	3	Demographic Settlement	Residence	47 Sharow Street, Pingelly	
36	3	Demographic Settlement	Residence	49 Sharow Street, Pingelly	
43	3	Demographic Settlement	Residence	74 Stratford Street, Pingelly	
48	3	Demographic Settlement	Residence - Kylin House	Stratford Street, Pingelly	
28	3	Community Efforts	RSL Building	23-25 Parade Street, Pingelly	
24	2	Occupations	Sandalwood Inne	Mourambine Road, Mourambine	
30	5	Occupations	Shops (Christian Book Nook, Community Craft Centre, Pingelly Supermarket)	Pasture Street, Pingelly	
33	3	Occupations	Shops (Highly Elaborate/Goldys)	Parade Street, Pingelly	
29	5	Occupations	Shops (Restoration)	22 & 24 Pasture Street, Pingelly	
41	3	Community Efforts	St Anne's Roman Catholic Church	Paragon Street, Pingelly	
44	3	Community Efforts	St John Ambulance Australia	Stratford & Park streets, Pingelly	
22	2	Community Efforts	St Patricks Church of England	Mourambine Road, Mourambine	
07	2	Community Efforts/Outside Influences	St Paul & Luke Anglican Church & War Memorial	Park & Walton streets, Pingelly	
31	5	Occupations	Stage Coast West	cnr Parade & Hall streets, Pingelly	
26	4	Outside Influences	Taylors Well Hall Site	Dattening	
52	3	Community Efforts	Uniting Church	Paragon Street, Pingelly	
40	3	Occupations	WH & MD Hodges Shop	Parade Street, Pingelly	

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