

PART 2

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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.

The map illustrates the Narrogin region in Western Australia, highlighting its strategic location as a transport hub. Key features include:

- Towns and Settlements:** Albany, Boddington, Williams, Dardkan, Wagon, Wickepin, Narrogin, Cuballing, Popanyinning, Pingelly, and Corrigin.
- Highways and Routes:**
 - Albany Highway:** A major route connecting Albany to the south coast, passing through Williams and Dardkan.
 - Great Eastern Highway:** A route connecting Williams to the east coast, passing through Boddington and Narrogin.
 - Narrogin Railway:** A rail line connecting Narrogin to the south coast, passing through Dardkan and Wagon.
 - Other Routes:** Various local roads and routes connecting towns like Wickepin, Cuballing, and Pingelly.
- Tourist Routes:** Indicated by thick black lines with 'T' symbols, showing paths from Albany to the south coast, from Williams to the east coast, and from Narrogin to the south coast.
- Tourist Attractions:** Marked with 'A' symbols, including the Dryandra Forest and the Albert Facey House.
- Legend:**
 - T:** Tourist Route
 - A:** Tourist Attractions

The map illustrates the Port of Albany's rail network and collection areas. Key locations include Brookton, Wandering, Boddington, Williams, Dardan, Wagin, Narrogin, Wickepin, Yornaning, Cuballing, Pingelly, Wheat Bin (Private), Bullaring, Corrigin, Yealering, Dudinin, Tincurin, and Kulin. Rail routes are marked with arrows and tonnage ranges: 25,000 - 50,000 tonnes, 10,000 - 25,000 tonnes, and 100,000 - 250,000 tonnes. A dashed line indicates the Port Collection Boundary.

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.

Figure 15: Great Southern towns Scheme Water Supply

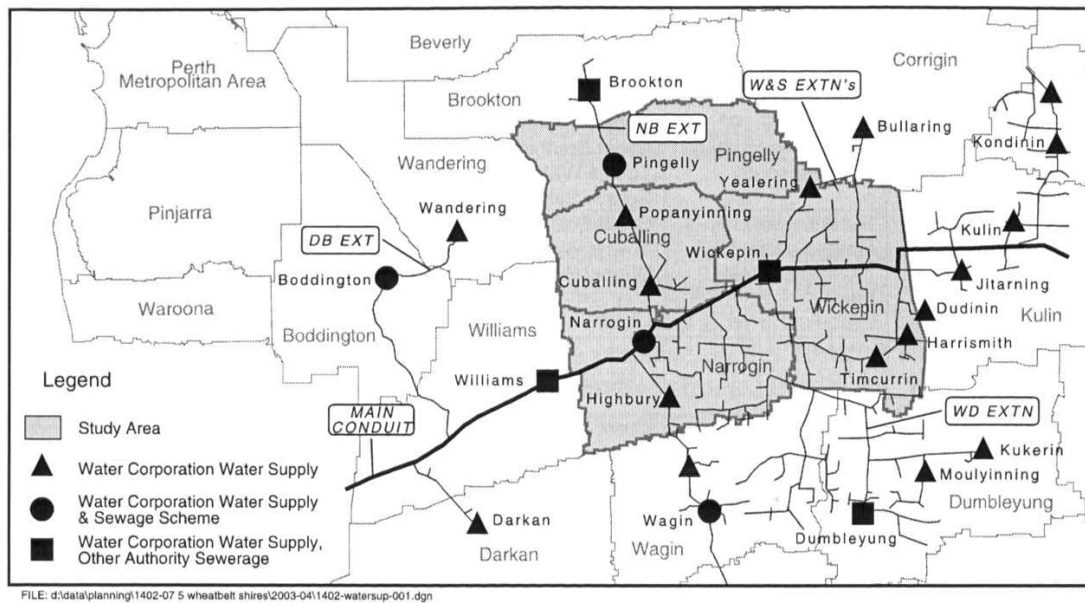


Figure 16: Power Distribution Network

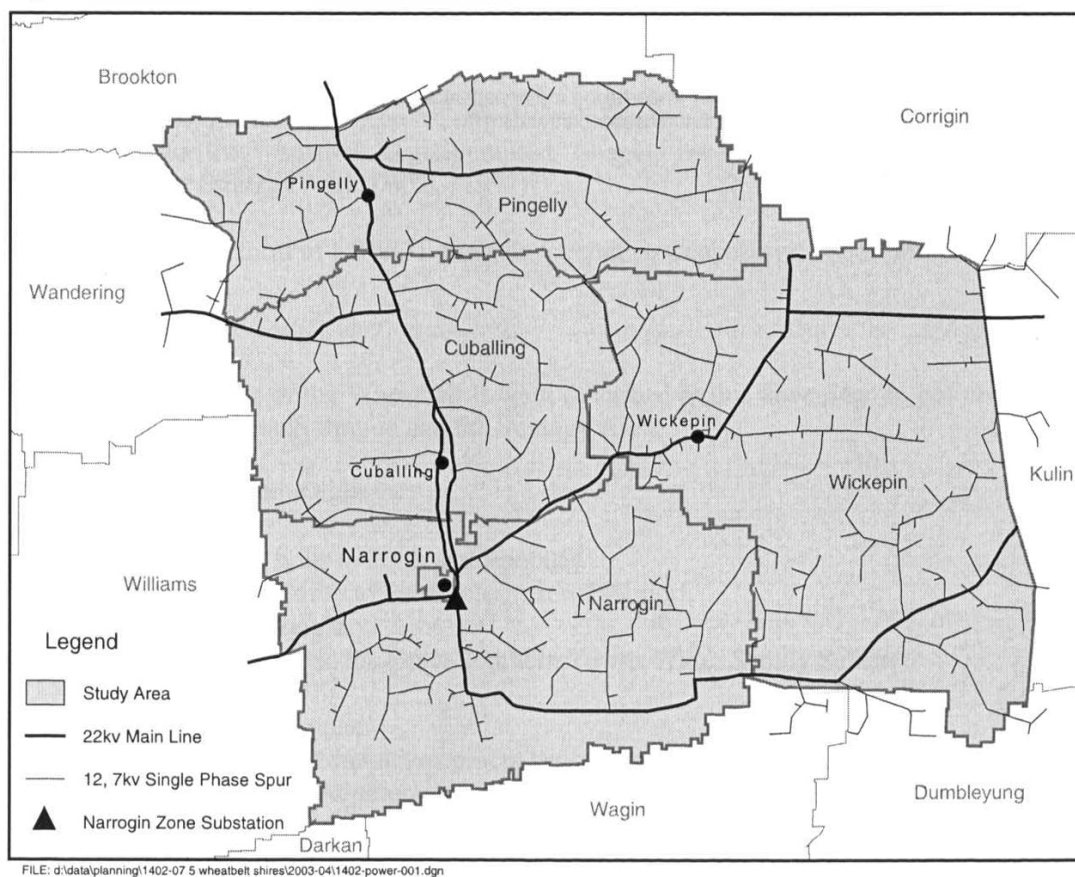


Table 11: Existing Town Infrastructure

Town	Power Supply	Water Supply ⁽¹⁾	Sewerage	Waste Management
Narrogin (Town) 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.		
Wickepin 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				Two other landfill sites for rural areas
Pingelly 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 sub-station.	No scheme water.		
Cuballing Cuballing Yornaning Popanyinning	Rural network. Limited ability for provision of bulk loads.	Great Southern Towns Water Supply System.		

- (1) 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

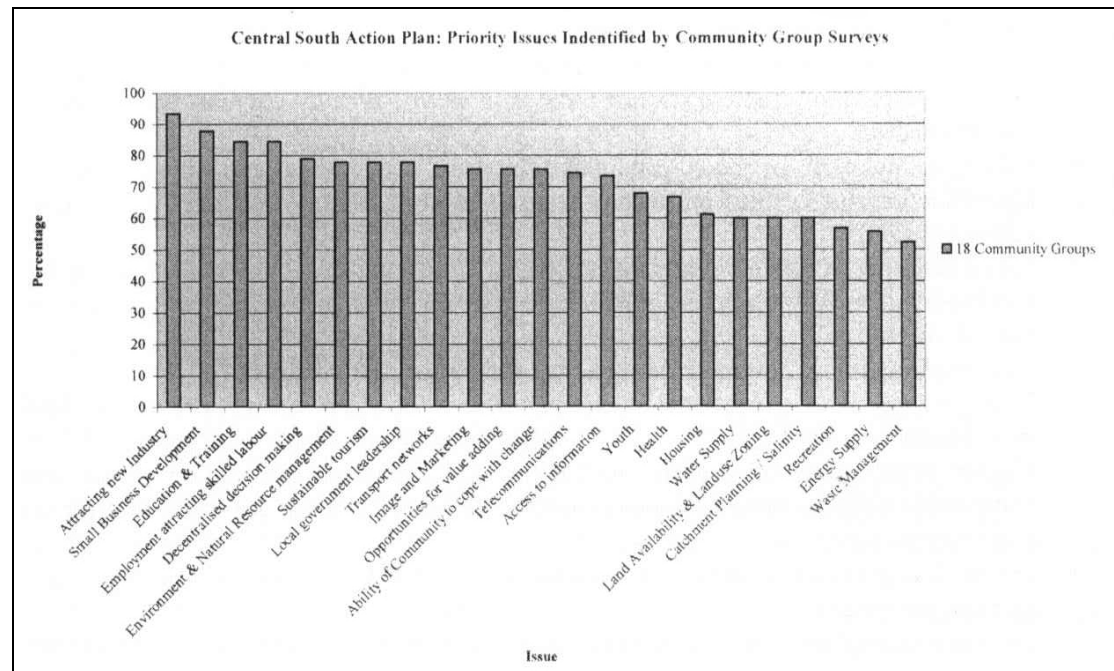
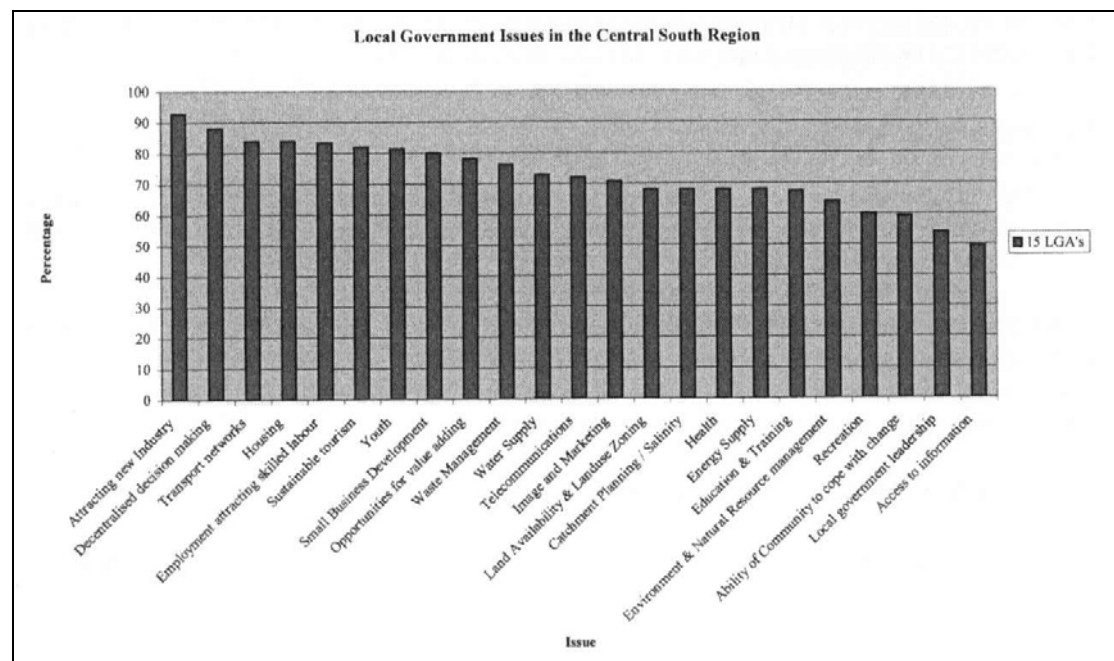


Figure 18: Local Government Issues in the Central South Region



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 Wickpin, Strategic Plan

Council's 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 Wickpin'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

Issue

- 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.

Issue

- The need to attract new industry.

Response Options

- Ensure that regional tourism 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.
 - Regional Service Centre - >10,000 people (Northam/Albany).
 - 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.

6.5.2 Rural Issues and Planning Responses

Issue

- 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).

Issue

- 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.

Issue

- 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

Issue

- 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

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

Issue

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

Response Options

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

Issue

- 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.

Issue

- 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 Planning 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.

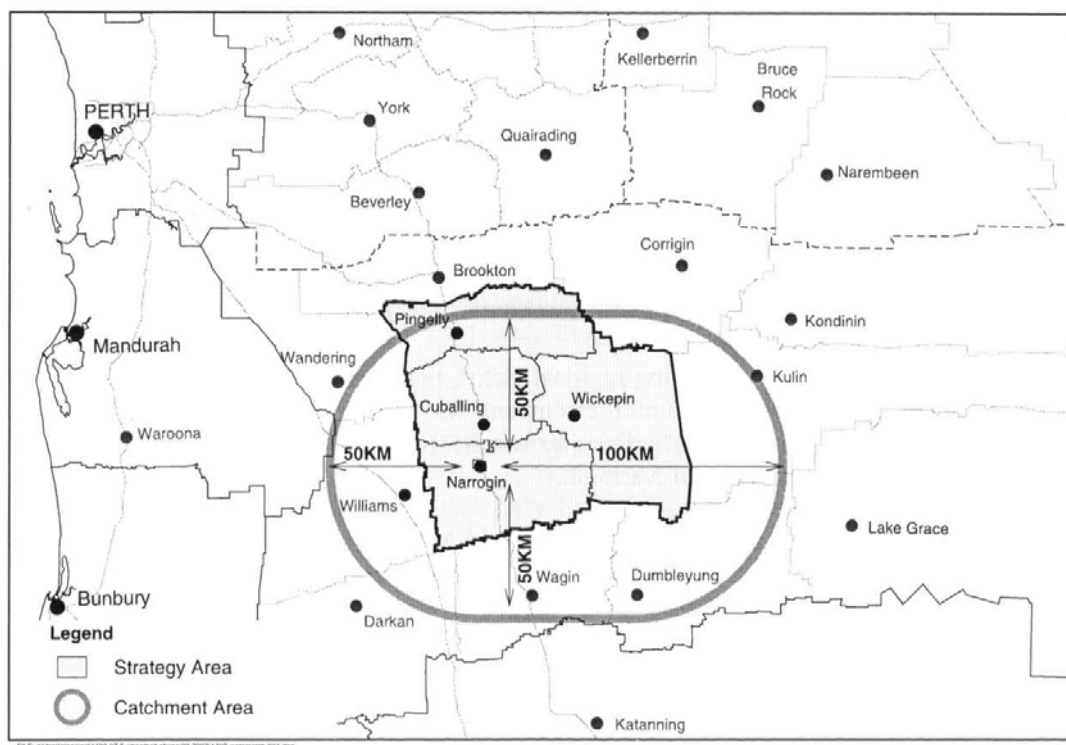
Within the Strategy Area, tourist and event activities need to be focused. Physically the triangular road base between Pingelly, Wickepin and Narrogin and the major entry roads to these foci, is an identifiable and manageable tourist precinct (See Fig. 20).

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 ⁽²⁾
	Wickepin	350	1 500	500-1 000
	Cuballing	400	1 000	1 000
Rural Townsites:	Highbury	200	200	500 ⁽³⁾
	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

(1) Includes partial development of urban expansion areas indicated in the Strategy Plan.

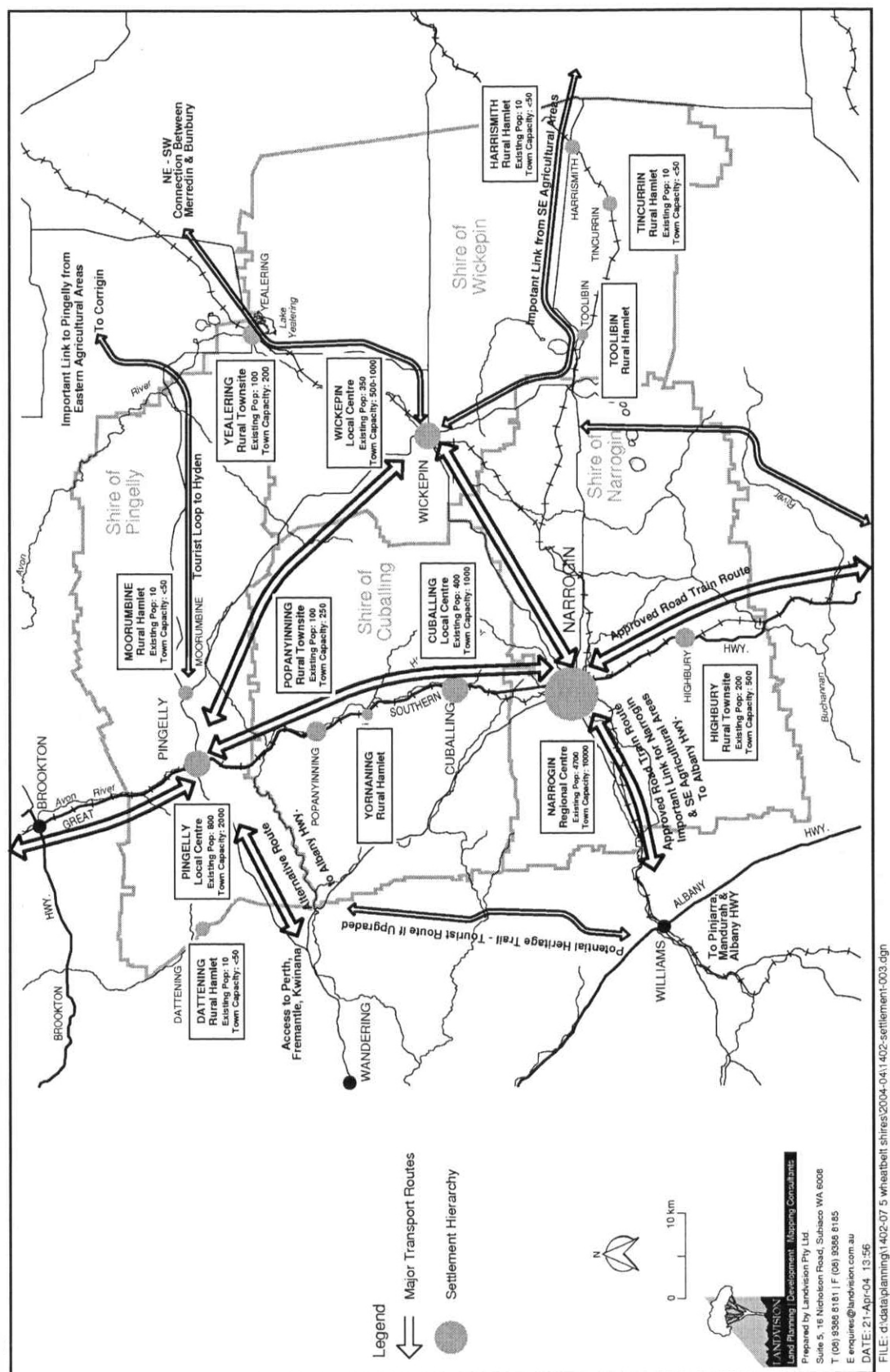
(2) Includes supplementary rural residential zones.

(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 only be supported in the western portion of the municipality by the local authorities provided it can be demonstrated that the proposal complies with one of the exemptions outlined under WAPC Policy DC 3.4 Subdivision of Rural Land.

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 townsites boundaries (particularly residential zones) 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:

- avoid productive agricultural land, important natural resources, areas of high bush fire risk or environmental sensitivity;
- avoid future urban areas particularly suitable for urban development in terms of their characteristics and proximity to urban services;
- give preference to locations near existing settlements which have services and facilities available in order to support the local community and avoid demands for costly infrastructure extensions;
- minimise potential for conflict with incompatible activities associated with productive rural uses or natural resource management;
- only include locations which are suitable for this type of development, for example topographically varied, visually attractive and with distinctive environmental attributes; and
- take a realistic approach by allocating land, based on measurable and verifiable estimates of demand for housing, not the speculative purchase of land.

All subdivision shall have a minimum lot size of 4 ha unless the lots can be connected to a reticulated water supply.

No lot within the Rural Residential Zone shall have an area less than 4000 sq m, if unsewered.

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 to require an amendment to the Local Planning Scheme to take place before any further subdivision of land for rural residential or rural small holding purpose.

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.

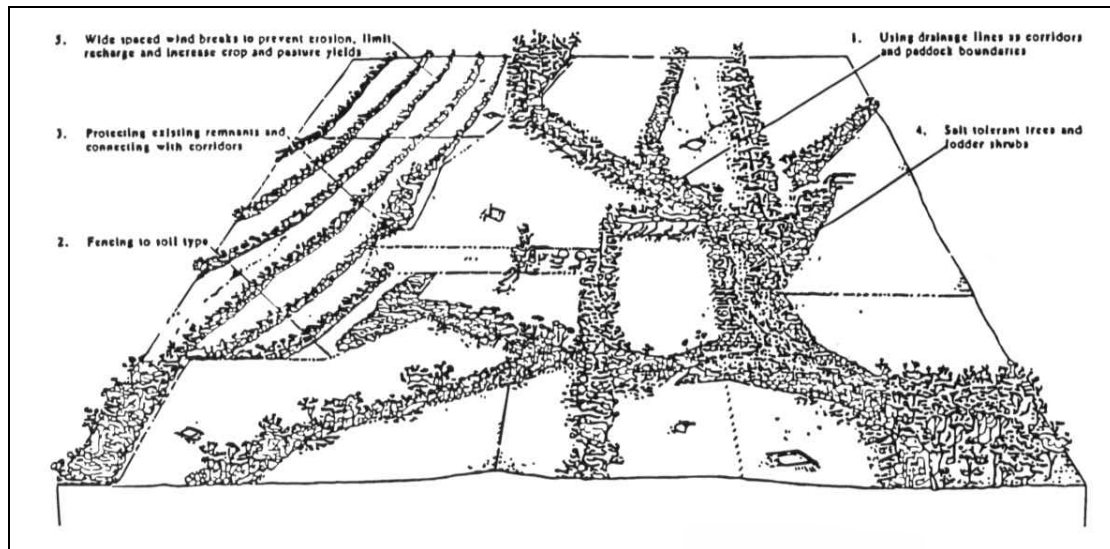
While there is considerable awareness of the need to act on these issues and the landcare movement has supported action in many areas, it is becoming increasingly obvious that the incremental change approach adopted has not resulted in the significant change at the scale necessary to achieve sustainable 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 conservation, 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:

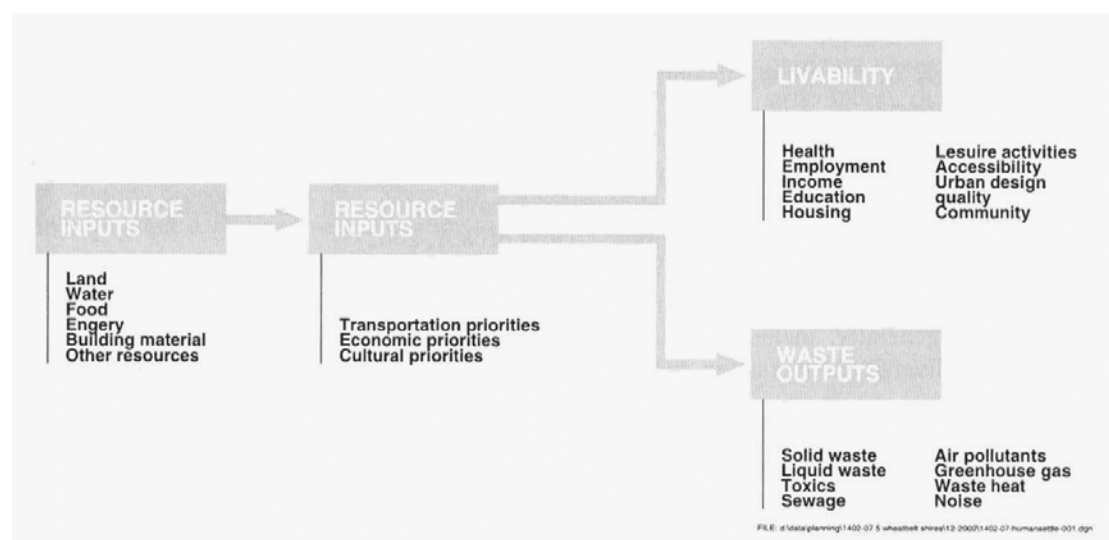
- Develop and identify agricultural systems designed to maintain or improve the condition of the States' natural resources.
- Facilitate the widespread adoption of best management practices that minimise environmental impact while improving profitability.
- Facilitate land use changes within agriculture.

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 farming 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 with 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 farming 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.

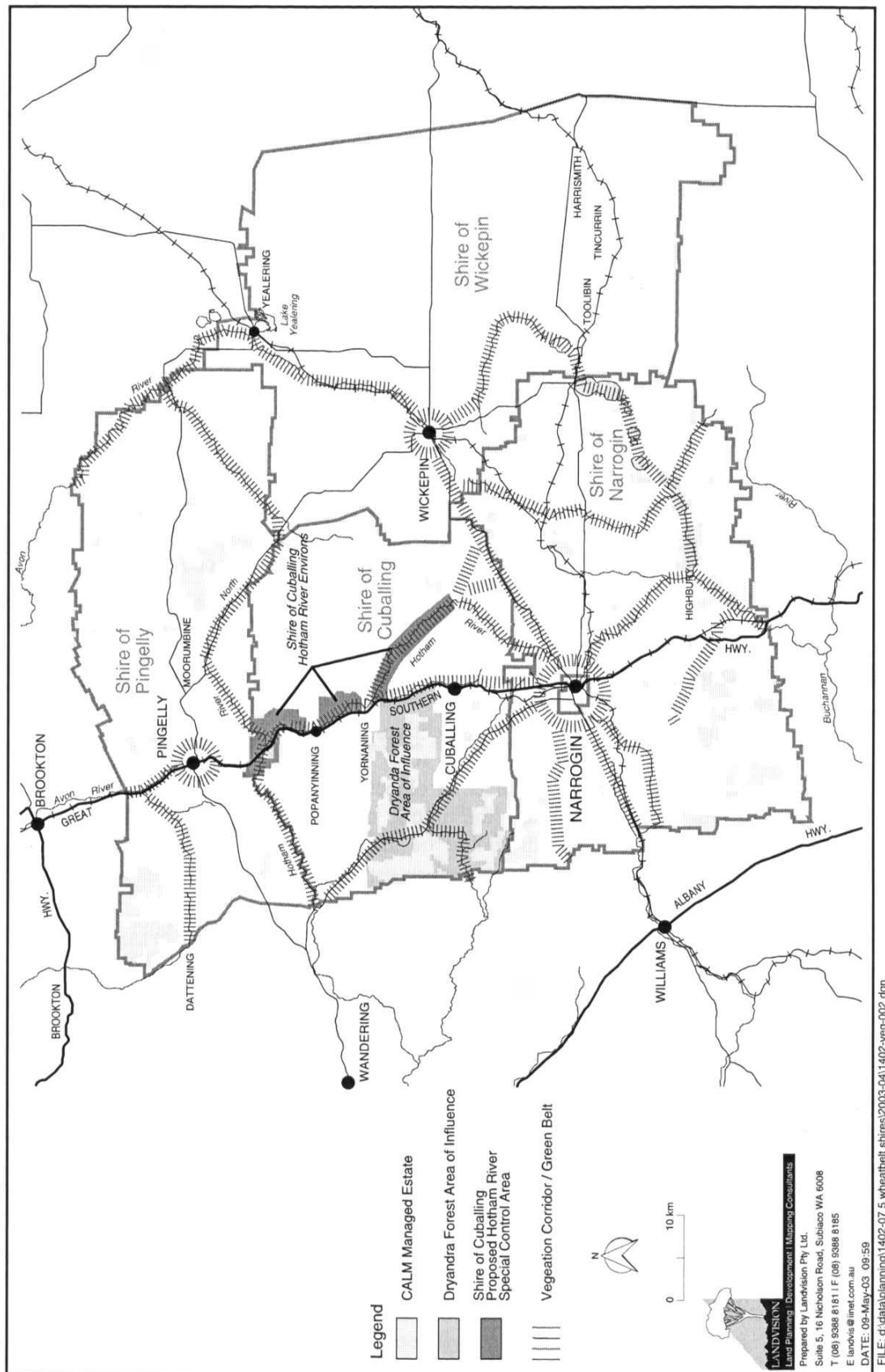
7.6.1 Strategic Actions

- 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.

Figure 23: Vegetation Corridors



- 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 pursuing 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.

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 far 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 sight-lines 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 townscape 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 in 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 residential 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 Other	Residential	Residential	Residential	Residential R2/R5, R12.5/R20, R30
Central Business	Shops and Offices Car Park Other commercial	Rural Townsite	Town Centre	Town Centre	Central Business Town Centre 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				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 Significant and Historic Places		Special Use	Additional Use	Additional Use/Restricted Use Special Use 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.

This area has been expanded to include surplus railway land in Wickepin and Yealering townsites to provide the potential for more comprehensive town centre and townscape development including possible tourist uses. In the case of Wickepin the Town Centre zone has also been expanded to include the civic area on the corner of Johnston and Campbell Streets, and other civic buildings such as a church in Johnston Street and the fire station, ambulance station and a retail nursery in Campbell Street.

- 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 unsewered urban areas	-	R2/R5
Sewered Urban Areas	-	R12.5/R20
CBD, town centres and adjoining areas	-	R20/R30 with bonuses available for aged persons and special purpose dwellings.

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

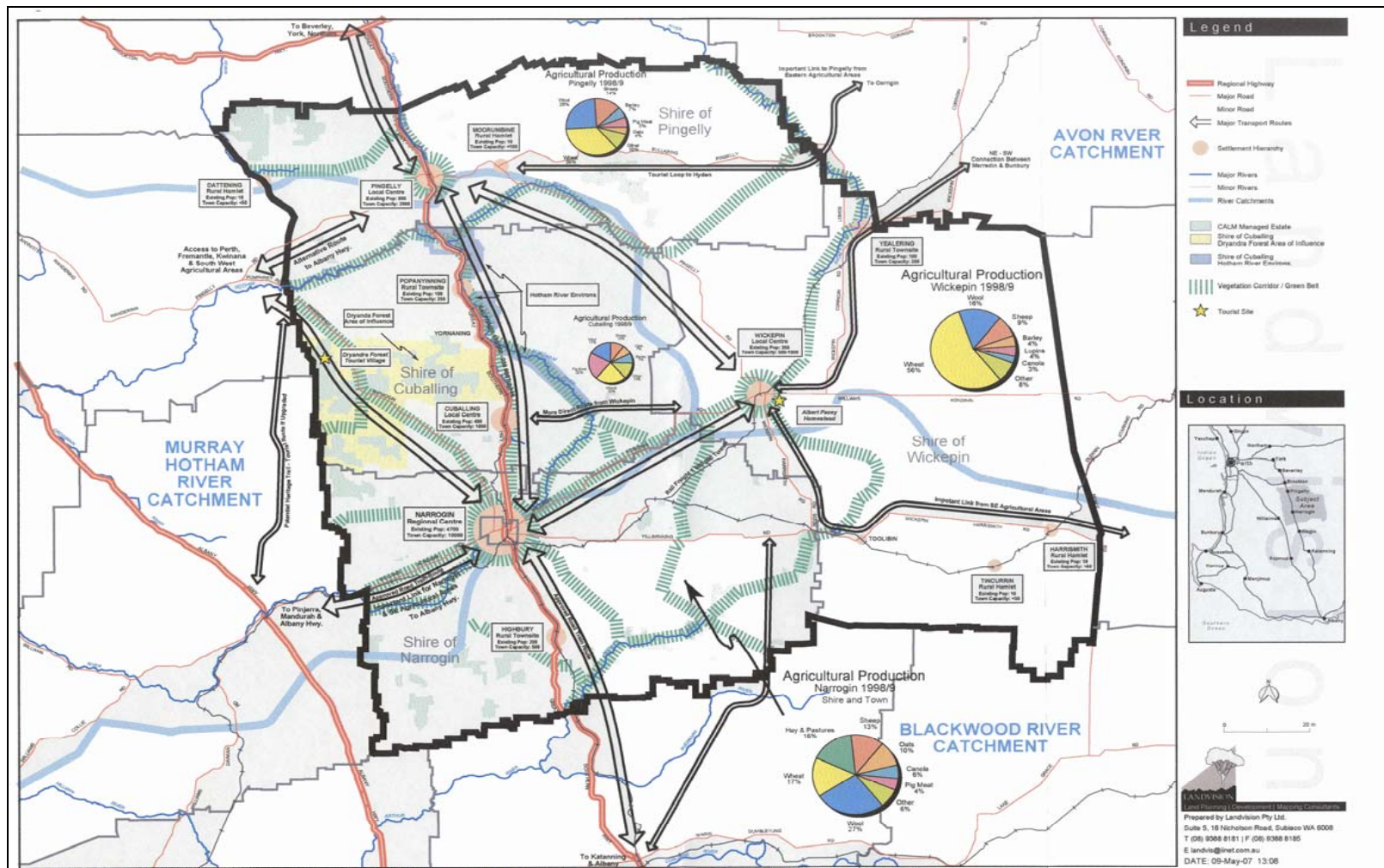
- Industrial Zones; (Mixed Use, Light Industry and General Industry) - to accommodate those operations, that due to off site impacts or space requirements cannot be located in the Town Centre Zones.
- Composite Zone;- (Residential/Light Industry) - a specially planned zone with lots accommodating both 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	P	N (SH)	N (T)
General				
Subdivision roads and footpaths	✓	✓	✓	✓
Landscaping and visual amenity	✓	✓	✓	✓
Tourism development	✓	✓	✓	✓
Outbuildings	✓	✓	✓	✓
Transportable and second hand relocated dwellings	✓	✓	✓	✓
Outdoor storage of materials/vehicles	✓	✓	✓	✓
Signage	✓	✓	✓	✓
Temporary accommodation	✓	✓	✓	✓
Road side stalls	✓	✓	✓	✓
Urban				
Townscape and urban design guidelines	✓	✓		✓
Heritage Guidelines	✓	✓		✓
Development Areas				✓
Factory Unit Buildings		✓		✓
Aged/dependent persons - ancillary accommodation		✓		✓
Residential development in CBD				✓
Fencing materials				✓
Off-street parking				✓
Cash in lieu parking				✓
Rural				
Intensive agriculture in general agriculture areas		✓	✓	
Feedlots		✓	✓	
Piggeries		✓	✓	
Viticulture		✓	✓	
Aquaculture		✓	✓	
Industry in rural areas		✓	✓	
Vegetation corridors and management	✓	✓	✓	✓
Rural residential/rural townsite development guidelines	✓	✓	✓	
Rural hamlets development guidelines/policy plans	✓	✓	✓	
Rural industry and buffers	✓	✓	✓	
Mining/extractive industry	✓	✓	✓	
Additional dwellings on rural zoned lots	✓	✓	✓	

Figure 24: Strategic Development and Land use Plan



8.0 SHIRE OF WICKEPIN - RECOMMENDATIONS

These recommendations apply to the Shire of Wickepin and are additional to the Strategic Recommendations above.

The Shire of Wickepin has a generally declining population with a rural population, that following a period of decline now seems to be stabilising. The town of Wickepin serves as a local service centre to the Shire.

The town is a classic, railway town layout. Should the kaolin mine, 25 km to the east commence operation there is plenty of room for expansion in the current townsite and in areas rezoned but not currently subdivided to the south.

The current industrial area appears to be excessive and could be reduced in size and if justified the Council depot could be relocated in the remaining area which would release its current site for residential development.

The area adjacent the current industrial area was identified as part of a heritage precinct in Council's Townscape Plan and the relocation of the Council Depot would provide the impetus to enhance this area as proposed in the plan.

The creek lines running through the town could be enhanced and revegetated and linked to the Facey Homestead by way of a heritage trail (See Fig. 25).

The "English" land, owned by Council to the south-east is available to round off the town and to be held as a land bank for the future. However given the amount of undeveloped urban and rural residential zoned land to the south of Wickepin, the majority of the "English" land is unlikely to be utilised for rural residential within the lifetime of the Strategy.

A revised plan has been prepared for this area which provides for some urban lots to round out the townsite and some special residential lots around the western and northern perimeter of the site and abutting the golf course (See Fig 26). Provision is made for the relocation of the northern part of the golf course to this area.

It is recommended that Council initiate investigations into the feasibility of a range of agricultural products, that the remainder of the "English" land might support.

Depending on the outcome of such investigations Council could consider leasing parcels of land for the production of a diverse range of produce.

If it were feasible to extend the golf course into this area then the area currently to the north of the main road could be set aside for a composite residential/specially planned light industrial use.

There are four other townsites in the Shire; Yealering, Toolibin, Tincurrin and Harrismith.

Figure 25: Wickepin Townsite

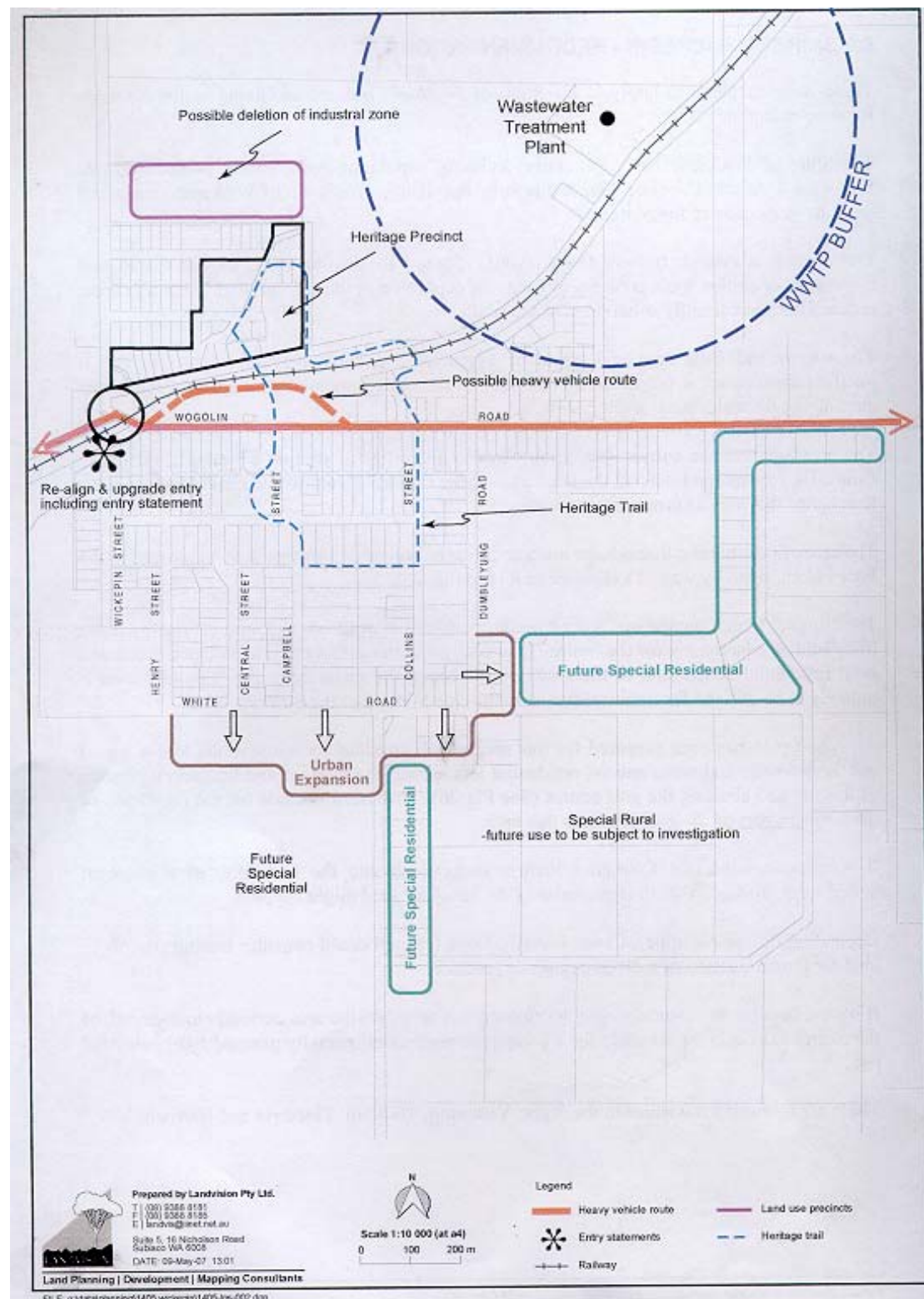
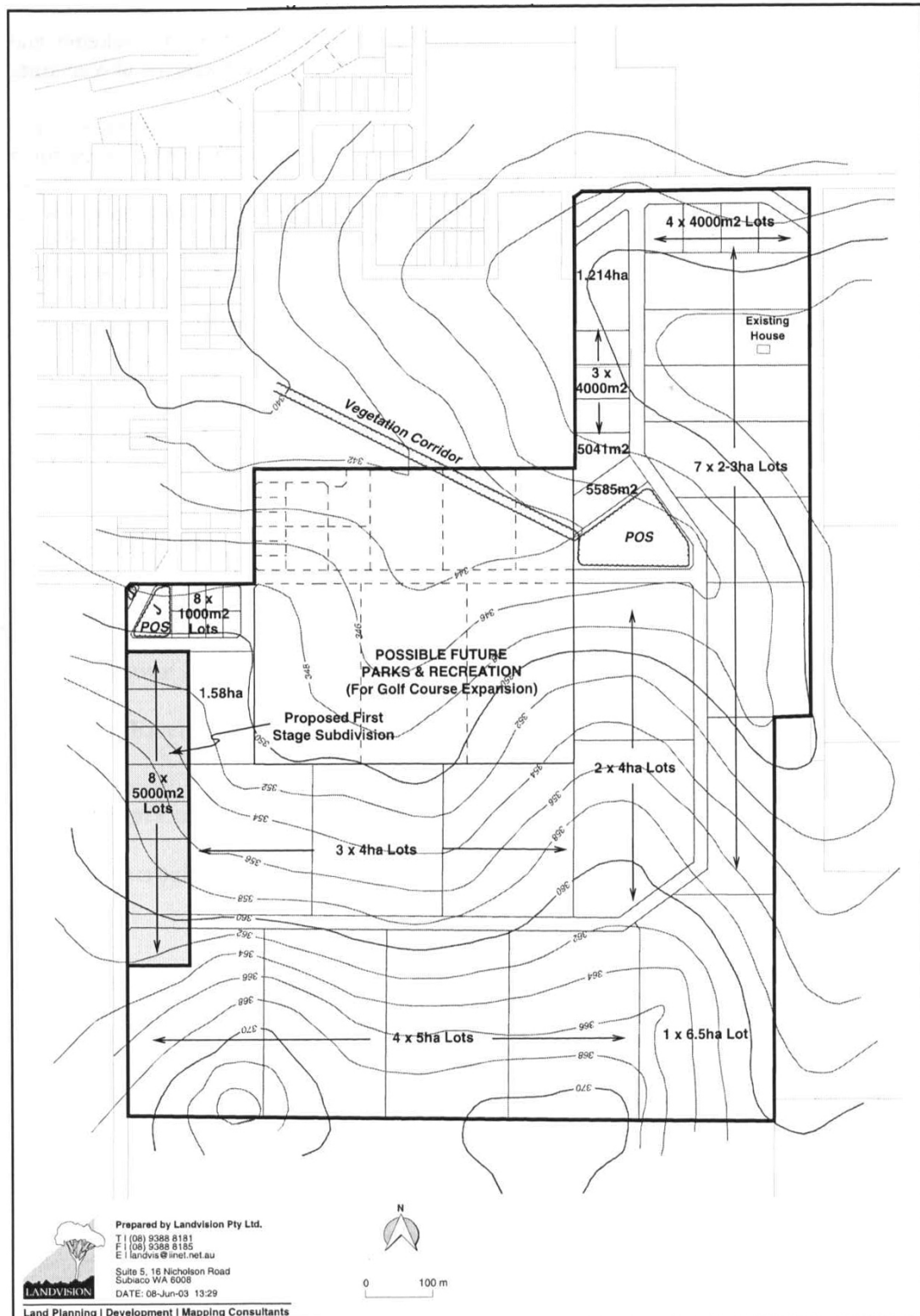


Figure 26: Proposed Subdivision Lots 1 & 2 Wogolin Road
Figure 26: Proposed Subdivision Lots 1 & 2 Wogolin Road, Shire of Pickepin



Yealering to the north are in the settlement strategy designated as a rural townsite and Harrismith, Toolibin and Tincurrin as rural hamlets. In each case development should be in accordance with a policy plan.

Townscape plans suggest some road realignments to improve the entry to Wickepin and Yealering and the management of through traffic. Heritage trails are proposed at Yealering and Harrismith (See Figs. 27 and 28).

The Toolibin Lake needs to be supported as a tourist attraction and form part of a tourist route within the Strategy Area.

Vegetation Corridors are designated in the Strategy along some of the major drainage lines in the Shire and this concept should be supported through a Scheme Policy.

It is recommended that the local planning policies relevant to the Strategy Area be adopted by the Shire. (See Table 15)

Figure 27: Yealering Heritage Trail

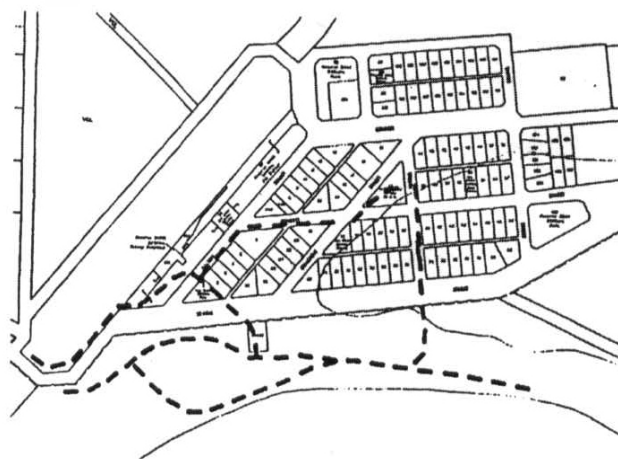
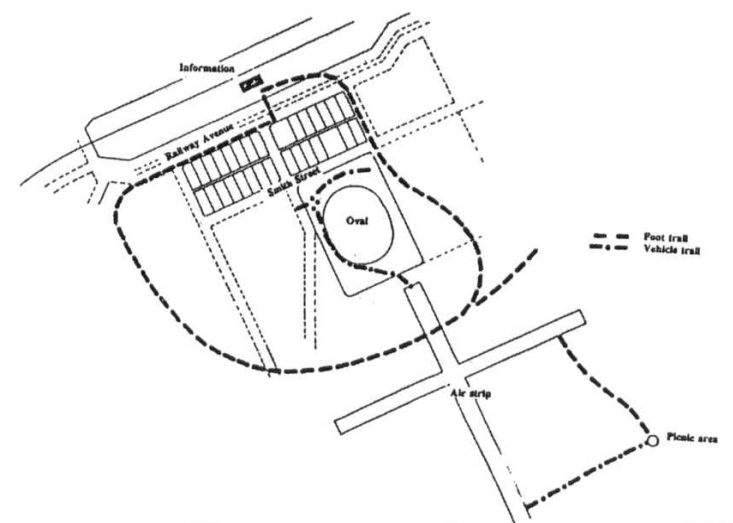


Figure 28: Harrismith Heritage Trail



AGENCIES AND PERSONNEL CONSULTED

Agriculture WA	Allan Johns Ian Kinnimonth
Department of CALM	Greg Durell
Department of Education	John Moore
Department of Minerals and Energy (now Department of Industry and Resources)	Mike Freeman Abey Abeysinghe
Department of Housing and Works	Sarah Bullock
Department for Planning and Infrastructure	Judi Bell Brett Coombes Erwin Swasbrook
Main Roads WA	Lindsay Broadhurst Harry Murari
Water Corporation	Frank Kroll Bernard Toohey Richard Forrest Carolyn Hills
Western Power	Peter Stegna
Water and Rivers Commission	Greg Davies Romy Collier
WA Tourism Commission	Research Section
Town of Narrogin	Gary O'Neill Dan Turner Wendy Sergeantson
Shire of Narrogin Shire of Pingelly	Geoff McKeown Greg Carter Matthew Trichet
Shire of Wickepin	Len Calneggia Aaron Capp
Westrail	Llew David

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ADVERTISING

The Shire of Wickpin Local Planning Strategy certified for advertising on 29 November 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:

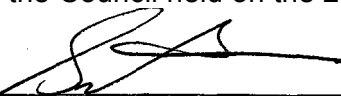


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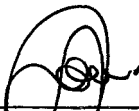
Witness
Date

ENDORSEMENT

The Shire of Wickpin hereby endorses the Local Planning Strategy, at the Ordinary meeting of the Council held on the 21st day of July 2004

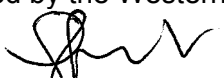


SHIRE RESIDENT



CHIEF EXEC FFICER

Endorsed by the Western Australian Planning Commission on 27 March 2007.



the
sralian Planning



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 27 AUG 2007