

Caboolture ShirePlan

Supporting Information



Caboolture ShirePlan - Supporting Information

VOLUME 1 – BACKGROUND STUDY

Historic Version
Caboolture ShirePlan

Historic Version
Caboolture ShirePlan



EXECUTIVE SUMMARY

In preparing a planning scheme for the Shire, it is important to have a comprehensive understanding of the issues that influence growth and development within the Shire. The preparation of this *Background Study* represents the collection of the background reports that Council has undertaken with respect to investigating the core matters of the planning scheme. The conclusions developed will inform the policies that are to be derived for the planning scheme.

In the broad context, future planning for Caboolture Shire needs to have regard to the State and regional planning policies and programs. The Regional Framework for Growth Management 2000 contains many policies across a number of themes that advance and coordinate planning in South East Queensland. The planning scheme for Caboolture Shire needs to take into account the State interests contained within such strategies.

Continual changes to and the introduction of State legislation and regulations means that future planning needs to be undertaken having regard to the range of matters that affect the sustainability of the Shire.

The Shire has experienced significant population growth since about 1986. While future growth will not occur at previous rates, annual increases at an average of around 3,000 persons per year can be expected to occur until 2016. Increased population growth means that Council is faced with having to address many issues that have the potential to impact on the lifestyles currently enjoyed by residents in the Shire.

There is an adequate supply of land currently set aside for urban residential and rural residential purposes within the Shire. As a result of this, there is no need to expand developed areas beyond the boundaries of designations previously identified. In some areas, it will be appropriate to reduce the amount of land available due to a number of constraints including the need to avoid an oversupply of land.

Sufficient land exists for commercial purposes within the Shire as many centres are experiencing high vacancy rates and have an oversupply of commercial land. There is also a need to develop the Shire's centres as places of major community nodes of interaction rather than having just the traditional retailing focus.

A shortfall of industrial land at the district level and also at the local level has been identified for some localities within the Shire. The provision of additional land for the future will ensure that an adequate supply of land will exist that can provide employment opportunities within the Shire. All land uses within the Shire have the potential to create employment.

Rural land covers approximately 51% of the Shire. The rural activities will continue to be an important land use and a major contributor to the Shire's growth and economy. For this reason, the planning scheme must continue to protect the long term integrity of rural areas in the Shire.

There are a number of areas containing local and regionally significant extractive resource deposits within the Shire. These deposits must be identified and protected for the long term. Extractive industries have the potential to create a number of impacts and for this reason ancillary components such as buffers, haul routes, and rehabilitation need to be addressed at the time development applications are assessed.

The studies that have been undertaken for infrastructure such as roads, water and sewerage indicate that such facilities can be provided to match the future population growth that is anticipated to occur. There is a need to coordinate all land uses with the timely provision of infrastructure.

The preparation of a Priority Infrastructure Plan is an important component of the planning scheme and will complement the network planning undertaken. It is important that the amount of land to accommodate all forms of growth and development for the life of the planning scheme is provided in a sustainable way, which includes provision of infrastructure in an efficient manner.

With regards to European history, there have been a number of sites identified across the Shire for inclusion on a heritage register list. Our Indigenous heritage is particularly strong and where possible will continue to be recognised within the Shire through the planning scheme and other measures. Developing a cultural identity for the Shire is as much about protecting the future as it is about protecting the past.

Population growth brings with it a corresponding increase in the demand for social infrastructure. The development of new areas within the Shire needs to be about building communities rather than just subdividing land. Involving the community in preparing future strategies such as a planning scheme is an equally important part of the process in planning for the future. The planning scheme alone cannot provide the delivery of community services that must be undertaken in combination with other Council projects and programs.

The Shire's location within South East Queensland means that it contains a diversity of natural assets that are of local, regional and State significance. These attributes are one of the principal reasons for attracting new residents to the Shire. Any future growth within the Shire must be undertaken in a manner that provides for the long term protection and enhancement of natural assets so that they can be enjoyed by future generations.

The Shire's open space system forms an integral component of the land uses within the Shire that provides recreational opportunities for the Shire's residents as well as supporting and complementing elements of our natural systems.

The natural features and geographic location of the Shire means that it is vulnerable to natural hazards such as bushfires and flooding. While the scheme cannot prevent such occurrences, it can ensure that future development is appropriately located in order to minimise adverse impacts.

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LIST OF TERMS AND ABBREVIATIONS

DLGP	Department of Local Government and Planning
IPA	Integrated Planning Act
IRTP	Integrated Regional Transport Plan
PIFU	Planning and Information Forecasting Unit
RFGM	Regional Framework for Growth Management
SPP	State Planning Policies

Section 1- Introduction

Overview

The Caboolture Shire Council is to have in place a planning scheme for the Shire that is prepared in accordance with the provisions of the *Integrated Planning Act* (IPA). These provisions largely influence the development of strategies that ultimately become part of the planning scheme.

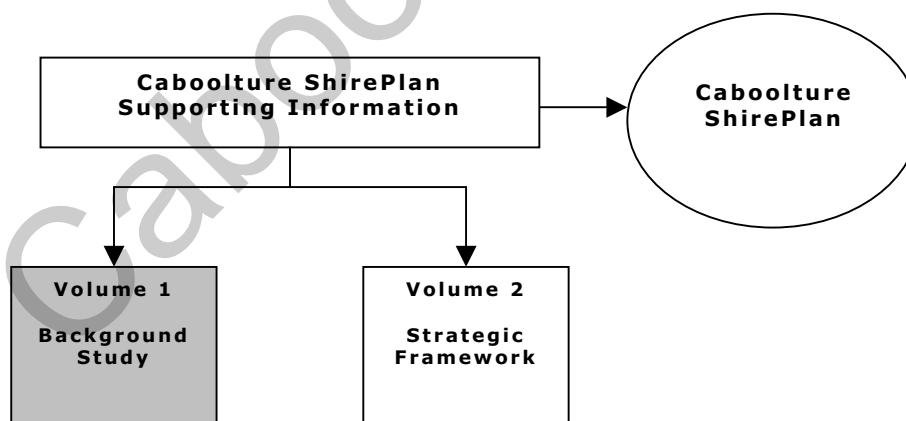
Planning schemes must be prepared having regard to the principles of ecological sustainability. While a planning scheme alone cannot achieve all of the objectives and outcomes sought by these principles, it can contribute in a major way to the overall aim of ensuring that balanced growth and development occurs for the community having regard to economic, social and ecological considerations.

The purpose of this volume is to provide factual information about a range of issues that have been identified for Caboolture Shire. Since the preparation of the majority of the components of the Town Planning Scheme in 1988 and the Strategic Land Use Plan in 1993, many new issues affecting the Shire have emerged. As an example, there has been the introduction of significant new State legislation that now places a greater responsibility on Council and its community in the planning for development and growth in the Shire. These changes provide greater challenges for Council and present a significant opportunity to ensure that the lifestyle and character of the Shire are retained for future generations.

This volume is essentially the information gathering phase of the process for preparing a planning scheme, with the matters to be addressed discussed in each of the following sections. These sections are set out in a standard format that presents the issues for discussion, a review of planning scheme provisions, community consultation issues, followed up by a discussion in response to the matters.

Each section is based on background research that has been undertaken either in-house or by a consultant engaged by Council. Most of this research is in the form of studies and reports that make a number of recommendations. The outcomes and recommendations are discussed within each section of this volume and where appropriate, taken forward as a conclusion for future development into a strategy for the planning scheme. Not all recommendations provided within the background reports have been advanced in the discussion contained within this volume. This is due to the fact that Council does not endorse the particular recommendation or that it does not relate directly to the preparation of the planning scheme. The conclusions from each of the sections are also further analysed within *Volume 2 – The Strategic Framework*. Figure 1.1 sets out the relationship between the ShirePlan and the Supporting Information used to prepare the planning scheme.

FIGURE 1.1 THE SHIREPLAN AND SUPPORTING INFORMATION



Historic Version
Caboolture ShirePlan

Section 2- State and Regional Planning Context

Introduction

Issues

State Planning Policies

*South East Regional Framework for
Growth Management 2000*

Conclusions

State and Regional Planning Context

Introduction

State and regional issues must be taken into consideration when preparing a planning scheme for the Shire. As part of addressing the core matters set out in the IPA, Council must take into account the State and regional dimensions of these matters. For the preparation of this planning scheme, State Agencies have been given the opportunity to provide input into the identification of issues that are to be addressed. Their involvement will be on-going during the implementation and future reviews of the scheme.

The purpose of this section is to provide a brief overview of the main State and regional issues that are going to influence the final outcomes of the planning scheme. State Agencies have already provided their input during the Statement of Proposals phase of the scheme preparation. Their comments have not been reproduced within this *Background Study* but rather are interspersed with the discussion made for each of the topic areas covered in the following sections. *Volume 2 – The Strategic Framework*, includes discussion on how the strategies for the planning scheme address State and regional considerations.

There are a large number of planning, social, environmental and infrastructure strategies that have been or are in the process of being prepared across the region. This section will mainly focus on the documents which contain the higher order strategies for growth management in South East Queensland.

Issues

State Planning Policies

There are three State Planning Policies (SPP) which directly impact upon the preparation of a Planning Scheme for Caboolture Shire. These are:

- SPP 1/92 Development and Conservation of Agricultural Land;*
- SPP 1/02 Development in the Vicinity of Certain Airports and Aviation Facilities;*
Development in the Vicinity of Certain Airports and Aviation Facilities –
Planning Guidelines
- SPP 2/02 Planning and Management Development Involving Acid Sulfate Soils*
- SPP 1/03 Mitigating the Adverse Impacts of Flood, Bushfire and Landslide*

The provisions of these policies have already been considered within the planning scheme and will continue to be addressed in future planning provisions. The protection of good quality agricultural land has long been recognised within the 1993 Strategic Land Use Plan along with the inclusion of objectives which set out to support its protection against incompatible uses. While not directly affecting the Shire, the SPP for aviation facilities is a useful reference document to be used when addressing activities in and around the Caboolture Airfield.

For acid sulfate soils, this issue has been considered for the planning scheme. The intention of the SPP is to consider the impacts which the disturbance of acid sulfate soils can create when development is undertaken. The introduction of SPP 1/03 in September 2003 represents a major advancement towards minimising the potential adverse impacts of flooding, bushfire and landslide hazard on people, property, economic activities and the natural environment.

It should also be noted that State Planning Policies are always being considered by the State Government e.g. in 2001, consultation commenced for a proposed policy for extractive industries. As these come into force, Council's planning scheme will be amended to reflect any implications which the policies may have. There is also the State Coastal Management Plan and subsequent Regional Coastal Management Plans that have the status of a state planning policy for the purpose of making and amending planning schemes and assessing and deciding development applications.

South East Regional Framework for Growth Management 2000

The principal document guiding the development of growth within South East Queensland is the Regional Framework for Growth Management 2000 (RFGM) which is an all encompassing strategy involving a number of agencies at the State and local levels. Each agency, including local government, is to have regard to the strategy in its planning, budgetary and program activities as well as its infrastructure provision. Caboolture Shire has been an active participant since the commencement of the process in 1990.

The first RFGM was released in 1994 with a number of reviews having taken place since then. This planning scheme and supporting information will be referring to the priorities outlined in the December 2000 version of the RFGM. The document consists of a vision statement and details of the organisational arrangements to manage the whole process. The focal point of the strategy are the priority actions which seek to deliver specific outcomes that will ultimately result in the balanced development of the South East Queensland region. These priority actions have been devised for each of the sixteen themes listed in the RFGM as follows:

- *Conservation of the Natural Environment*
- *Natural Economic Resources*
- *Water Quality*
- *Air Quality*
- *Regional Landscape*
- *Urban Growth*
- *Residential Development*
- *Major Centres*
- *Economic Development and Employment Location*
- *Social Justice and Human Services*
- *Liveability*
- *Cultural Development*
- *Indigenous Involvement*
- *Transport*
- *Water Supply*
- *Waste Management*

The priority actions for each of these themes impact upon Council and must be taken into account in the future planning for the Shire. In some instances, it is the responsibility of Council to specifically implement the actions through the preparation of a strategy and in other cases Council will provide a supporting role to State Agencies. The level at which these priority actions affect the planning scheme varies from the broad scale, where it influences major policy, through to the fine detail of requiring the preparation of a specific code and assisting with the assessment of development.

Council has already undertaken or is in the process of preparing a number of projects which advance the priority actions of the RFGM. These include: a development control plan for the Narangba Industrial Estate, preparation of a State of the Environment Report, recognition of good quality agricultural land in the planning scheme, provided support for the preparation of the Pumicestone Catchment Management Plan, preparation of various Key Metropolitan Centre strategies, and preparation of a cultural heritage study.

The RFGM includes a series of maps which outline the indicative growth pattern, environmental constraints, nature conservation areas, natural economic resource areas, and infrastructure areas for the South East Queensland region. For Caboolture Shire, these maps and the priority actions contain a number of significant elements that impact upon the preparation of a new planning scheme.

In terms of the future growth pattern, the main feature of the map is Caboolture's designation as a Key Metropolitan Centre. This means that the area is to operate as the centre of employment, social, cultural, recreational, educational and business activities for the region. In conjunction with the State Government, Council has already prepared a Centre Development Strategy, Mobility Plan, and an Economic Development Plan for the Caboolture Key Metropolitan Centre. The provisions of the planning scheme will reflect many of the recommendations and outcomes set out in these studies.

The RFGM Map also depicts the major urban areas which essentially reflect the pattern of growth shown on the 1993 Strategic Land Use Plan map. The other important designation for the Shire is the Narangba Industrial Estate which is described as a major industrial area. The preparation of a planning scheme provides an opportunity for Council's policies and strategic decisions to reflect the planning for South East Queensland.

Map 2 of the RFGM outlining the Environmental Constraints depicts the natural economic resource areas and nature conservation areas which are further detailed in maps 2A and 2B respectively. These maps contain a number of significant implications for the preparation of a planning scheme. At the outset, the areas of regionally significant conservation value need to be identified along with the measures which the planning scheme can include to protect areas of remnant vegetation. Council has undertaken environmental studies for the planning scheme, the outcomes of which will be discussed in a separate section devoted to this issue.

For the natural economic resources, the areas of good quality agricultural significance, extractive and forestry resources need to be identified and protected. All of these land uses involve significant holdings within the Shire. Studies have been undertaken to identify the extent of these resources which will also be discussed in a separate section.

Since 2002, a comprehensive review of the RFGM has been under way with a draft document expected to be released for consultation in October 2004. It is intended that this planning scheme will be able to provide valuable input into the process for the preparation of that new document. At the same time, it is recognised that the preparation of future planning schemes will need to take into account any new strategies and actions advanced by an updated RFGM.

As it can be seen from the foregoing list, there is a comprehensive set of issues which need to be considered that cover social and community, cultural, environmental, and infrastructure matters. The issues affecting these theme areas have been identified by State agencies and the community during the course of community consultation for the planning scheme.

It is Council's role to determine how the planning scheme can advance each of the priority actions. However, in some instances, the planning scheme cannot provide specific outcomes by itself and will require support from other strategies and initiatives to be developed by Council.

It is acknowledged that the RFGM is not the only document that Council must take into account when preparing a planning scheme. There are many other long term plans such as the Integrated Regional Transport Plan, the State Coastal Management Plan, and the South East Queensland Regional Water Quality Management Strategy that are taken into account in the preparation of the planning scheme.

Conclusions

For State and Regional planning issues, the following conclusions have been made.

- (1) The RFGM is the principal planning document which contains a number of priority actions over sixteen different themes that must be considered when preparing a planning scheme.
- (2) There are State Planning Policies which have implications for the future planning for the Shire.
- (3) There is a range of strategies within each State and regional agency that need to be considered when preparing a planning scheme.

Section 3- Population

Introduction

Issues

Overall Population Growth

Age Structure

Migration

Occupancy Rates

Dwelling Structure

Household Structure

Dwelling Approvals

Population Projections – For The Shire

*Population Projections – For Local
Communities*

Review of Planning Scheme Provisions

Community Consultation

Discussion

Conclusions

Population

Introduction

In order to understand the implications of future growth, it is important to first of all review past demographic profiles and trends of the Shire. The purpose of this section is to provide an overview of the population data from the 2001 census. Where available, additional information has been provided by the Australian Bureau of Statistics, the Department of Local Government and Planning and Council's own data bases and information.

The residential areas (urban and rural residential) represent one of the major land uses within the Shire. Since 1986 and particularly during the early part of the 1990s, the Shire experienced significant growth rates and was one of the fastest growing local authorities in Australia. While the urban residential and rural residential development has been predominantly occurring upon greenfield sites, the continued rate of growth will place pressure on other areas of the Shire to be developed.

Given the decline in population growth since 1996, it is appropriate to review development trends and to assess the implications of decisions affecting future land requirements for the Shire. The requirement for land is also addressed having regard to the infrastructure planning requirements set out in the *Integrated Planning Act*. These matters are assessed in further detail within *Section 4* of this *Background Study*.

Issues

Overall Population Growth

The Caboolture Shire has experienced one of the fastest growth rates for a local authority within South East Queensland and Australia over the past ten to fifteen years.

Most of the growth occurred in the period up until 1996 where for the period from 1986 to 1991 the Shire's population increased by 21,401 persons while between 1991 and 1996 it increased by 30,667 persons. Between 1996 and 2001, the Shire experienced a quieter period of growth with the population increasing by 13,067 persons. *Figure 3.1* summarises the Shire's population growth over time.

FIGURE 3.1 CABOOLTURE SHIRE POPULATION SUMMARY 1971 TO 1996

Year	Population	Increase*	Growth Rate** %
1971	12207	-	-
1976	20060	1571	10.4
1981	32380	2464	10.0
1986	48602	3244	8.5
1991	70093	4298	7.6
1996	100760	6133	7.5
2001	114338	2717	2.6

* represents the average annual increase over the preceding five (5) years

** represents the average annual growth rate over the preceding five (5) years

Source: Australian Bureau of Statistics

Since 1996, the growth rate has slowed considerably which can be attributed to a number of reasons which will be discussed later within this section. The recent rates of change for the period 1996 to 2003 are summarised in *Figure 3.2*.

FIGURE 3.2 CABOOLTURE SHIRE POPULATION INCREASE 1996 TO 2003

Year	Estimated Population	Increase***
		%
1996	100760	-
1997	104313	3.5
1998	107379	2.9
1999	110002	2.4
2000	112118	1.9
2001	114827	1.2
2002	117296	1.1
2003 ⁺	121135	3.3
2004 ⁺	126729	4.5

*** represents the average annual growth rate over the preceding year
+ Preliminary estimate only

Source: Australian Bureau of Statistics

Caboolture Shire has experienced four distinct periods of vastly different growth rates. Prior to 1947 nearly zero growth, from 1947 to 1971 a steady increase of around 4%, followed by the post-1971 growth rates of around 10%. Since 1996, while annual increases of around 2,000 to 3,000 persons have been experienced, the growth rate of less than 3% is relatively low by comparison with some previous levels.

Within the Shire, the areas that have experienced new development (both urban residential and rural residential) have been the major growth areas i.e. Caboolture, Bellmere, Morayfield, Burpengary, Narangba, Deception Bay, Bribie Island and Sandstone Point. Very little of the population growth has occurred from infill and redevelopment. As these areas are located within the major urban corridors of the Shire where land is still available for development, it is likely that they will continue to experience strong population growth in the future.

Age Structure

Demographic information reveals that the Caboolture Shire has a population structure which varies noticeably to that for Queensland and compared to a large local authority such as Brisbane City. Figure 3.3 sets out the age profile comparisons.

At the time of the 2001 census, Caboolture had a large young population. Those in the 0-14 years age group represented 24.3% of the population. Caboolture Shire's figure has remained at a constant level since 1991. By comparison, Queensland's percentage for the same age group was 20.8% and Brisbane City's 18.1% in 2001.

The number of persons within the 15-64 years age group has also remained constant within the Shire over the last ten years being 62.7% in 2001. This figure is lower than the figures for Queensland (64.9%) and Brisbane City (69.7%). Figure 3.4 sets out the age profile comparison for 1991, 1996 and 2001 for the Shire.

Those persons within the 65 years and older age group represented 12.6% of the population in 2001 which is similar to the figures recorded for Queensland (12.1%) and Brisbane City (12.0%). The actual number of persons within this age group has significantly increased in the last ten years being 4,753 persons in 1991, 11,012 persons in 1996 increasing to 14,120 persons in 2001.

Within the individual localities around the Shire, the demographic profile varies. For the 0-14 years age group, the areas of Caboolture (24.7%), Morayfield (26.7%), Burpengary (26.5%), Narangba (27.8%), and Deception Bay (28.3%) have a population greater than the Shire's average for the age group. These areas are characterised by new residential development attracting new residents to the Shire. Localities with noticeably low percentages for this age group are Sandstone Point (18.2%), and Bribie Island (15.4%).

For the 15-64 years age group, the areas of Morayfield, Elimbah, Wamuran, Narangba and Woodford have a high proportion of residents in this age group compared to the Shire's average. Localities such as Morayfield, Burpengary and Narangba have high percentages of residents in the 15-39 years age sector which corresponds with the high number of persons within the 0-14 years age group also occurring in these areas. In the 40-64 years sector, the coastal areas of the Shire such as Donnybrook, Toorbul, Sandstone Point, and Bribie Island tend to dominate with high percentages of persons within this age group.

FIGURE 3.3 AGE PROFILE COMPARISONS – 2001

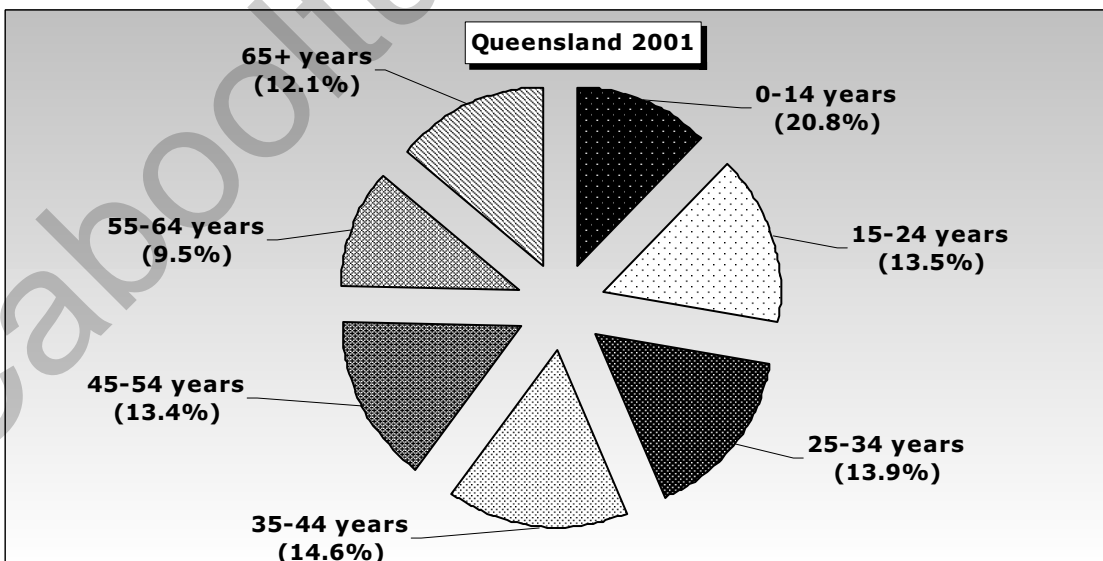
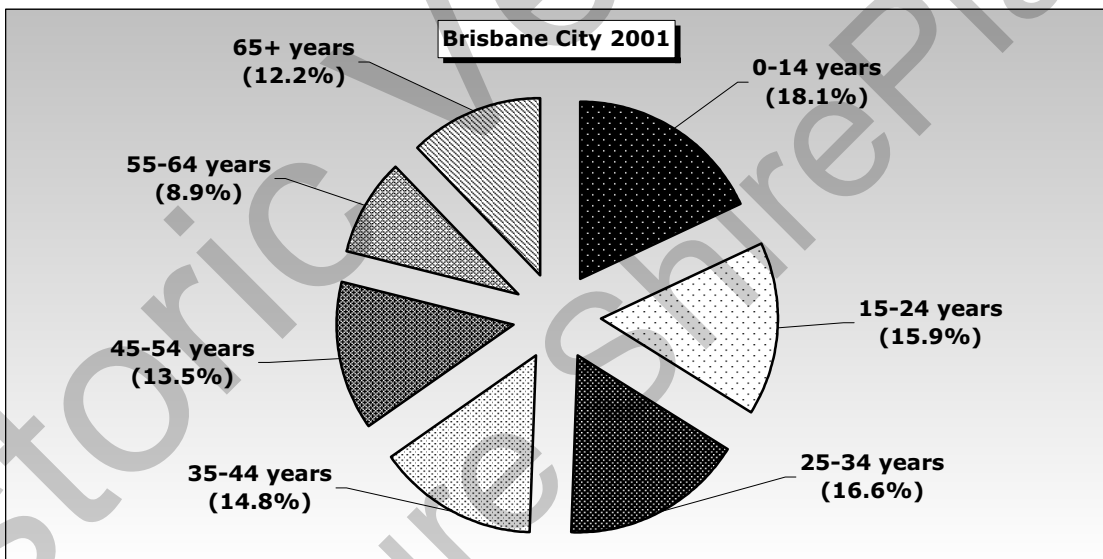
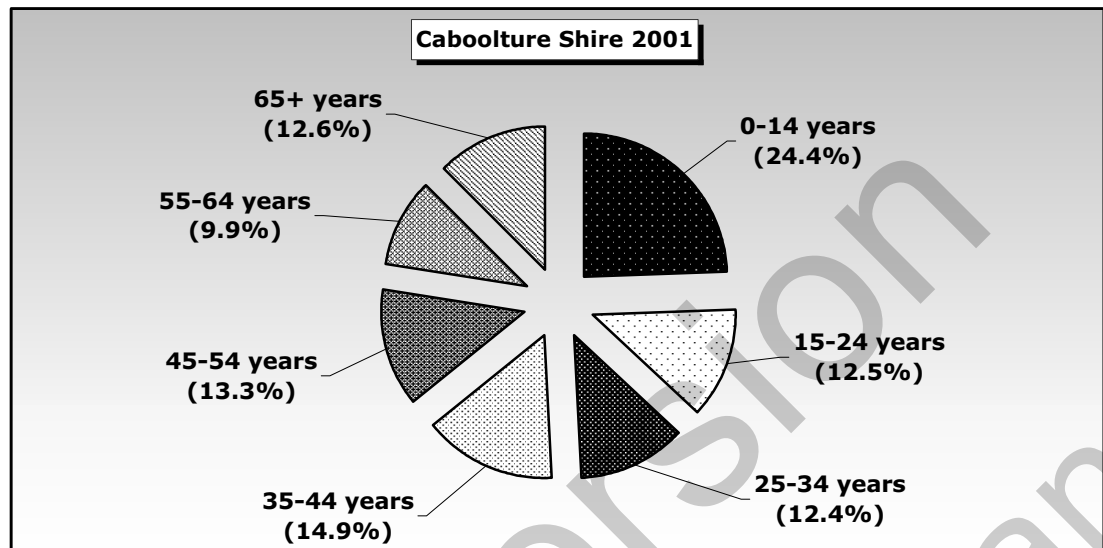
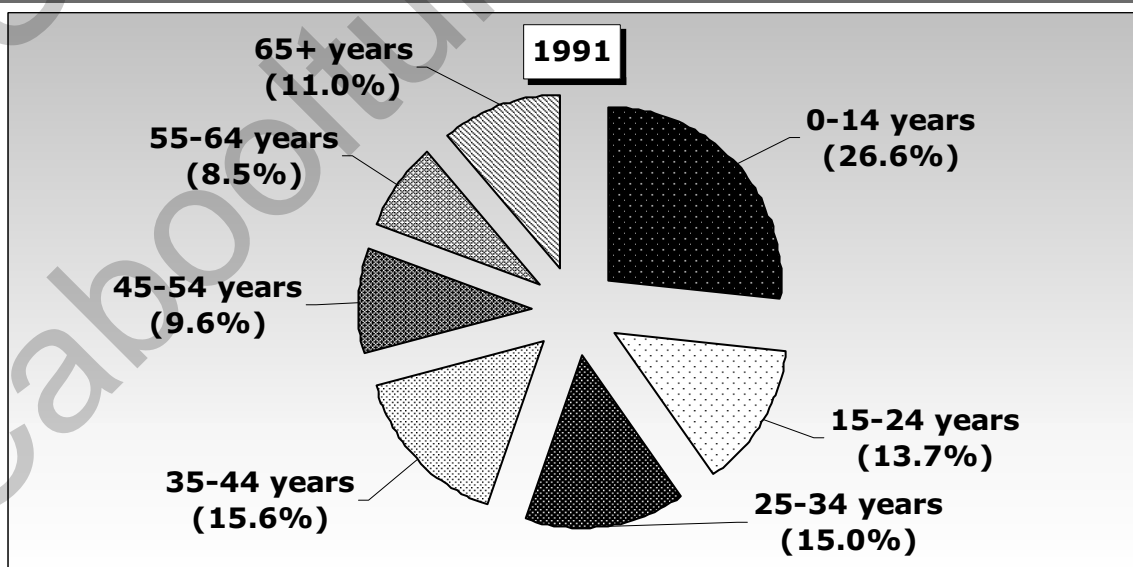
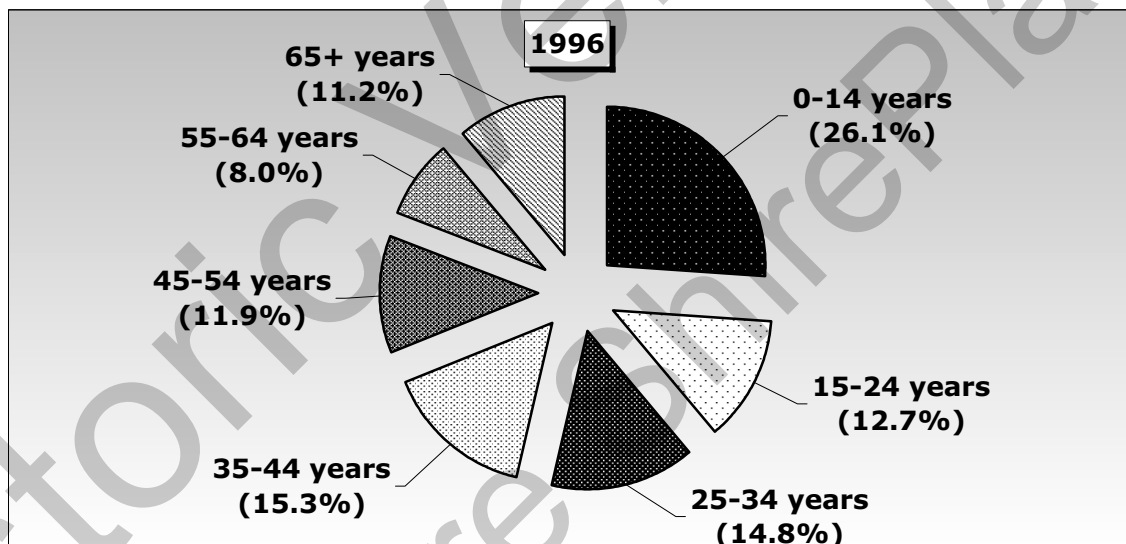
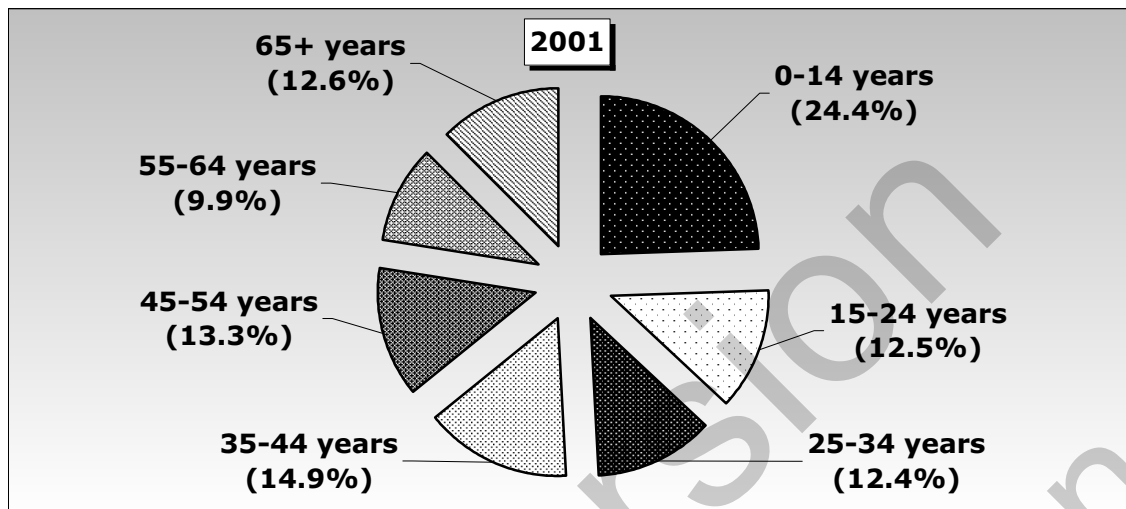


FIGURE 3.4 AGE PROFILE COMPARISONS – CABOOLTURE SHIRE



Within the 65 years and over age group, the coastal areas of Sandstone Point and Bribie Island are again predominant with 22.5% and 30.9% of their populations in this age bracket respectively. These figures are well in excess of the Shire's figure of 12.6%. Other coastal areas also tend to have high percentages of the population within this age group.

Migration

Migration continues to be the main driver of population increases within the Shire. This is indicative of the trend experienced in other local authorities within South East Queensland. Between 1986 and 1991, net migration accounted for 86% of the Shire's population increase. This figure remained relatively high at 83% for the period between 1991 and 1996. The net migration figure for this period was 25,076 persons. For the period 1996 to 2001, the net migration accounted for 66% of the population increase representing 9,083 persons.

Caboolture Shire continues to experience major gains from intrastate migration. The main areas where people have moved from have been Brisbane City, Pine Rivers Shire and Redcliffe City. This trend is indicative of one of the four patterns of redistribution of population, which have been identified, as being the movement of people from inner and middle suburbs to the metropolitan fringe (*Migration Queensland 1991-1996*, DCILGPS, p8).

For interstate migration, a total of 6,112 persons moved to the Shire, predominantly from New South Wales and Victoria. Movement of people from these areas has been the major contributing factor to internal migration for the State.

Occupancy Rates

Figure 3.5 sets out the occupancy rates (persons per household) in 2001 and represent a further reduction that has been steadily occurring over time. The 2001 rate for the Shire is slightly higher than the occupancy rate of 2.6 for Queensland.

FIGURE 3.5 CABOOLTURE SHIRE OCCUPANCY RATES 1971 TO 2001

Year	Population	Dwellings		Occupancy Rates
		Total	Occupied	Occupied Dwellings Only
1971	12207	5088	3665	3.3
1976	20060	7588	5813	3.5
1981	32380	11645	9673	3.4
1986	48602	17386	14648	3.3
1991	70093	26068	23427	3.0
1996	100760	37926	34485	2.9
2001	114827	43529	40100	2.8

The occupancy rates for individual localities are set out in *Figure 3.6*. Those which have high occupancy rates are Wamuran, Bellmere, Narangba, Elimbah, Morayfield, Burpengary, and Deception Bay. These areas have experienced significant residential or rural residential growth in recent years. Those areas which have low occupancy rates are Sandstone Point and Bribie Island which for both areas is significant considering the amount of development that has occurred in recent years.

The occupancy rate for detached dwellings was 2.9 persons per household in 2001 which is the same rate that was recorded for the Shire in 1996. Occupancy rates for semi-detached are 1.7 persons per household which is considered low and is consistent across the Shire for most localities.

FIGURE 3.6 OCCUPANCY RATES BY LOCALITY – 2001

Locality	Occupancy Rates	Locality	Occupancy Rates
	Occupied Dwellings		Occupied Dwellings
Beachmere	2.5	Mt Mee	2.4
Bellmere	2.9	Narangba	3.2
Bribie Island	2.2	Ningi	2.8
Burpengary	3.0	Sandstone Point	2.4
Caboolture	2.6	Toorbul	2.3
D'Aguilar	2.7	Wamuran	3.1
Deception Bay	2.9	Wamuran Surrounds	3.0
Donnybrook	2.1	Woodford	2.8
Elimbah	3.2	Woodford Surrounds	2.7
Meldale	2.5	SHIRE	2.8
Morayfield	2.9		

Dwelling Structure

Single detached houses were the most common type of dwelling structure within the Shire in 2001 with 91% of the residents living within this type of structure. The figure has remained constant over the previous ten years and is indicative of the pattern of residential settlement which has occurred in that time.

The number of semi-detached dwellings has increased marginally from 8% in 1986 to 9.9% in 1996 reflecting the number of duplexes and unit developments which have been established since about 1988.

Across the Shire, the percentage of detached houses within individual localities is consistently above 90% except for areas such as Caboolture (78%), Sandstone Point (61%), and Bribie Island (66%). For these same areas, there is a high percentage of dwelling stock consisting of units, flats or similar types of accommodation being 18% for Caboolture, 17% for Sandstone Point and 24% for Bribie Island. The only other locality to figure prominently is Morayfield which has 6.8% of its dwelling stock as units that can be attributed to the large number of duplexes that have been built in recent years.

The number of relocatable home and caravan parks within the Shire, predominantly at areas such as Burpengary and Bribie Island, is evident in the census information. The Shire average for those living within such accommodation type is 2.8% with Burpengary (5%), Sandstone Point (18%) and Bribie Island (6%) accounting for a large proportion of the this type of accommodation.

Household Structure

The nature of households within the Shire principally consists of families (couples with children, couples without children, and one parent families) living within detached dwellings. This arrangement has consistently accounted for around 90% of the population since 1986 and is common amongst all localities within the Shire.

Significantly, those people living in one-person households has increased from 4.8% in 1986, 5.8% in 1996, to 7.3% in 2001. Areas with high percentages of single person households are Beachmere, Bribie Island, Caboolture, and Toorbul. These figures reflect one of the many common trends occurring in recent years which has contributed to decreasing household sizes and larger numbers of households.

Twenty-two percent (22%) of single person households were living within flats or units which is an increase on the 1991 figure of 17%. Single person households are spread consistently over all age groups from 25 years and upwards with the largest numbers represented by those aged 65 years and over.

Dwelling Approvals

Figure 3.7 outlines the number of building permits issued by Council for the past eight years. While the number of permits issued on an annual basis has remained steady, there was a sharp decline in the number of approvals issued for single detached dwellings within the Shire around 2000. This decline corresponds with decreasing population growth rates that the Shire experienced at the same time.

In recent years though, the trend has seen an increase in the number of permits issued. It remains to be seen whether this trend will continue for any significant period of time. The approvals are those issued by Council and do not include Private Certification permits.

FIGURE 3.7 BUILDING PERMITS ISSUED BY COUNCIL

Year	Permits Issued – Dwellings	Permits Issued – All Types
1995/96	1326	3880
1996/97	1174	3380
1997/98	1254	3720
1998/99	722	3195
1999/00	540	3532
2000/01	317	2697
2001/02	1214	4598
2002/03	894	6765

Population Projections – For The Shire

While the overall growth rate increased significantly between 1991 and 1996 by 7.5%, it has decreased to around 2.6% per annum between 1996 and 2001. Low, medium and high growth projections provided by the Department of Local Government and Planning in September 2002 are set out in Figure 3.8. Updated projections are likely to be released in the future which may see these amounts slightly increase.

FIGURE 3.8 DLGP POPULATION PROJECTIONS 2001 TO 2021

Year	Low	Growth Rate	Medium	Growth Rate	High	Growth Rate
		%		%		%
2006	130,346	2.6	133,067	3.0	134,928	3.3
2011	146,986	2.5	152,580	2.9	157,183	3.2
2016	164,546	2.4	173,495	2.8	182,225	3.1
2021	184,743	2.4	195,495	2.7	209,226	3.0

The above rates represent the average annual growth rate over the preceding five year period and are consistent with the growth rates experienced in recent years.

Figure 3.9 sets out the population projections provided from other sources in recent years. In comparing these with the most recent projections, there are notable differences.

FIGURE 3.9 PROJECTION SUMMARIES FROM OTHER SOURCES

Year	1993 SLUP	DLGP 1998	RFGM 2000
1996	99255	100760	100760
2001	128796	121009	-
2006	159098	144937	-
2011	-	169871	175000
2016	-	197329	-

In the above figure, the second column represents the figures developed in the early 1990s that appeared in Council's Strategic Land Use Plan (SLUP) while columns three and four were prepared in the late 1990s. They provide an interesting comparison with the up-to-date figures outlined in Figure 3.8 with the most notable aspect being that any estimates developed previously are unlikely to be reached given recent population trends. DLGP, through its various publications, has identified a number of changes being experienced across South East Queensland that will be impacting on future growth, especially within Caboolture Shire.

Population Projections- For Local Communities

The Shire has been divided into planning communities as set out in Figure 3.10 for the purposes of providing a breakdown of population projections within the Shire. The boundaries of the communities have been determined having regard to a number of considerations. They represent combination of census collector districts (CDs) as these are the basic unit used for gathering demographic data by the Australian Bureau of Statistics.

Unfortunately, the CD boundaries do not correspond with the boundaries used for localities, Councillor divisions, or other features in the Shire such as waterway catchments. The CDs have been grouped based on the best estimates of how areas within the Shire function and relate to the general community they belong to but are by no means to be interpreted as being the only collection of communities in the Shire.

Figure 3.11 contains the population projections and growth rates for each of the Shire's planning communities. The Planning Information and Forecasting Unit (PIFU) within the Department of Local Government and Planning advise that the low growth scenario is most appropriate to use. These projections form the basis for the determination of land for 2016 as set out in Section 4 of this Background Study.

While population increases have picked up in the Shire in the last year, it is yet to emerge whether this is the beginning of a new growth trend for the Shire.

FIGURE 3.10 SHIRE PLANNING COMMUNITIES

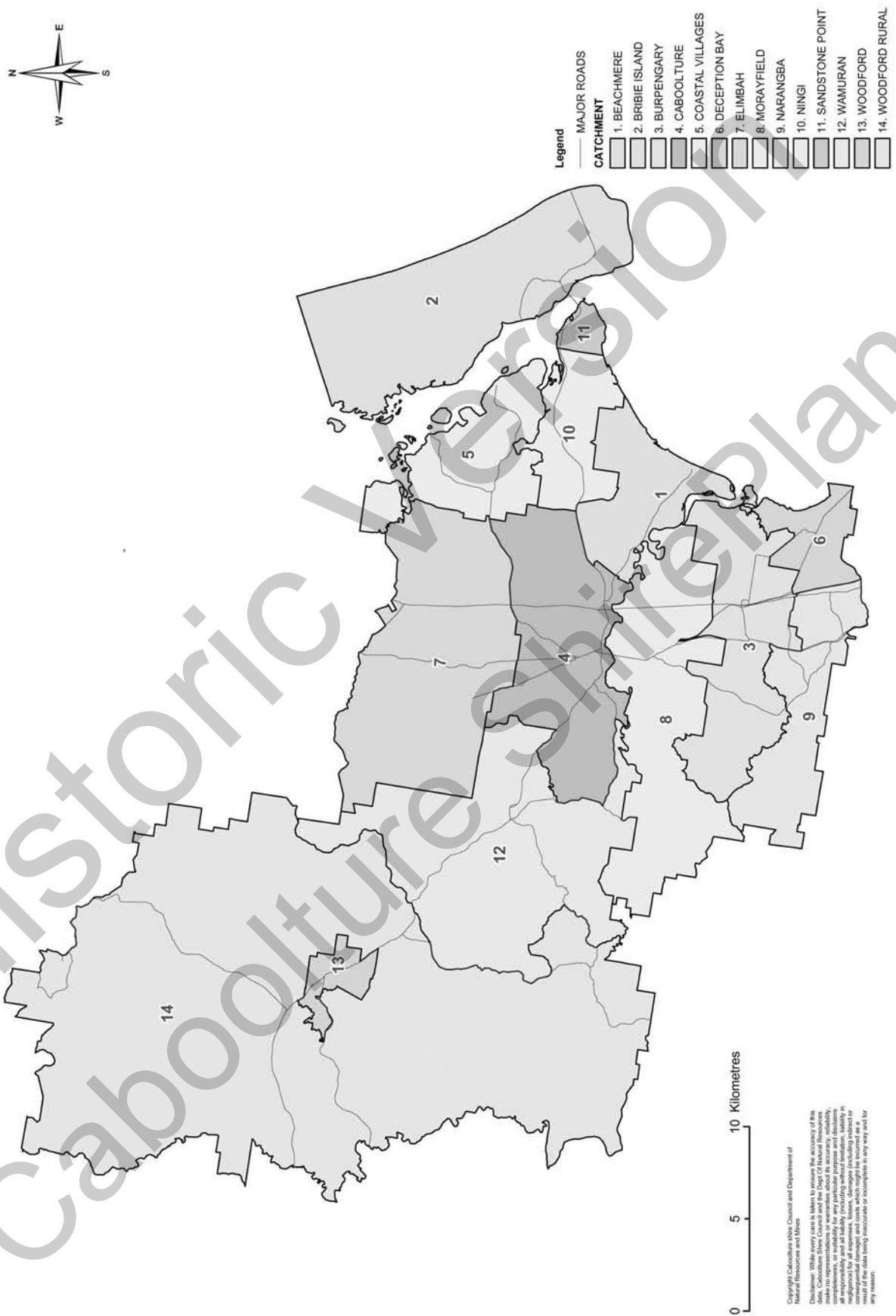


FIGURE 3.11 PROJECTION SUMMARIES AND GROWTH RATES BY COMMUNITY 2001 TO 2021

Community	2001	2016	2021	Growth Rate 2001 - 2016
				%
1 Beachmere	3229	3582	3772	0.7
2 Bribie Island	14848	19387	21018	1.8
3 Burpengary	18359	20198	22329	0.6
4 Caboolture	18980	30863	34451	3.3
5 Coastal Villages	1539	1612	1617	0.3
6 Deception Bay	15121	16663	18526	0.6
7 Elimbah	3014	3569	3581	1.1
8 Morayfield	18657	33439	39960	4.0
9 Narangba	8464	18694	21900	5.4
10 Ningi	2610	2792	2801	0.5
11 Sandstone Point	2198	3530	3822	3.2
12 Wamuran	3032	4263	4949	2.3
13 Woodford	2455	3095	3309	1.6
14 Woodford Rural	2321	2860	3009	1.6
SHIRE TOTAL	114827	164546	184744	2.4

Review of Planning Scheme Provisions

The provisions relating to the 1993 Strategic Land Use Plan and the 1988 town planning scheme are discussed in Section 4.

Community Consultation

Consultation was undertaken with the community and State Agencies both before and during the Statement of Proposals phase of the planning scheme review. The feedback revealed many common issues for all stakeholders and for residential land uses, these issues were broad and specific in nature.

Overall, concerns were raised about the increasing sprawl of residential areas which occurred to the detriment of other considerations such as the natural environment. Impacts from adjoining land uses, usually non-residential ones, were also of concern.

At the local level, the types of issues raised were varied. Responses placed a high value on allotment sizes with a preference for them being large in size where they enhanced the character of the area. Low density development was considered desirable from an amenity point of view for many of the localities in the Shire. The fact that a diversity of housing choice existed was appreciated but at the same time high rise and high density and their associated impacts were raised as a concern. The provision of housing in the form of retirement villages was seen as important for the future.

The provision of services for a community was considered important. The needs ranged from parks, bikeways and walkways through to community facilities. Undertaking overall urban design and amenity improvements for some localities was considered important. Integration of natural environmental features which enhanced neighbourhoods was considered as desirable for the future.

Discussion

The Shire's population has been steadily increasing for a number of years. A large component of the Shire's population increase which has been occurring can be attributed to migration. Based on recent trends, it is doubtful that the migration rates will be sustained in the same manner as they have in the past. Consequently, the growth of the Shire will not be at the same level as what has been previously experienced.

However, as the Shire's population grows, natural increase will account for more of the population growth although large increases will be needed if natural increase is to have any impact on future growth patterns in the Shire.

While the growth rates have gone into a period of decline in recent years, annual increases of around 3000 persons may still be expected which equates to approximately 1000 new dwellings every year. On this basis, the annual growth rates to be assumed for the future planning for the Shire are those outlined in *Figure 3.8*.

The Shire has a large percentage of young persons which is a trend that is expected to continue. While the percentage of older persons is lower than other local authorities, there are areas within the Shire which have significantly large percentages within this age group. The percentage is expected to increase over the next fifteen years as the population ages.

New urban and rural residential developments close to the main urban corridor i.e. Caboolture, Morayfield, Burpengary, Narangba, and Deception Bay have tended to attract younger persons and families. These areas have traditionally provided affordable housing aimed at the first home buyer. New developments closer to the coastal areas such as Bribie Island and Sandstone Point have attracted older persons who are the second, third or fourth home owner.

Areas with high proportions of younger persons have low percentages of older persons and conversely those areas with high numbers of older persons have small numbers of young persons.

Overall, the trends being experienced are not different to those occurring elsewhere across the State i.e. decreasing numbers of those aged less than 15 years of age and an ageing of the population as numbers in retirement and close to retirement also continues to increase at a significant rate.

The single detached dwelling remains the most popular form of residential accommodation across most localities of the Shire except for areas such as Caboolture and Bribie Island where occupancy in units or townhouses is a popular form of settlement. This can be attributed, in part, to the large number of retirement villages established in these areas.

Occupancy rates remain high for some parts of the Shire especially those localities which have new residential development. Families (either couples or single parents with children) tend to settle in these new estates accounting for the higher occupancy rates. Couples without children, most likely retirees, tend to settle in areas closer to the coastline accounting for the low occupancy rates in those areas. Single person households also account for a significant number of households in the Shire with this figure noticeably increasing over time.

The low occupancy rates occurring within major development areas such as Bribie Island and Sandstone Point are of concern as are the low occupancy rates for unit developments. The major implication for the long term is that more land will be needed to accommodate a fewer number of people. This will have significant implications on the future provision of infrastructure and services, both in terms of costs and standards, for the Shire's residents.

The fact that in 2003 there is a ten year supply of urban residential land that can be easily serviced means that only an additional five years of zoned land needs to be provided for future development i.e. until 2016. The population growth rates for the Shire demonstrate that the growth has not been at the high rates once experienced.

Land is not being consumed with the same intensity hence most of the urban residential areas identified within previous strategic plans for the Shire can still remain as the areas that are to accommodate the future growth of the Shire until 2016 and 2021. With the benefit of hindsight, the Shire's first strategic plan produced in 1988 was in fact a thirty year plan with respect to providing land for future growth. In the past, all of the growth has been confined to these urban designated areas across the Shire and should continue to do so for the future.

The analysis of land availability within the Shire shows that there is sufficient land for rural residential purposes. The extent of those areas outlined in the Rural Residential Development Control Plan 1996 and the Strategic Land Use Plan 1993 will be the basis for the allocation of rural residential land in the future.

While most of the provisions contained within these and other components of the planning scheme have worked well for the Shire, some of the provisions will need to be amended as a matter of course. Updated practices and codes will mean that various residential provisions of the planning scheme will need to be revised.

Conclusions

From the assessment of the population data and residential development for the Shire the following conclusions are made.

- (1) The Shire will continue to experience population growth. While the rate of growth will not be as high as previously experienced, planning will be based on future population of between 164,546 persons (low growth scenario) and 173,495 (medium growth scenario).
- (2) The age profile of the Shire's residents is changing while it also contains significant variations within age groups between the individual localities. Overall, the Shire has an ageing population but still continues to have significant increases within younger age groups which can be attributed to migration.
- (3) The number and type of dwellings required to house the Shire's residents will increase as a result of declining household sizes. This has implications for both established and newly developed areas.
- (4) Providing a variety of housing choice is an important consideration in planning for the Shire's current and future communities.
- (5) Occupancy rates and household structures continue to change in the Shire highlighting the need to encourage a range of housing choices and locations across the Shire to meet lifestyle needs.

Historic Version
Caboolture ShirePlan

Section 4 - Urban Residential and Rural Residential Development

Introduction

Issues

Amount of Land Available

Land Requirements for 2016

Land Requirements Beyond 2016

Review of Planning Scheme Provisions

Community Consultation

Discussion

Conclusions

Urban Residential and Rural Residential Development

Introduction

The urban residential and rural residential areas represent one of the major land uses within the Shire. Since 1986 and particularly during the early 1990s, the Shire experienced significant growth rates and was one of the fastest growing local authorities in Australia. While the urban residential and rural residential development has been predominantly occurring upon greenfield sites, the continued rate of growth will place pressure on other areas of the Shire to be developed.

Given the decline in population growth since 1996, it is appropriate to review development trends and to assess the future land requirements for the Shire. The purpose of this section is to provide an overview of the issues that affect the development of urban residential and rural residential areas within the Shire. The requirement for land is also addressed having regard to the infrastructure planning requirements now set out in the *Integrated Planning Act*.

Issues

Amount of Land Available

This section provides an analysis of land availability within the Shire. The purpose of this analysis is to identify the extent of the land which is occupied and to determine how much land needs to be provided in order to satisfy the legislative requirements for the provision of infrastructure. The availability of land has been assessed under the headings of urban residential, rural residential and rural uses.

Urban Residential Land

Figure 4.1 outlines the extent of urban residential areas within the Shire. The amount of zoned land for urban residential purposes has been determined and is divided into the following three categories.

Residential Low Density – this includes all land used under the 1988 town planning scheme as Residential A zoned land and any Special Residential zoned land developed as single dwellings on their own allotment. Land has been determined on the basis of whether or not it has the potential for redevelopment. For residential low density land, allotments that are 0.8 hectare or greater have been determined as being suitable for development.

In order to determine the residential capacities for this type of land, the following density rates have been applied:

- Land greater than or equal to 0.8ha – 22 persons/ha. This represents a gross density based on 7.5 dwellings per hectare and 2.9 persons per household.
- Land less than 0.8ha – 30 persons/ha. This represents a net density based on 10 dwellings per hectare and 2.9 persons per household.

For the whole Shire in June 2001, there was a total of 3,487 hectares of land zoned for residential low density purposes. Of this, the area of zoned land less than 0.8 hectare in size was 2,325 hectares, which using the above density, can accommodate an estimated population of 69,747 persons. For land greater than 0.8 hectare in size, there was 1,162 hectares suitable for development and using the above density rate, can accommodate a population of 25,569 persons.

While this land does have development potential, it is likely that a low density rate will occur for an interim period, most probably in the form of a single dwelling house. This area consists of approximately 200 allotments and so with a household rate of 2.9 persons, has an estimated population of 580 persons at June 2001.

Figure 4.2 sets out the available land and estimated populations for each planning community.

FIGURE 4.1 URBAN RESIDENTIAL AREAS

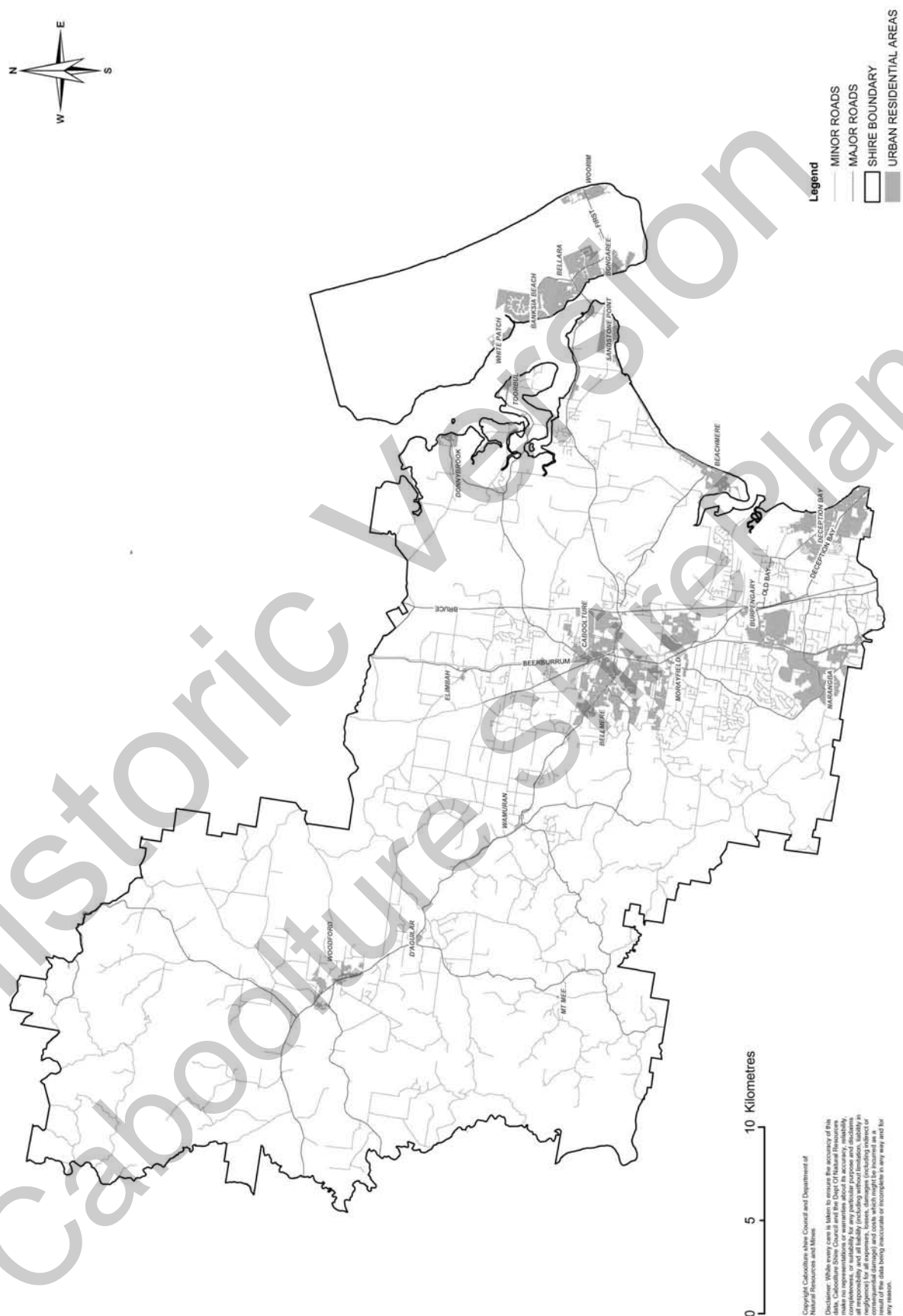


FIGURE 4.2 URBAN RESIDENTIAL AREAS (LOW DENSITY) – 2001

Locality	Less Than 0.8ha		Greater Than or Equal to 0.8ha		Totals	
	Area	Persons	Area	Persons	Area	Persons
Beachmere	105.7	3171	33.8	743	139.5	3914
Bellmere	69.4	2083	35.6	783	105.1	2867
Bribie Island	394.5	11835	239.4	5266	633.9	17101
Burpengary	205.3	6158	33.2	731	238.5	6889
Caboolture	349.3	10480	207.6	4567	556.9	15046
D'Aguilar	10.2	306	0.0	0	10.2	306
Deception Bay	335.2	10056	108.1	2378	443.3	12435
Donnybrook	23.5	704	0.0	0	23.5	704
Elimbah	8.0	239	0.9	20	8.9	259
Meldale	7.2	217	0.0	0	7.2	217
Morayfield	364.2	10925	136.1	2994	500.2	13918
Mt Mee	8.4	251	0.0	0	8.4	251
Narangba	230.9	6926	280.4	6169	511.3	13095
Ningi	32.9	987	8.7	192	41.6	1178
Sandstone Point	67.5	2024	59.8	1315	127.2	3339
Toorbul	35.1	1052	0.0	0	35.1	1052
Wamuran	5.1	153	4.2	92	9.3	245
Woodford	72.7	2181	14.5	319	87.2	2500
TOTAL	2324.9	69747	1162.2	25569	3487.1	95316

Residential Medium Density – this includes all Residential B, C and D, and any Special Residential zoned land developed as multiple dwelling units under the 1988 town planning scheme. This category has been divided into land that is occupied by units and land that is not occupied by units. For the whole Shire there was a total of 209 hectares land zoned for medium density purposes in June 2001.

For the land occupied by units, a density rate of 30 persons per hectare is assumed (based on 16 dwellings per hectare at a rate of 1.8 persons per dwelling). In the Shire, there was 47.7 hectares of land within this category which provides for an estimated 1,432 persons.

Land zoned for but not occupied by units, has a similar density potential for the long term. There are 161.2 hectares of this type of land which can provide for an estimated 4,837 persons. At present, there is only likely to be one dwelling per allotment on this type of land and so for 912 allotments within the Shire, there is likely to be 2,645 persons situated thereon, using a density of 2.9 persons per household.

Other Residential – this includes any uses such as relocatable home and caravan parks, and some retirement homes and villages. In the Shire at June 2001, there is a total of 100 hectares of land within this category. Densities for these uses are at the rate of 25 dwellings per hectare, which at 1.6 persons per dwelling, equates to a density of 40 persons per hectare. At this rate, these uses can accommodate 4,000 persons.

Figure 4.3 sets out the amount of residential medium density and other residential land across the Shire.

The total number of persons that could be accommodated within the urban residential areas of the Shire based on zoned land was 105,584. The estimated population living within these areas at June 2001 was 78,404 persons.

**FIGURE 4.3 URBAN RESIDENTIAL AREAS
(MEDIUM DENSITY AND OTHER RESIDENTIAL USES) – 2001**

Locality	Medium Density						Other Residential		Combined Urban Residential – all 3 categories
	Occupied by Units		Not Occupied by Units		Total		Total		
	Area	Persons	Area	Persons	Area	Persons	Area	Persons	Total Persons
Beachmere	0.2	7	1.3	39	1.5	46	0.0	0	3960
Bellmere	0.0	0	0.0	0	0.0	0	0.0	0	2867
Bribie Island	17.2	515	110.0	3299	127.1	3814	15.7	628	21543
Burpengary	4.2	125	0.9	26	5.0	151	31.4	1256	8296
Caboolture	12.1	363	19.9	598	32.0	961	18.6	744	16751
D'Aguilar	0.0	0	0.0	0	0.0	0	0.0	0	306
Deception Bay	3.6	107	13.9	418	17.5	525	25.9	1036	13995
Donnybrook	0.0	0	0.0	0	0.0	0	0.0	0	704
Elimbah	0.0	0	0.0	0	0.0	0	0.0	0	259
Meldale	0.0	0	0.0	0	0.0	0	0.0	0	217
Morayfield	6.6	197	3.5	104	10.0	301	0.4	16	14235
Mt Mee	0.0	0	0.0	0	0.0	0	0.0	0	251
Narangba	0.2	6	1.0	30	1.2	36	0.0	0	13131
Ningi	0.0	0	0.0	0	0.0	0	0.0	0	1178
Sandstone Point	3.8	113	10.8	323	14.5	436	4.1	164	3939
Toorbul	0.0	0	0.0	0	0.0	0	3.9	156	1208
Wamuran	0.0	0	0.0	0	0.0	0	0.0	0	245
Woodford	0.0	0	0.0	0	0.0	0	0.0	0	2500
TOTAL	47.7	1432	161.2	4837	209.0	6269	100.0	4000	105584

Rural Residential Land

Land for rural residential purposes is determined by a combination of zonings and designations within the 1996 Rural Residential Development Control Plan. *Figure 4.4* outlines the extent of these areas within the Shire.

Up until 1998, there were three rural residential zones within the Shire. The main difference between them were the allotment size. The density rates for each of the allotment sizes have been determined as:

- up to 5000m² – 2.6 dwellings per hectares or 8 persons per hectare;
- around 8000m² – 0.8 dwellings per hectare or 2.4 persons per hectare;
- 2 hectares and larger – 0.4 dwellings per hectare or 1.4 persons per hectare.

Figure 4.5 sets out the areas of land for different categories of allotment sizes within the Shire along with the estimated number of persons that each category can accommodate. The total number of persons that can be accommodated within the current rural residential areas of the Shire was 32,155 in June 2001. The estimated population living within these areas at June 2001 was 26,450 persons.

FIGURE 4.4 RURAL RESIDENTIAL AREAS

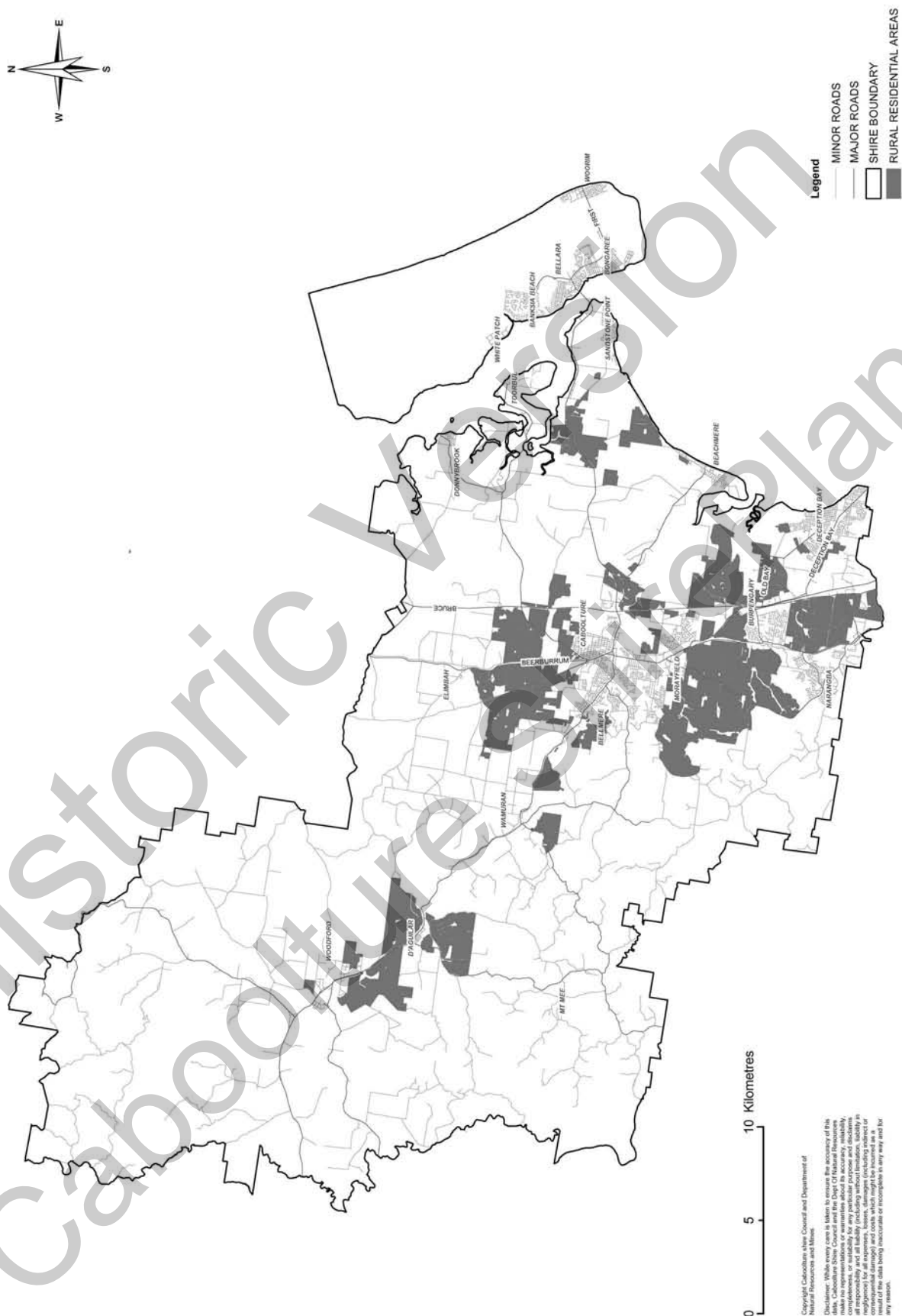


FIGURE 4.5 RURAL RESIDENTIAL LAND BY LOCALITY

Locality	Less than 0.8 ha			Greater than or equal to 0.8 ha but less than 2 ha			Greater than or equal to 2 ha			Total		
	Area	Lots	Persons	Area	Lots	Persons	Area	Lots	Persons	Area	Lots	Persons
Beachmere	19.6	46	156	72.2	41	173	140.3	64	196	232.0	151	526
Bellmere	9.3	12	74	84.2	53	202	80.1	37	112	173.5	102	388
Burpengary	874.3	2319	6994	757.9	755	1819	671.2	217	940	2303.3	3291	9753
Caboolture	294.1	707	2353	312.7	247	751	866.1	236	1213	1472.9	1190	4316
D'Aguilar	23.6	33	189	78.3	66	188	147.5	34	207	249.5	133	584
Deception Bay	77.1	231	617	5.2	4	13	31.0	13	43	113.4	248	673
Elimbah	242.8	578	1942	177.6	167	426	448.8	104	628	869.1	849	2997
Morayfield	407.8	1029	3263	563.3	494	1352	1031	335	1444	2002.6	1858	6059
Narangba	114.4	270	915	157.4	170	378	430.3	126	602	702.0	566	1895
Ningi	188.4	554	1507	28.2	26	68	223.2	70	312	439.7	650	1887
Wamuran	51.5	151	412	145.6	123	349	264.3	61	370	461.4	335	1131
Wamuran	26.1	83	209	93.7	51	225	151.1	36	211	270.8	180	645
Surrounds												
Woodford	30.7	51	246	78.2	67	188	233.6	54	327	342.4	172	760
Woodford Surrounds	4.0	7	32	36.7	30	88	300.3	24	420	341.0	61	541
TOTAL	2364	6071	18910	2591	2294	6218	5019	1421	7027	9974	9786	32155

Rural Land

Within the Shire, there is over 83,300 hectares of land zoned for rural purposes. At a current density of one person per five hectares, this means that it has a capacity of 16,660 persons. The estimated population within the rural areas of the Shire at June 2001 was 10,350 persons.

Summary

Based on the foregoing, Figure 4.6 summarises the estimated population and likely capacity of the three main residential land uses within the Shire.

FIGURE 4.6 POPULATION SUMMARY

Residential Category	Estimated Population 2001	Estimated Long Term Development Possibility
URBAN RESIDENTIAL		
Residential Low Density		
Less than 0.8ha	69,747	69,747
Greater than 0.8ha	580 (based on 200 lots)	25,569 (based on 1162.2ha)
Residential Medium Density		
Developed as units	1,432	1,432
Suitable for units	2,645 (based on 912 lots)	4,837 (based on 161ha)
Other Residential		
All uses	4,000	4,000
Total	78,404	105,584
RURAL RESIDENTIAL	26,450	32,155
RURAL	10,350	16,660
SHIRE TOTAL	115,204	154,400

Land Requirements for 2016

In Section 3, it was indicated that a low to medium growth scenario should be used for the future planning within the Shire. In order to determine the future land requirements in this section, both the low and medium growth scenarios will be used hence for 2016, the projected range will be 164,546 to 173,495 persons. As the Shire's capacity to accommodate its residential population is 154,400 persons, there is an obvious shortfall of land appropriately zoned for residential purposes within the Shire for the life of the planning scheme.

The decision needs to be made of where this land should be provided and at what density. The rural zoned areas of the Shire are not primarily established for residential purposes but rather are for rural activities that also have a supporting residential population. It has been widely documented through regional planning processes such as the Regional Framework for Growth Management (RFGM), that increasing the amount of rural residential land within the Shire and region is highly undesirable for a number of reasons. While the extent of the existing rural residential land within the Shire is acknowledged, additional areas of land should not be provided.

Having regard to this, the only option will be to concentrate future population growth within the urban residential areas of the Shire. An analysis of previous census results gives some guidance with regards to the likely amount of land to be required. For the whole Shire, residents were concentrated at the following rates: urban residential – 68%, rural residential – 23% and rural – 9%. Using this scenario, a likely population breakdown based on our low and medium growth scenarios for 2016 would be:

- Urban Residential (68%) – 111,891 to 117,977 persons
- Rural Residential (23%) – 37,846 to 39,903 persons
- Rural (9%) – 14,809 to 15,614 persons.

These figures reveal that it is generally unnecessary to provide more land for residential living within the rural and rural residential areas of the Shire as the capacities of these areas can provide for most of the growth likely to occur. If the majority of growth was to be accommodated within the urban residential areas of the Shire, then there is a shortfall of land needed for 2016.

Based on the numbers outlined in Figure 4.6, there is spare capacity within the urban residential areas for 27,180 persons. This equates to a land supply for about 10.4 years assuming that current take-up rates and densities will continue. As the planning scheme must accommodate growth for at least 15 years, then additional zoned land for urban residential purposes will be needed. The shortfall of just under five years supply of urban residential land equates to approximately 6,307 persons (low growth) to 12,393 persons (medium growth).

The amount of urban residential land having regard to the location and density needs to be determined. Urban residential land is currently split into 92% for low density and 8% for medium density and other residential uses. For the long term sustainability of the Shire, there are two factors that need to be considered. The first one is that any future development must occur within proximity to the network of existing centres and communities. Any expansion of our current urban residential areas should be avoided if we are to maintain an efficient and sustainable Shire for the future. Secondly, urban residential densities should be increased particularly in areas which are currently developed. Sustainable planning means that concentrations of higher than the usual low residential densities should be occurring within our existing communities and especially in areas that can support employment, transport, and community well-being goals for the long term.

In this regard, it is intended to provide additional medium density zoned land in the future in order to increase its percentage as a land use within the Shire. It has been determined that future land should be provided at the rate of 80% low density residential and 20% medium density and other residential uses. Figure 4.7 shows the amount of land needed for both the current and preferred density scenarios.

FIGURE 4.7 URBAN RESIDENTIAL LAND REQUIRED 2016

Population Shortfall – 2016	Low Density	Area	Medium Density and All Other Residential	Area	TOTAL AREA
6,307 (low growth)	(92%) 5,802	263 ha	(8%) 505	17 ha	280 ha
	(80%) 5,047	229 ha	(20%) 1260	42 ha	271 ha
12,393 (medium growth)	(92%) 11,402	518 ha	(8%) 991	33 ha	551 ha
	(80%) 9,914	451 ha	(20%) 2,479	83 ha	534 ha

Therefore, using the preferred density split, it has been determined that for 2016 between an extra 229 and 451 hectares is needed for low density and between 42 and 83 hectares is needed for medium and other residential uses. The total amount of urban residential land needed is between 271 hectares (low growth) and 534 hectares (medium growth).

The Shire has the ability to provide this additional land required for urban residential purposes. There are many parcels of land that present themselves as being suitable and available for redevelopment. In deciding where these areas should be situated, a number of factors are taken into consideration.

Regional Planning Strategies

Documents such as the RFGM and the Integrated Regional Transport Plan (IRTP) have a number of strategies that set out to provide good planning for future growth and development. Some of the specific provisions relate to:

Key Centres – Caboolture is designated a Key Metropolitan Centre within South East Queensland and is therefore the main focus for higher-order retailing, commercial, entertainment, cultural and administrative activities making it a hub of employment and social activity. For this to be successfully achieved, the areas in and around the centre need to contain a higher population base than what has been achieved currently or in the past. Opportunities exist to provide increased population through development of greenfield land, allowing higher density residential uses, and encouraging mixed residential and commercial developments.

Transport – Land use and transport planning are linked so it is important that the network for the movement of passengers and goods is in the most appropriate locations to support where the people within the Shire live and work. At the same time, residential and employment areas need to be located in such a manner that they maximise opportunities for varied forms of transport to be utilised and encouraged. There are a number of existing employment and residential communities that have the capacity to support these higher order objectives.

Consolidation

Infill development and redevelopment have long been recognised as key initiatives that support the concept of consolidation. The rezoning of land has not occurred in a logical progression in the past. This has meant that development has leap-frogged some areas of the Shire and while it has all been contained within the overall designated residential areas, it is clearly apparent that there are areas that should now be infilled with development.

There are extensive areas of rural residential land available in close proximity to existing centres and communities that are suitable for urban residential purposes in the long term. The Rural Residential Development Control Plan 1996 includes a Transition Area designation which specifically sets aside land that is to be investigated for long-term urban residential development. In the Transition Area for Morayfield, there are over 500 hectares of land within a four kilometre radius of the main business/commercial centre that have redevelopment potential.

Summary

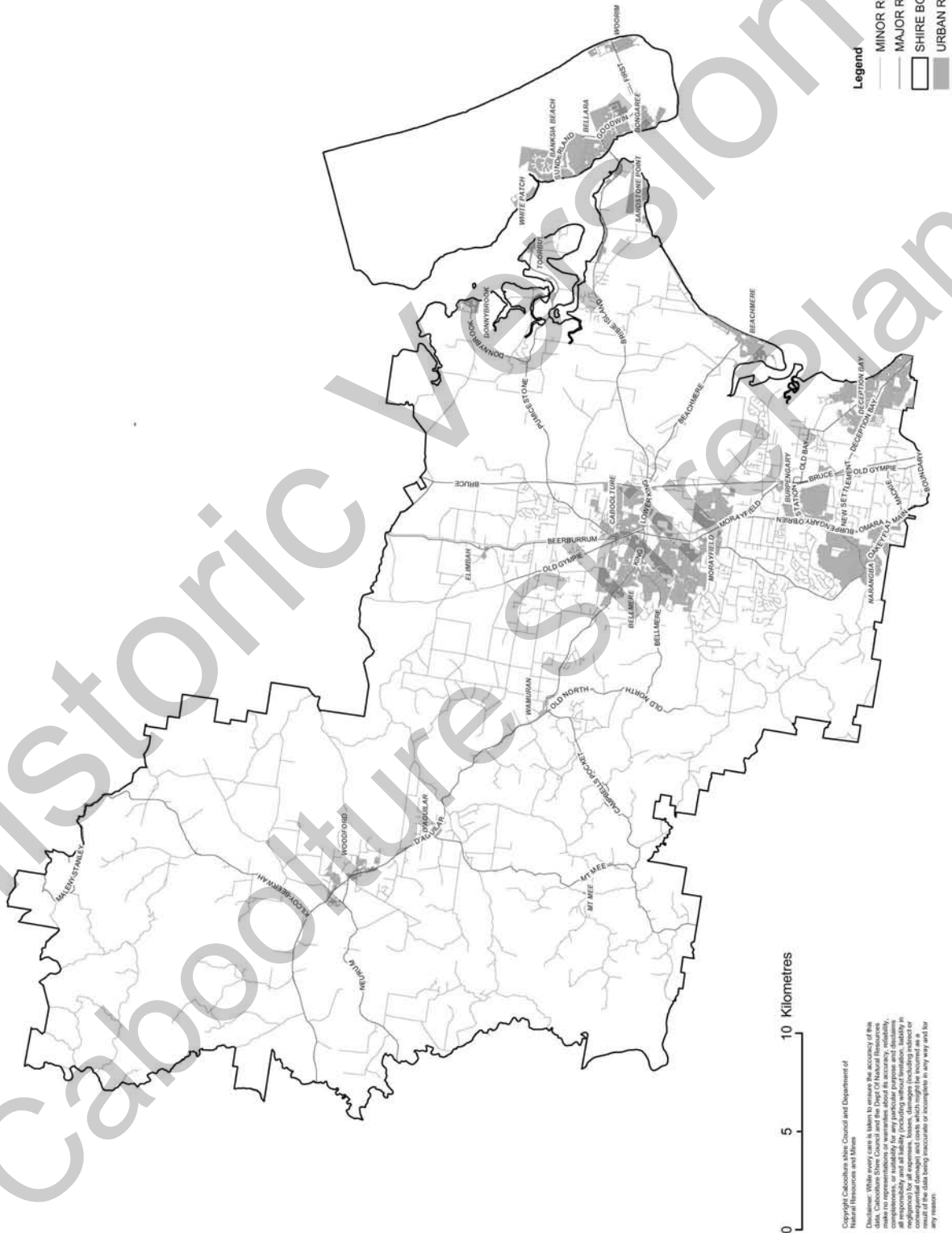
In determining the manner in which future urban residential land should be provided within the Shire, the following principles have been adopted:

- (1) Parcels of land that have been leap-frogged should be zoned for urban residential purposes;
- (2) Land that is within close proximity to the network of existing centres and communities should have development occurring within them in the first instance;
- (3) Medium density land should be provided in and around the Caboolture Key Metropolitan Centre in order to provide a population base that can support the centre for the future;
- (4) Medium density developments should be encouraged around the network of district centres and around major transport nodes such as railways stations;
- (5) Where known constraints exist, areas should not be set aside for urban residential purposes until further investigation is undertaken.

Using these principles, it is apparent that expansion of urban residential areas should be limited to the main growth corridor between Caboolture and Narangba. Limited expansion can occur in settlements outside of this main growth area such as at Bribie Island, Deception Bay, and Woodford.

Figure 4.8 depicts the extent of the areas where development should occur which can provide an adequate supply of land until 2016.

FIGURE 4.8 URBAN RESIDENTIAL AREAS 2016



Land Requirements Beyond 2016

While growth rates will fluctuate, it is certain that the Shire's population will increase over time. This rate of growth may vary for the life of the planning scheme so it is appropriate to identify the availability of land for the five years after 2016 or in the event that a higher rate of growth is achieved in the life of the planning scheme. To determine this, it is considered that the principles outlined above will also be used for determining land beyond 2016.

The population projections from *Section 3* indicate that the estimated population for 2021 will be between 184,743 persons (low growth) and 195,495 persons (medium growth). Based on this figure it has been determined that for the period 2016 to 2021, provision will need to be made for an additional 13,734 to 14,960 persons within the urban residential areas of the Shire. *Figure 4.9* sets out the amount of land needed to accommodate these extra people.

FIGURE 4.9 URBAN RESIDENTIAL LAND REQUIRED 2021

Population Shortfall - 2016 to 2021	Low Density	Area	Medium Density and All Other Residential	Area	TOTAL AREA
13,734 (low growth)	(92%) 12,635	574 ha	(8%) 1,099	37 ha	611 ha
	(80%) 10,987	499 ha	(20%) 2,746	92 ha	591 ha
14,960 (medium growth)	(92%) 13,763	625 ha	(8%) 1,197	40 ha	665 ha
	(80%) 11,968	544 ha	(20%) 2,992	100 ha	644 ha

Therefore, based on the 80/20 split, between an additional 591 hectares and 644 hectares of land will be needed for the period between 2016 and 2021. This will consist of between 499 and 544 hectares for low density and between 92 and 100 hectares for medium density development. These areas can be provided within the Shire in the form of expansions of existing areas already provided for up to 2016 and further concentrations of medium density residential uses that already exist around main employment, transport, or residential areas.

Review of Planning Scheme Provisions

The 1988 planning scheme contains a number of measures which provide for the planning of the urban residential and rural residential areas of the Shire. At the broad level, the Strategic Land Use Plan sets out on a map, the extent of the preferred urban residential and rural residential areas across the Shire. This is supported by a series of objectives and implementation criteria that are the framework for determining the suitability of urban residential and rural residential development within the Shire. These provisions have served the Shire well in terms of guiding the future growth while also discouraging undesirable development and impacts.

The planning scheme must include provisions which reflect best planning practice and demonstrate a clear resolve to provide balanced development for the Shire. This essentially needs to be reflected in the higher order aims and objectives of the document. It also needs to have regard to the issues raised by the community during the Statement of Proposals consultation process.

At the next level of planning, there are a number of development control plans (DCPs) which guide the future development of specific areas within the Shire. For the ones which include an urban residential component, their provisions range from addressing specific issues such as encouraging good urban design (Woodford Township) through to planning for a new community (Narangba Residential). The Rural Residential DCP sets out the preferred subdivision pattern across the rural residential designated areas of the Shire. It also contains provisions which address the environmental impacts that can be created by this type of development. This DCP has worked particularly well in terms of requiring all of the issues to be developed up front before Council will consider allowing any development to occur.

The planning scheme also includes a range of urban residential zones which provide for a mixture of residential types and densities. The specific development provisions for uses such as units need to be reviewed in order to provide an improved and more functional standard of development which occurs within the Shire. The reconfiguration of a lot (subdivision) provisions also need to be reviewed.

The scheme also has one rural residential zone with subdivision rights conferred by the Rural Residential DCP.

The planning scheme also contains a number of use definitions which describe the different forms of dwellings within the Shire. These will need to be updated to reflect future intentions in order to encourage more appropriate forms of development.

Community Consultation

Consultation was undertaken with the community and State Agencies both before and during the Statement of Proposals phase of the planning scheme review. The feedback revealed many common issues for all stakeholders and for residential land uses, these issues were broad and specific in nature.

Overall, concerns were raised about the increasing sprawl of residential areas which occurred to the detriment of other considerations such as the natural environment. Impacts from adjoining land uses, usually non-residential ones, were also of concern.

At the local level, the types of issues raised were varied. Responses placed a high value on allotment sizes with a preference for them being large in size where they enhanced the character of the area. Low density development was considered desirable from an amenity point of view for many of the localities in the Shire. The fact that a diversity of housing choice existed was appreciated but at the same time high rise and high density and their associated impacts were raised as a concern. The provision of housing in the form of retirement villages was seen as important for the future.

The provision of services for a community was considered important. The needs ranged from parks, bikeways and walkways through to community facilities. Undertaking overall urban design and amenity improvements for some localities was considered important. Integration of natural environmental features which enhanced neighbourhoods was considered as desirable for the future.

Discussion

The fact that in 2001 there is a ten year supply of urban residential land within the Shire means that only an additional five years of zoned land needs to be provided for future development i.e. until 2016. The population growth rates for the Shire, outlined in *Section 3*, demonstrate that the growth has not been at the high rates once experienced although recent approvals in 2003 and 2004 indicate that a new trend may be emerging.

Land is not being consumed with the same intensity that it once was hence some of the urban residential areas identified within previous strategic plans for the Shire can still remain as the areas that are to accommodate the future growth of the Shire until 2016 and 2021. With the benefit of hindsight, the Shire's first strategic plan produced in 1988 was a thirty year plan with respect to providing land for future growth. In the past, all of the growth has been confined to these urban designated areas across the Shire and should continue to do so for the future.

The analysis of land availability within the Shire shows that there is sufficient land for rural residential purposes. The extent of those areas outlined in the Rural Residential Development Control Plan 1996 and the Strategic Land Use Plan 1993 will be the basis for the allocation of rural residential land zoned in the future.

While most of the provisions contained within these and other components of the planning scheme have worked well for the Shire, some of the provisions will need to be amended as a matter of course. Updated practices and codes will mean that various residential provisions of the planning scheme will need to be revised.

Conclusions

Based on the foregoing assessment of issues for urban residential and rural residential land uses within the Shire, the following conclusions have been made.

- (1) Consolidation (infill and development) is a major theme for the future development of residential land in the Shire.
- (2) A sufficient supply of land can be identified to accommodate the anticipate growth for 2016 and 2021. Any expansion beyond identified areas needs to be justified having regard to ecological sustainability principles.
- (3) This supply can be provided at a number of locations across the Shire and through a mixture of zones while also providing housing variety and choice therefore meeting lifestyle needs.
- (4) The designation of Caboolture as a Key Metropolitan Centre under the RFGM brings with it a number of challenges and responsibilities with respect to residential densities in the centre and integrating land use planning with ecological, social and infrastructure considerations.
- (5) Increased and mixed residential densities in specific areas should be provided with good access to commercial/employment nodes, community and transport facilities.

Historic Version
Caboolture ShirePlan

Section 5- Commercial Centres

Introduction

Issues

Centre Functions

Retail Functions

Non-Retail Functions

Review of Planning Scheme Provisions

Community Consultation

Discussion

Conclusions

Commercial Centres

Introduction

There is a wide range of commercial centres varying in size and function distributed throughout the Shire. These centres are generally characterised by retail development, however they may contain a significant non-retail component. The physical form of centres within the Shire also ranges from consolidated stand-alone facilities through to fragmented centres spread out over a number of dispersed parcels of land.

The *Caboolture Shire Commercial Hierarchy Strategy* was undertaken to investigate opportunities and constraints for future retail uses within the Shire. Each centre includes a range of retail functions. The existing hierarchy of centres includes small scale local shopping providing for the day-to-day needs of local residents; district centres incorporating a wider range of shopping; the Caboolture CBD and the large scale regional shopping complex at Morayfield. *Figure 5.1* indicates the location and scale of existing centres throughout the Shire.

The *Commercial Hierarchy Strategy* suggests that the incorporation of non-retail facilities is critical to the development of an efficient and effective hierarchy of centres that will meet the future needs of Caboolture Shire residents. Depending upon the size and maturity of a commercial centre, non-retail functions may include office, educational, government, cultural, entertainment, community and recreation facilities.

The commercial centres within Caboolture Shire perform diverse functions and provide for various catchment areas. The extent of each centre catchment is dependant upon such factors as the range of goods and services offered and the proximity to other centres. Generally, the higher order centres within the hierarchy serve a wider catchment area.

Since the introduction of the Strategic Land Use Plan (SLUP) in 1993, Caboolture has been identified in the South East Queensland Regional Framework for Growth Management (RFGM) as a Key Metropolitan Centre (KMC). In accordance with the principles of the RFGM, a KMC is "...an important urban centre which is multi-functional and includes retail, commercial, recreational, community, cultural and transport services." The KMC is the subject of a separate planning study (Caboolture Centre Strategy) which will inform local planning provisions for that area. Specific recommendations for the KMC form part of that study. The Planning Scheme needs to have in place a structure that supports the Caboolture KMC designation while also promoting commercial and employment opportunities within the Shire across all of its communities from Woodford to Bribie Island and Elimbah to Narangba.

The results of the *Caboolture Shire Commercial Hierarchy Strategy* will guide Council in formulating its policy direction relating to retail development within Commercial Centres in the planning scheme.

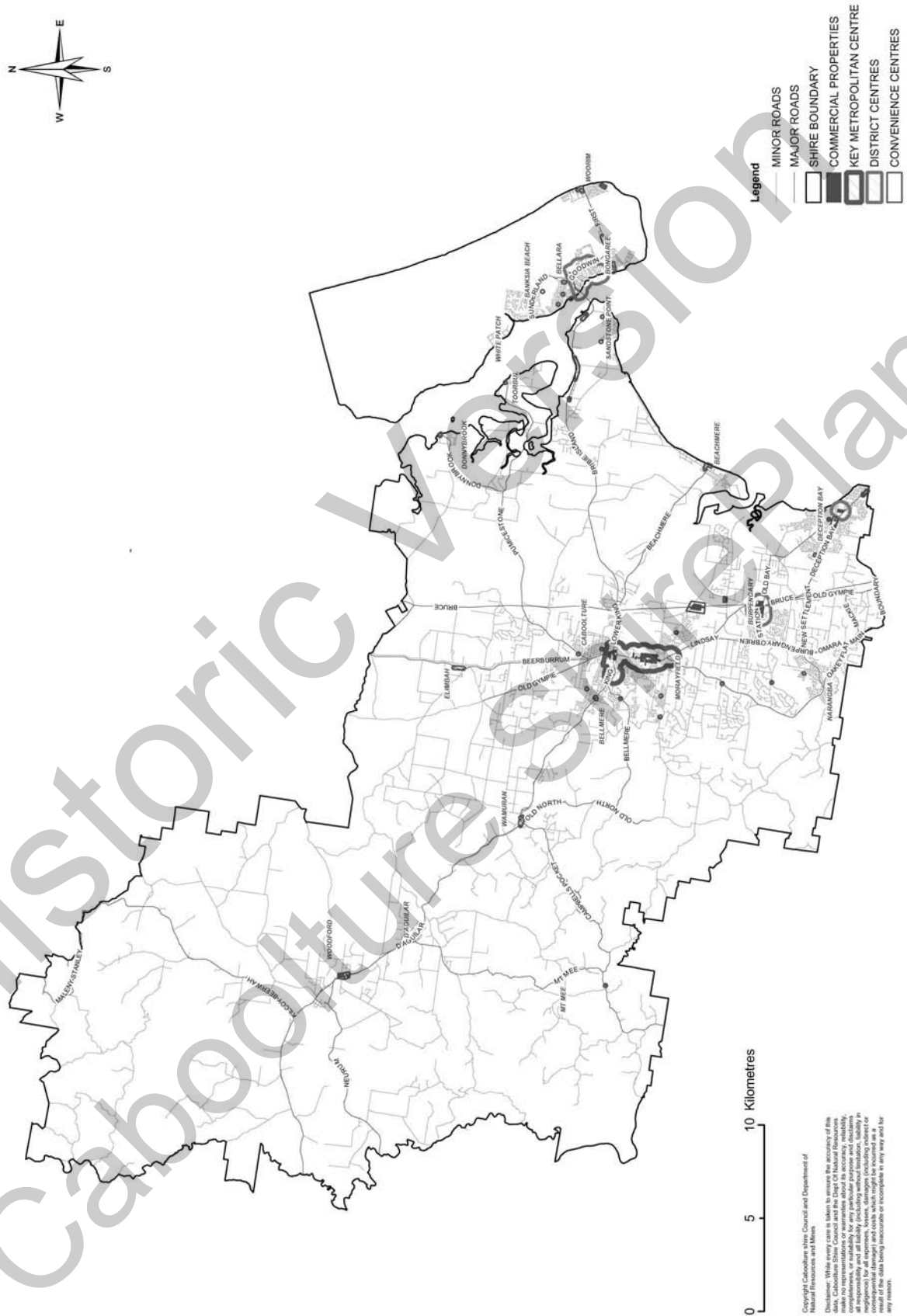
Issues

Centre Functions

The *Caboolture Shire Commercial Hierarchy Strategy* includes a detailed analysis of the range of existing and planned retail nodes throughout the Shire. The Strategy proposes a three tiered hierarchy of centres for the Shire ranging from Convenience Centres at the local and neighbourhood level, District Centres serving a wider catchment area, and the Key Metropolitan Centre covering the areas of Caboolture and Morayfield.

The Shire's existing commercial centres' structure has been strongly influenced by significant growth in the Caboolture Key Metropolitan Centre (which includes the Morayfield Shopping Centre), and in particular the provision of regional scale retail facilities. Whilst the Caboolture centre will continue to maintain its status as the highest order centre within the Shire, the remaining centres will provide a range of services and facilities commensurate with the catchments they service. With the exception of the Caboolture KMC area, the balance of centres have a floor space composition that generally reflects 65% retail and 35% non-retail, although in some of the smaller centres the retail component is much higher. Essentially however, historic centre development patterns have been driven by the retailing dynamics of the growing population.

FIGURE 5.1 COMMERCIAL CENTRES



The 1988 planning scheme has encouraged the development of retail and non-retail centre functions in a wide variety of zones. Whilst this approach has resulted in expanded economic activity, the supply side of retail facilities has exceeded the demand side in some areas at this point in time.

Retail Functions

The Caboolture KMC provides the highest order retail facilities within the Shire with Burpengary, Deception Bay and the combined facilities of the commercial strip at Bellara and the Bribie Island Shopping Centre precinct functioning as District Level facilities.

A range of convenience centres at both the local and neighbourhood scale are located throughout the balance of the Shire, however it is noted that the relationship between the provision of these facilities and the distribution of resident population areas is not evenly matched. Some localities within the Shire include an obvious oversupply of convenience centres whilst other localities suffer from a marked shortage of convenience centres. The size, composition and nature of these centres varies significantly within the Shire and it would not be useful to differentiate between neighbourhood and local centres within the hierarchy as they have been developed in response to local circumstances and for differing historical reasons.

The existence of a number of small local centres that are not performing well with high vacancy levels is indicative of stressed retail and commercial environments.

At the time of inspection (October 2000), there was approximately 278,000m² of commercial floor space in the Shire (this figure excludes space in the industrial and commercial industry areas and service industry uses such as motor vehicle sales, educational and other community uses such as schools, libraries and community halls).

Some 200,250m² (72%) of the commercial floor space was occupied by retail tenancies and 49,500m² (17.8%) was occupied by non-retail uses such as the professional services of real estate agents, legal and financial firms and medical services. The balance of the floorspace, 28,395m² was vacant, representing a vacancy rate of 10.2% for the Shire as a whole.

It is projected that by 2016 Caboolture Shire could support approximately 255,000m² of retail floor space, allowing for a 3% vacancy rate.

Allowing for the quantum of vacant retail floor space at present, this represents a potential net increase of about 40,000m² of retail floor space by 2016. It is expected that there will be some redevelopment of older retail space, potentially for alternate activities. Existing approvals and proposed retail developments are expected to add around 40,000m² of retail floor space to the Shire, the most significant proportion of which is located within the Key Metropolitan Centre. At the strategic level, these figures suggest that there is more than sufficient existing commercially zoned land to cater for projected demand to the 2016 planning horizon. It is however, evident that projected population growth suggests some potential for additional convenience centre facilities within emerging communities.

Planning for commercial centres in Caboolture to date has been generally focussed on the designation of major centres at the strategic level and assessment of local level needs in response to individual applications for development. Consequently, all levels of centres have generally suffered from a lack of integrated planning at the micro level. There is significant scope for initiating better practices in centre development, particularly through local area planning. It must be considered however, that planning provisions for centre development need to be complemented by non-planning measures such as improved business management by centre stakeholders.

Non-Retail Functions

There is a large supply of vacant land or land developed for purposes other than retail development within the existing commercial zonings. Large areas of rural residential have constrained the formation of more consolidated urban communities. At the strategic level, existing commercial zonings are more than sufficient to cater for projected demand to the 2016 planning horizon. Future population growth will be the principal catalyst for the continued expansion of commercial and community services and facilities in the Shire. The majority of this growth should be within the immediate catchment of the KMC reinforcing the role of this centre as the focal point for activity in the Shire.

The extent of non-retail functions within each centre will be determined by local planning processes. The Commercial Hierarchy Strategy recommends that local plans be prepared for the three district level centres.

Review of Planning Scheme Provisions

The 1988 planning scheme includes a number of measures which provide for the planning of commercial areas. These commercial areas identify the preferred location of centres that are intended to provide for a range of retail and non-retail activities including community facilities. At the broad level, the 1993 SLUP sets out on a map the location and extent of the preferred commercial areas across the Shire. The areas designated commercial on the map are supported by a number of objectives and implementation measures which are the framework for determining the suitability of commercial development within the Shire.

The planning scheme includes a number of zones that provide for retail and non-retail functions of commercial centres. The Central Commercial, Local Shopping, Tourist Business and Residential, and Commercial Industry zones all provide for varying levels of commercial activity. There are around 20 localities throughout the Shire that include land in at least one of these zones. The current planning scheme provisions provide a flexible approach to the development of centre functions. Whilst this approach encourages economic activity, the potential for regulating the future supply and demand characteristics of retail development is effectively lost. Existing development within the commercial industry zones includes a range of uses that could be catered for in other commercial and industrial zonings. There are significant areas of this land throughout the Shire. The continued development of Commercial Industry zoned land for commercial purposes has some potential to fragment commercial activity in the Shire to the possible detriment of existing centres.

The planning scheme also includes a range of use definitions that describe the different forms of commercial development intended within the Shire.

Whilst the 1993 SLUP generally reflects the existing and preferred future pattern of Centre development within the Shire, the provisions need to be updated to reflect the expanded role and function of commercial centres. It should be noted that the SLUP predates the release of the RFGM (1995) which identified Caboolture/Morayfield as a Key Metropolitan Centre.

The objectives for the 'Commercial Areas' designation within the 1993 SLUP are targeted at consolidating existing centres by establishing a suitable hierarchy and ensuring that the most desirable function, integration of land uses, and layout of each centre is achieved.

Rapid population growth in Caboolture Shire and land use constraints within the Caboolture Town Centre resulted in the development of significant retail and commercial industry activities at Morayfield. In response to this, development control plans were prepared for both Morayfield and the Caboolture Town Centre with the aim of implementing the broad objectives of the Strategic Plan. An example of this implementation is the establishment of the regional shopping centre at Morayfield.

Community Consultation

Residents throughout the Shire, especially in the more densely settled areas of Caboolture, Morayfield and Deception Bay, enjoy having access to services such as shopping centres and recreation facilities. The survey results indicate that many of the respondents feel a greater variety of retail outlets are required in the Shire.

The Bribie Island meeting group expressed major concern regarding the oversupply of commercial development. Concerns about commercial activities in residential areas were also raised at this meeting.

Retail and business issues were the highest scoring category of responses by the Caboolture meeting group. Comments focussed around the need for thriving centres, the revitalisation of the Caboolture town centre, the need for more employment and the opportunities for centre improvement programs with attraction of after-hours activities and upgrading entries to the business centre. The Woodford meeting group expressed concern for the lack of commercial land in the area and suggested that appropriate sites be investigated.

Discussion

Planning for commercial centres in Caboolture Shire to date has generally focussed on the designation of major centres at the strategic level and assessment of local level needs in response to individual development applications. As a result, a number of centres, particularly Bribie Island, Burpengary and Deception Bay are now suffering from a lack of integrated planning at the micro level with access, mobility and circulation problems; confused and fragmented urban form; and the need for significant improvements in the integration of activities.

Site planning and design of commercial development within each level of the hierarchy will need to be guided by detailed development codes to ensure appropriate site and building design. Whilst the *Caboolture Shire Commercial Hierarchy Strategy* does not address detailed planning scheme elements such as assessment tables, codes and policies, it does recommend that such provisions be influenced by local area planning processes for the higher order commercial centres within the Shire. It is anticipated that a generic development code will be applied to convenience level centres throughout the Shire.

There are obvious signs of an existing oversupply of retail development. There is also a large supply of vacant land within the existing commercial zonings. The major role for the planning scheme will be to identify the proposed centre hierarchy and limit the extent of land that can be developed for commercial purposes to within those identified locations. Any development outside of designated commercial areas should be required to adequately justify demand for the expansion and/or establishment of commercial activity in alternative locations. Implementation of the proposed hierarchy will require a serious commitment from Council, State Government and the business community.

The preferred location and distribution of future KMC land uses will be determined by the *Caboolture Centre Planning Strategy* and the subsequent planning provisions contained within the scheme.

Conclusions

Based on the analysis of existing and future commercial land requirements in the Shire the following conclusions have been reached.

- (1) There is an oversupply of retailing in the Shire indicated by high vacancy levels.
- (2) Caboolture has been identified as a Key Metropolitan Centre in the South East Queensland Regional Framework for Growth Management 2000. A Key Metropolitan Centre is considered to be "... an important urban centre which is multi-functional and includes retail, community, cultural, and transport services."
- (3) Observed commercial centre trends suggest a polarisation of centres towards larger mega-complexes and small convenience centres with the neighbourhood and district centres potentially becoming less popular.
- (4) In the past there has been a lack of long-term planning within the centre communities. Many existing commercial centres are characterised by disjointed layouts and existing community facilities are often not well located with respect to commercial centres.
- (5) Much residential growth has occurred around the KMC including the rapid expansion of retail at Morayfield. This growth has impacted upon the viability of convenience centres in the adjoining localities.

Section 6 - Industry

Introduction

Issues

Existing Industrial Land

Future Industrial Needs

Review of Planning Scheme Provisions

Community Consultation

Discussion

Conclusions

Industry

Introduction

In accordance with the South East Queensland Regional Framework for Growth Management 2000 (RFGM), Council is required to investigate potential major industrial areas within the Shire and where appropriate provide for their protection through planning schemes. To achieve Economic Development and Employment Location priority actions within the RFGM it is essential that Council undertake periodic review of the industrial land supply within the Shire.

Caboolture Shire currently includes a wide range of industrial developments from small-scale local employment areas up to the large-scale industrial estate at Narangba. These areas are identified in the 1993 Strategic Land Use Plan (SLUP).

A land use survey of all existing industrial areas throughout the Shire has confirmed a shortfall of future land supply for all levels of industrial activities. These investigations identified a need for large areas of land to be preserved for future business and industry development within Caboolture Shire. The preservation of these areas can be assisted by the planning scheme.

Issues

Existing Industrial Land

Industrially zoned land (including both developed and vacant land) within Caboolture Shire is located at Woodford, Mount Mee, Elimbah, Caboolture, Morayfield, Bongaree, Burpengary, Narangba, Deception Bay and Beachmere. These areas are set out in *Figure 6.1*. The amount of industrial land within each of these ten areas may vary from one allotment (eg Elimbah) up to a regional scale industrial estate (eg Narangba).

The larger existing industrial areas within the Shire are located at Narangba, Caboolture, and to a lesser extent Morayfield. The Narangba Industrial Estate is a regional scale employment area and provides for large industries and difficult to locate activities. This estate is recognised at the regional level through its designation as an industrial area in the RFGM. The existing industrial area in Caboolture at the Bribie Island Road/Bruce Highway interchange (incorporating the Corporate Park Estate) is considered to be a district level employment area providing small scale industries that primarily serve local and shire wide catchments. The existing scattered industrial areas at Caboolture and Morayfield provide for small scale local population servicing industries, however these areas are almost fully developed.

There are small established industrial areas serving local catchments at Bongaree, Burpengary, Deception Bay and Woodford however these locations do not entirely offer significant opportunities for expansion. Other industrial land at locations such as Mt Mee, Beachmere and Elimbah include some dispersed allotments (generally due to historical reasons) rather than consolidated industrial nodes.

In June 2000, there was a total of 40.12 hectares of land zoned Commercial Industry, 63.12 hectares zoned Light Industry, 308.56 hectares zoned General Industry, and 4.1 hectares zoned Waterfront Industry within the Shire. In addition to this, the entire Narangba Industrial Estate covering approximately 530 hectares (based on entire Development Control Plan area) is included in the Special Development Zone. This area is comprised of land previously zoned Light Industry, General Industry and Special Industry. These figures reflect a total of approximately 945 hectares of industrial zoned land distributed throughout the Shire.

Within the industrial zoned areas identified above, there are supplies of vacant land that can provide for further industrial development. Localities with existing vacant industrial land include Morayfield, Narangba, Caboolture, Elimbah, Bongaree, Burpengary, Deception Bay and Woodford. *Figure 6.2* indicates the amount of existing vacant industrial land in each locality.

FIGURE 6.1 INDUSTRIAL SITES

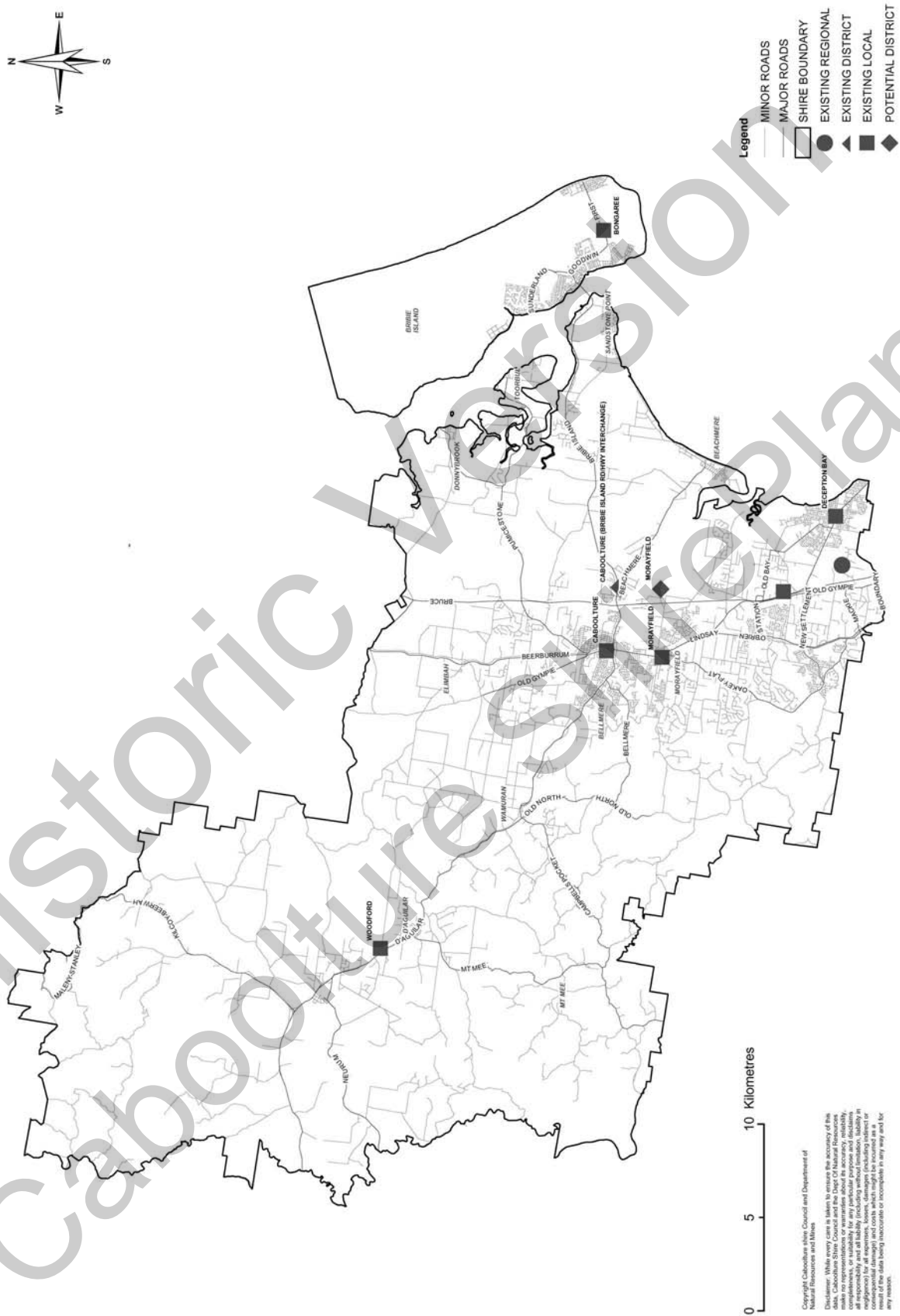


FIGURE 6.2 EXISTING VACANT INDUSTRIAL LAND IN CABOOLTURE SHIRE (NOVEMBER 1999)

LOCATION	AREA OF VACANT LAND	NUMBER OF ALLOTMENTS	ZONES INCLUDED
Bongaree (Bribie Island)	17ha	3	Light Industry General Industry
Burpengary	3.3ha	10	Commercial Industry Light Industry
Caboolture	<1ha	12	Commercial Industry Light Industry General Industry
Caboolture - (Bribie Island Road/Hwy Interchange)	53.4ha	45	Light Industry General Industry Commercial Industry
Deception Bay	1.5ha	2	Commercial Industry
Elimbah	3ha	1	General Industry
Morayfield	9.6ha	7	Commercial Industry Light Industry General Industry
Narangba	223.2ha	60	Special Development
Woodford	<1ha	2	Light Industry

Future Industrial Needs

Introduction

In the report, *A Review of the May 1998 Policy for Planning Major Regional Industrial Areas for Development in the Caboolture Shire*, prepared by the Department of State Development in collaboration with Council, a shortfall of land for future business and industry activities within Caboolture Shire was identified. This report indicates that approximately 900 hectares of additional industrial land will be required in Caboolture Shire by the year 2011, representing a further requirement of around 600 hectares in addition to existing industrial land stocks identified in Figure 6.2 above.

The range of business and industry development within the Shire will include local employment areas, district scale employment areas, and regional industrial areas catering for difficult to locate activities. Whilst the local employment areas have relatively low impacts on surrounding land uses and require small parcels of land, district and regional scale industrial areas have a number of locational criteria which restrict their development opportunities. To provide for the range of future industrial land demands in Caboolture Shire, the development of new industrial areas and the consolidation of existing industrial areas will be required.

Local Employment Areas

Existing local employment nodes at Caboolture, Mt Mee, Beachmere, Bongaree, Elimbah, Burpengary, Morayfield and Narangba are considered to have sufficient land supply for the life of the planning scheme i.e. until 2016. Therefore, no expansion of these nodes is proposed.

Although no requirement for additional industrial land for local employment has been identified at Elimbah, the appropriateness of the existing industrial allotment (eg potential type and scale of industrial development) will be reviewed. There is currently a supply of vacant land available at Bongaree for future local employment opportunities.

Demand for additional land has been identified at Woodford and Deception Bay. The existing local employment node at Woodford is near capacity and the local community has expressed a need for additional land.

A previous analysis of land suitable for future local employment at Woodford has identified some potential sites, however it is likely that only a small part of this area will be required to satisfy demand for local employment activities in the Woodford area until 2016.

The Deception Bay Community Action Plan (December 2000), prepared as part of the State Government's Community Renewal Program, has identified a requirement for local employment in the area. The Deception Bay area suffers a high rate of unemployment and a need for local jobs and training is a major issue. Whilst the potential of the area to provide a local

employment node needs to be investigated, the encouragement of home based business should also be considered.

Any development of industrial land in local areas will generally be the responsibility of the private sector, as it is unlikely that Council or the State government could justify such infrastructure expenditure in these areas.

District and Regional Scale Employment Areas

The main factors influencing the choice of suitable study area locations for future district and regional scale employment areas are as follows:

- The topography of the Shire limits the amount of land suitable for large scale industrial development due to slope constraints, particularly in the western parts;
- Large areas of land in the eastern part of the Shire are subject to flooding, particularly in low lying areas around watercourses. Many of these areas also have major environmental constraints;
- The existing urban areas constrain opportunities for land use separation between residential and industrial uses;
- Existing infrastructure is concentrated around the major urban areas in the east of the Shire; and
- Accessibility to markets and potential workforce is maximised in close proximity to the Bruce Highway and the North Coast Railway line.

Many areas of Caboolture Shire can be readily discounted for district and regional scale business and industry based on major constraints such as slope, flooding, distance to major transport routes and proximity to existing or future residential development.

A number of potential major industrial areas were identified in the RFGM for further investigation during the early stages of the South East Queensland regional planning process. Most of those sites, including land at Bracalba, have now been discounted as unsuitable for various reasons. The Bracalba extractive resource area may have potential for large scale industrial development in the very long term (i.e. 100 years) subject to major remediation and capital cost. At this stage limited processing industries associated with quarry products are being considered, however a large scale industrial area would not be viable until quarry operations have ceased. The West Elimbah area (incorporating parts of Wamuran and Moodlu) is the only locality being seriously considered for regional scale industry and is now identified within the RFGM.

At the district level, an area of land over 100 hectares has been identified as being suitable in order to satisfy a likely shortfall of this type of land in the future.

Conclusions

At this stage, preliminary investigation has indicated that there is an area at Morayfield that has the potential to provide for future industrial growth and is shown in *Figure 6.1*. Further detailed studies will be required to determine the exact extent of land suitable for the proposed range of industrial activities. The provisions of the planning scheme can greatly assist in protecting proposed industrial areas from encroachment by sensitive land uses, however a more detailed level of planning at a local level will be required to allow actual development to occur.

The Morayfield site does not include any major constraints for a district scale employment area. Although the land is included in the 'Future Possible Effluent Disposal Area' designation in the 1993 SLUP, Council no longer intends to proceed with such a use.

With regards to the West Elimbah site identified in the RFGM, it is considered that there has not been a sufficient level of research and investigation undertaken in order to make an informed decision regarding the suitability of land for industrial purposes. On this basis, it is inappropriate to designate land for such purposes in the planning scheme until a more detailed and thorough analysis of all issues have been investigated.

Review of Planning Scheme Provisions

The 1993 SLUP designates land suitable for Industrial development throughout the Shire. The extent of this designation generally represents the existing zoned industrial areas, some of which are almost fully developed, and does not indicate any preferred future areas of major industrial expansion. The objective for the Industrial Areas designation is *'To consolidate industry in existing suitable zoned areas, and to permit the expansion of existing areas in appropriate locations.'* Thus, the objective does not generally promote the establishment of new major industrial areas outside existing industrial designations.

The industrial nodes in the SLUP include small clusters of Local Scale employment activities (eg Morayfield, Burpengary), the District Scale employment area at the Bruce Highway/Bribie Island Road interchange (including the Corporate Park Estate) and the Regional Scale employment area at Narangba.

The 1988 Town Planning Scheme for the Shire of Caboolture provides for a wide variety of types and scale of business and industry. Whilst type and scale of industrial development in any given location is generally determined by the relevant land use zoning and associated provisions, the Narangba industrial area has been included in a development control plan due to the special land use characteristics and amenity issues in the area.

The 1988 planning scheme includes the following zones that provide for a variety of business and industry development.

Commercial Industry

The Commercial Industry Zone provides for showroom and service industry activities in high access areas.

Light Industry

The Light Industry Zone provides for small scale industrial uses in highly accessible areas where there will be minimal impact upon adjoining land uses.

General Industry

The General Industry Zone caters for a wide range of industrial activities that may have particular locational requirements due to possible impacts upon adjoining land uses.

Waterfront Industry

The Waterfront Industry Zone provides for small scale industrial uses which require waterfront access.

Special Industry

The Special Industry Zone is intended to provide for industries that may be hazardous, noxious or offensive and therefore require separation from more sensitive land uses.

Special Development

The Special Development Zone is intended to confer land use rights in areas included in a development control plan and does not only apply to industrial areas. The Narangba (Industrial) Development Control Plan is included in this zone and provides for a broad spectrum of business and industry activities.

The extent of land designated for Industry in the SLUP will be reviewed in accordance with future industrial land requirements.

Whilst the zones within the planning scheme provide for a comprehensive range of anticipated industrial activities, the location and extent of existing land within these zones has resulted in limitations for such developments. The suitability of waterfront industry and the location of industries with potential off-site impacts need to be carefully considered for a planning scheme.

Community Consultation

Many of the Shire's residents rely on employment opportunities outside the Shire. Many residents, particularly those from Morayfield, Caboolture and Burpengary, think there are a lack of employment opportunities within the Shire.

Bribie Island residents expressed a need for employment opportunities on the island. The Narangba residents identified a need to ensure that residential areas are well separated from industrial areas. Woodford residents expressed concern for the lack of industrial land in the area and suggested that appropriate sites be investigated. It was also suggested that there are opportunities for the development of cottage industry in Woodford that could be linked to tourism activities.

During the consultation process associated with the Deception Bay Community Action Plan, residents expressed a desire to promote the establishment and growth of home-based business and other forms of local employment.

Discussion

The existing industrial areas within the Shire provide for a wide range of industrial activities, however the land supply stocks within the existing industrial nodes will only provide for the short to medium term.

The long term viability of existing Regional Scale industrial activities, particularly at Narangba has been severely limited by the encroachment of residential development and subsequent land use conflict issues. The off-site impacts from large industries in this location place some limitations on the ability for existing businesses to expand.

Previous studies have indicated a need for Caboolture Shire to identify and preserve suitable areas for future business and industry growth. Due to the specific locational criteria of business and industry development, the extent of land suitable for such uses is limited.

Preliminary investigation suggests that a suitable area does exist for a future District Scale employment node. *Figure 6.1* indicates the location of existing and potential industrial areas throughout the Shire. The suitability of these areas for future business and industry in the medium to long term will depend upon their protection through the planning scheme. The encroachment of uses that are incompatible with industrial activities will need to be avoided despite pressures for such development in certain areas.

There are a number of Local scale employment nodes in the Shire that provide for small scale industries serving local catchments. These areas generally have adequate provision for local employment throughout the Shire, however some need for additional land at Woodford and Deception Bay has been identified.

Conclusions

The analysis of existing and future industrial land requirements in the Shire has enabled the following conclusions to be reached.

- (1) There is an established framework for industrial areas within the Shire that should be further developed and enhanced to provide employment and business opportunities for the future.
- (2) Future industrial land in the Shire is required at the local and district scales.
- (3) Industrial activities by nature create external impacts affecting other land uses both within and outside industrial areas. These can be minimised through effective long-term planning.
- (4) Support from State Government Agencies, in particular the Department of State Development, will be required to undertake further investigations of potential regional scale industrial areas within the Shire.

Historic Version
Caboolture ShirePlan

Section 7 - Employment and Tourism

Introduction

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Existing Employment

Existing Unemployment

Journey to Work Data

Tourism

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Employment and Tourism

Introduction

In accordance with the South East Queensland Regional Framework for Growth Management 2000 (RFGM), Council is required to ensure that the planning scheme is informed by economic and employment objectives including employment estimates. To achieve Economic Development and Employment Location priority actions within the RFGM it is essential that Council review employment figures on a local basis within the Shire. The recent growth in the information technology sector is acknowledged within the priority actions of the RFGM. Planning schemes are to have regard to information technology and communications clusters, nodes and corridors.

Tourism has been identified in the RFGM as a significant business activity to be provided for in planning schemes. Council's Corporate Plan also identifies Economic Development and Tourism as one of the Key Strategic Issues and includes broad strategies encouraging the development of tourism within the Shire.

Caboolture Shire includes a wide range of urban and rural land uses offering employment opportunities, however a significant rate of unemployment is still evident. The sectors of the Shire's economy offering the most significant employment opportunities are retail and manufacturing. Whilst there is an abundant supply of land for retail development, there is a need to identify and protect land for future manufacturing activities as identified in *Section 6*.

Issues

Existing Employment

The most recent reliable employment data available for the Shire has been derived from the 2001 Census conducted by the Australian Bureau of Statistics (ABS). At the time of the 2001 Census, there were a total of 26,393 persons (64%) employed full time and 15,130 persons (36%) within the Shire employed part time, representing a total of 41,523 persons.

In 1996, of the total number of employed persons, there were 14,861 persons (41%) who live and work in the Shire and 17,196 persons (48%) who live in the Shire but work in another local government area. 2001 figures are not available.

A comparison of the above figures suggests that a substantial amount of the Shire's labour force are actually employed outside of the Shire. At the time of the 1996 Census, there were 19,010 jobs located within the Shire. A significant amount of the jobs (21%) within the Shire are occupied by people living outside the Shire, and around 50% of the Shire's resident labour force work outside the Shire.

While 2001 figures are not available, at the time of the 1996 Census, the main sectors of the economy providing jobs within Caboolture Shire were Retail Trade, Manufacturing, Health and Community Services, Construction, and Agriculture, Forestry and Fishing.

In 2001 the major sectors providing employment to residents of the Shire (i.e. the jobs were not necessarily located within the Shire) were Retail Trade; Manufacturing; Health and Community Services; Construction; and Property and Business Services.

Existing Unemployment

At the time of the 2001 Census, the overall unemployment rate for Caboolture Shire was 11.0%. The labour force within the Shire at the time was 48,840 persons, of which 5,396 were unemployed.

The levels of unemployment were higher in urban areas and were most pronounced in Morayfield, parts of Caboolture and parts of Bribie Island. Unemployment was comparably lower at Narangba, Burpengary, Bellmere and Wamuran.

According to the Department of Employment and Training *Regional Profile: Brisbane North, June 2000*, Caboolture Shire had an unemployment rate of 9.3% in 1999 representing an improvement on the 1996 rate. This figure includes 4,701 unemployed persons.

The overall unemployment rate for the Pine Rivers, Caboolture and Redcliffe region at the time of the 2001 census was 8.5%. Labour force data for March 2000 indicates that the unemployment rate for the region was 7.7%.

Further updated figures for unemployment based on census data will become available when the 2001 census results are finalised.

Journey to Work Data

The Department of State Development has previously published figures based on the 1986 and 1991 Census, however these statistics are now considered to be out of date. At the time there were 4 out of 10 workers (40%) living and working within the Shire.

Department of Local Government and Planning employment figures based on the 1996 Census indicate that 43% of the resident work force had jobs within the Shire which shows a slight increase since the previous census. The journey to work figures for the Shire are comparable with the neighbouring local government areas of Caloundra and Redcliffe however Pine Rivers has a considerably lower proportion (30%) of the resident workforce that have jobs inside Pine Rivers Shire.

Council should aim to reduce journey to work distances of the Shire's residents as the provision of local jobs has a number of advantages. The most obvious advantage relates to journey to work issues such as distance, time and cost reductions. Other less direct benefits may include reduced vehicle emissions and opportunities to provide more efficient public transport services.

A number of people travel out of the Shire to work while at the same time a significant amount of people travel into the Shire to work. There is a variety of reasons for such journey to work patterns. In terms of the Shire's resident labour force, there is a mismatch between the amount and type of jobs available within the Shire and the amount and type of workers living in the Shire. Thus many people are left with no choice but to work outside the Shire. In terms of outside labour force that travel to the Shire to work, there may be a variety of reasons why such workers choose not to reside within Caboolture Shire (eg lack of facilities, lifestyle choice).

As evidenced by the above employment figures, a large proportion of the Shire's resident workforce is employed outside the Shire.

Tourism

There are a variety of man-made and natural attractions throughout the Shire with existing or potential tourism benefits. These attractions involve land uses ranging from rural to commercial. Tourism relies on a range of supporting services including shopping and accommodation functions, however the extent of services needed depends on the type of tourism involved (eg nature-based or urban).

Expenditure on tourism has impacts upon a range of land use activities including transport, accommodation, retailing, entertainment, business and personal services, providing diversification of the Shire's economic base and employment for skilled and semi-skilled people from all sectors of the community.

Review of Planning Scheme Provisions

Employment

The primary function for the planning scheme in addressing the employment issue is to provide an appropriate quantity of land in suitable locations to allow for the range of employment generating activities that will be needed to meet employment requirements of future populations.

There is a wide range of land uses that provide employment and these uses can be found throughout the Shire. Employment is provided in both rural and urban areas of the Shire to varying degrees. Many urban land uses provide a high density of employment in relation to land area requirements (eg retail trade and manufacturing) whereas other rural uses such as agriculture involve a very low employment density. Residential areas also provide for some level of employment through activities such as home-based businesses.

The planning scheme must be able to provide for employment generating activities that recognise existing and potential economic development opportunities within the Shire.

Many of the employment sectors within the Shire already have sufficient land supplies to cater for future expansion. For example, existing commercial land supplies are considered to be sufficient for the next 15 years. Emerging employment generators such as aquaculture are also provided for within the existing rural areas of the Shire. However, other major employment sectors such as manufacturing have only short term land supplies remaining. The planning scheme needs to respond to land shortages for employment generating activities by identifying and protecting suitable additional land for future requirements.

There are many significant non-planning scheme measures that will be required to realise employment opportunities within the Shire. Demand analysis and marketing are examples of other key requirements that will need to be satisfied to achieve economic development and associated employment generation.

Tourism

The existing planning scheme provides for a range of tourist related facilities. The scheme incorporates a 'Tourist, Business and Residential Zone' that provides for a mix of commercial and residential development in desirable locations for tourist development. However, the extent of this zone is currently limited to coastal areas of the Shire and supports mainly resort style tourism.

The existing Woodford Township Development Control Plan provides for tourist activities that complement the country town nature of the area, however suitable areas for tourism have not been specifically identified in the Development Control Plan Map.

The Caboolture Shire Strategic Land Use Plan 1993 (SLUP) acknowledges possible tourist facilities within the Shire. These facilities generally relate to resort developments, however small-scale tourist facilities such as those associated with farmstays and ecotourism can be accommodated in existing land use designations.

The ability of the planning scheme to designate particular areas for tourism is extremely limited as tourism generally co-locates with an established dominant land use. Therefore the scheme should focus on the merits of individual tourism proposals and how any potential impacts from such development can be managed.

Whilst the Shire has a number of potential opportunities to expand tourism activities, the level of tourism in certain areas needs to be related to the type of attraction. For example, nature based or rural based tourism will involve low development intensity whereas urban tourism could involve high development intensity. The scheme needs to ensure that natural features are protected both as part of a tourism promotion and strategy and to ensure they are not adversely impacted by over-use. Tourist activity also needs to be sympathetic to the surrounding environment.

Community Consultation

Employment issues raised by the community have been addressed in the Industrial section. Community consultation undertaken during the initial stages of the planning scheme review process did not raise any significant issues regarding tourism, however a number of related environmental issues were identified such as the importance of protecting beaches and waterways and flora and fauna.

Discussion

There is a range of employment generating land uses throughout the Shire within both rural and urban areas at varying densities. However there is a significant mismatch between the Shire's labour force and the amount of jobs available within the Shire. Even if the amount of jobs available in the Shire matched the resident labour force it is likely that there would still be a mismatch between labour force skills and available employment sectors.

Although available statistics suggest that unemployment levels in the Shire have decreased in recent years there is still much scope to reduce unemployment rates at the local level.

There is a significant proportion of the Shire's labour force that currently work outside the Shire thus increasing journey to work distances. The provision of future employment opportunities should aim to decrease journey to work distances particularly through the provision of local jobs in appropriate employment sectors.

The major employment sectors within the Shire are retail trade and manufacturing. Council must ensure that there is adequate future land supplies to provide for employment

opportunities within these sectors. The Shire has a number of opportunities to encourage the growth of the tourism sector, however it is acknowledged that many tourism activities are associated with other primary land uses in urban and rural areas. The scheme can provide considerable support for tourism by including clear guidance and encouragement to tourist uses such as bed and breakfasts, and farmstays.

Conclusions

Based on an assessment of employment and tourism characteristics of the Shire and its resident population the following conclusions have been reached.

- (1) All land uses provide opportunity for some level of employment generation.
- (2) A significant proportion of the Shire's resident labour force work outside the Shire.
- (3) Some employment sectors have only short term future land supplies.
- (4) Tourism activities are generally associated with other existing land uses and are difficult to identify as a land use in their own right.
- (5) The Shire has potential for a range of tourist activities associated with the range of land uses throughout the Shire that have varying degrees of scale and impact on surrounding areas.

Historic Version
Caboolture ShirePlan

Section 8 - Rural

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*Existing Rural Land Uses/Economic
Overview*

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Rural

Introduction

The *Caboolture Rural Lands Study 2001* was undertaken to identify opportunities and constraints for future rural land uses within the Shire. The *Rural Lands Study* consists of a Background Report providing an inventory of existing rural lands within the Shire and a rural land use Strategy Report to guide the preparation of the planning scheme. The range and location of existing rural uses throughout the Shire is indicated in *Figure 8.1*. This study focuses on areas included in the rural designation in the 1993 Strategic Land Use Plan (SLUP). The planning scheme needs to recognise and protect viable existing and future rural land uses in the Shire and control some activities in order to minimise land use conflicts.

The State Planning Policy 1/92 *Development and the Conservation of Agricultural Land* is the principal planning instrument in the State to provide for the protection of good quality agricultural land. In developing its planning scheme, Council needs to be aware of the extent and quality of agricultural land throughout the Shire.

The South East Queensland Regional Framework for Growth Management 2000 (RFGM) supports the government's objective of protecting good quality agricultural land. The RFGM identifies a role for local government to designate and protect such land through planning schemes and investigate requirements that support rural processing industries.

There are a number of urban land uses (such as residential and industrial development) that are competing for the use of rural land within the Shire. The results of the *Rural Lands Study* will allow an informed decision to be made on which uses should prevail in certain locations by determining the extent of areas that need to be protected for existing and future rural land uses. It should be noted that extractive industries are a significant land use within the rural areas of the Shire. The issues related to these activities are specifically addressed in *Section 9* of this study.

Issues

Overview

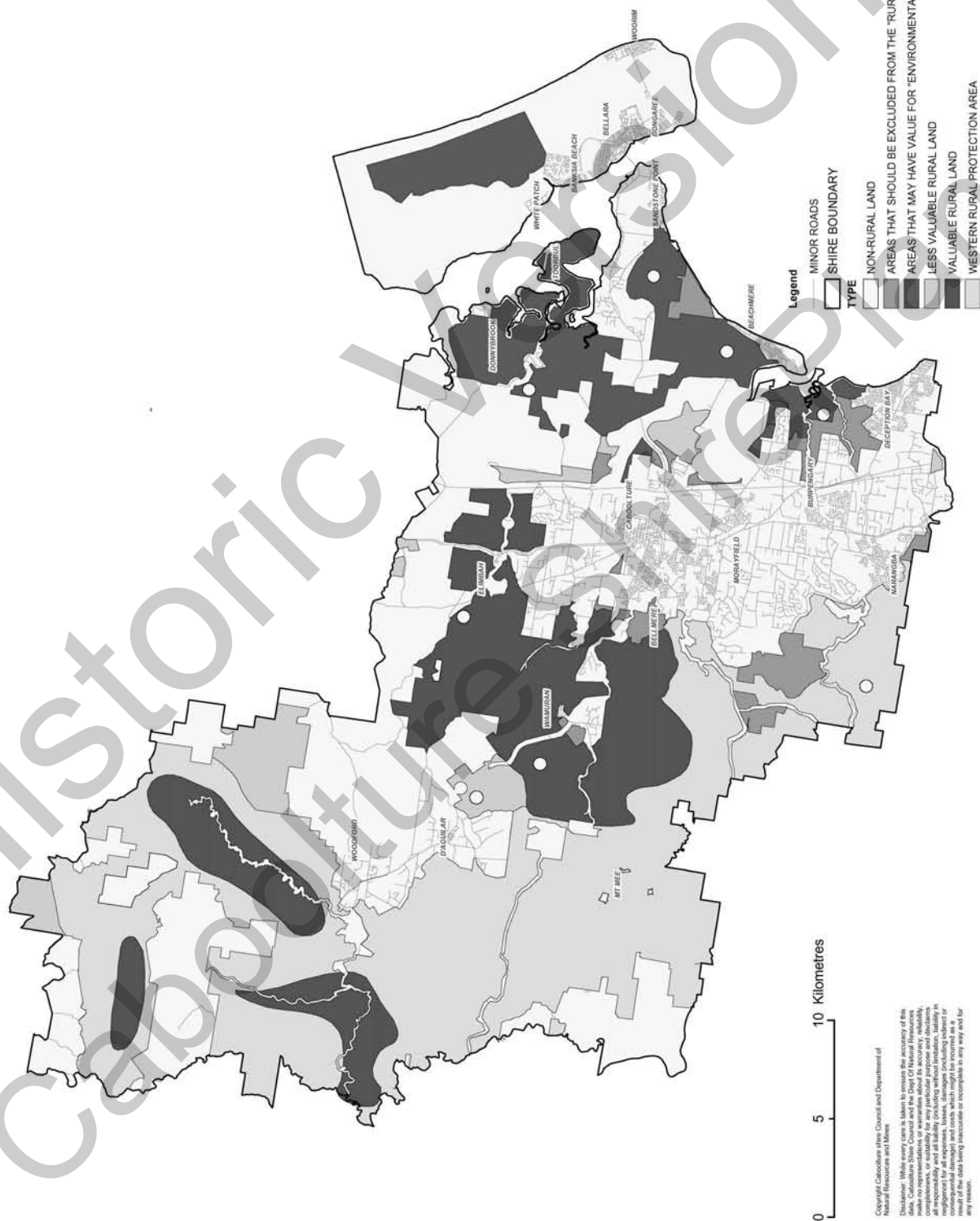
Future urban growth within the Shire will continue to compete for existing areas of rural land. In the past there has been little focus on the protection of rural lands within the Shire. The SLUP states that "... a number of large areas of previously rural land are being developed for rural residential and urban purposes". The subdivision of farms has further affected the viability of production on rural land holdings. Whilst the focus of the rural designation is to protect areas of good quality agricultural land, the extent of the rural designation in the SLUP is primarily influenced by its potential (or lack of potential) to accommodate future urban or rural residential development.

The protection of good quality agricultural land requires a thorough understanding of land use distribution and soil characteristics within the areas designated as Rural in the 1993 SLUP. Prior to undertaking the *Rural Lands Study*, there was a lack of understanding of the distribution of existing rural land uses throughout the Shire. In addition, the agricultural land quality mapping for the Shire, undertaken by the Department of Primary Industries in the 1980s, was considered to be indicative only and based on a low level of detail.

A comprehensive analysis of rural land within the Shire has been undertaken to determine the range and extent of existing rural activities and the suitability of these lands for agricultural pursuits. As major stakeholders in the protection and operation of rural land uses, the Department of Primary Industries and the Department of Natural Resources and Mines have had involvement throughout the course of the *Rural Lands Study*. The primary concerns of these departments include the identification and protection of good quality agricultural land and the ability of the planning scheme to manage and allow for the continuing viability of the range of existing and potential rural activities within the Shire.

The following sections provide an overview of the major issues affecting the future location and protection of rural land uses in the Shire. These issues involve both strategic aspects of rural land uses and associated activities that influence the planning of rural areas.

FIGURE 8.1 *EXISTING RURAL LANDUSE*



Soils

The *Rural Lands Study* provides a revised map of agricultural land quality throughout the rural areas of the Shire that identifies land suitability classes based on soil characteristics and management requirements.

There are nine main soil groups found within the Shire with varying suitability for crop production. Certain soils, landforms and slopes confer certain limitations for productive rural pursuits including erosion susceptibility, ease of physical working and risk of flooding.

Four agricultural land suitability classes have been described in the study, however these do not take into account specific crop requirements. These classes, indicated in *Figure 8.2*, include crop land, limited crop land, pasture land and non-agricultural land.

Existing Rural Land Uses/Economic Overview

The rural areas of Caboolture Shire can generally be divided into four major regions of differing agricultural production. The Wamuran/West Caboolture area produces predominantly pineapples and some annual horticultural crops. The Campbell's Pocket/South-west Woodford area produces mainly bananas and some tree crops. The Stanley River flood plain area produces annual grains and the Mount Mee plateau area is used for dairying and beef cattle production. Emerging rural activities in the Shire include aquaculture and private forestry.

The *Rural Lands Study* indicates that particular rural land uses have clustered together. Dairying and beef cattle production uses are generally located in the west of the Shire at Mount Mee, Delaney Creek, west of Woodford and Neurum. Pineapple farms can be found in the central area of the Shire at Wamuran, Elimbah and Bellmere. Tropical fruits are generally grown at Campbell's Pocket and Wamuran Basin. Other rural activities, such as aquaculture, show less propensity to group together.

Animal husbandry uses are not concentrated in any part of the Shire, but rather dispersed throughout the Rural designation. Existing and potential rural uses involving animals include aquaculture, stables, piggeries, poultry farms, stock saleyards, lot feeding of stock, kennels, and other forms of animal husbandry.

Production in the rural areas of the Shire represents 9% of South East Queensland rural production and 1% of State rural production. The study noted that not all crops make the same contribution to the economy of the Shire relative to the area they occupy. For example, the value of strawberries per hectare is at least four times that of any other fruit crop in Caboolture and nine times that of bananas. The Shire is experiencing some changes in its rural economy resulting from increasing pressure on rural land from urbanisation and the deregulation of the dairy industry.

The major crops in the Shire are pineapples, strawberries and bananas. In terms of State production, Caboolture Shire is a major producer of strawberries and pineapples. Banana production in the Shire is also significant in terms of South East Queensland. Emerging crops in the Shire include ginger, broccoli and capsicum.

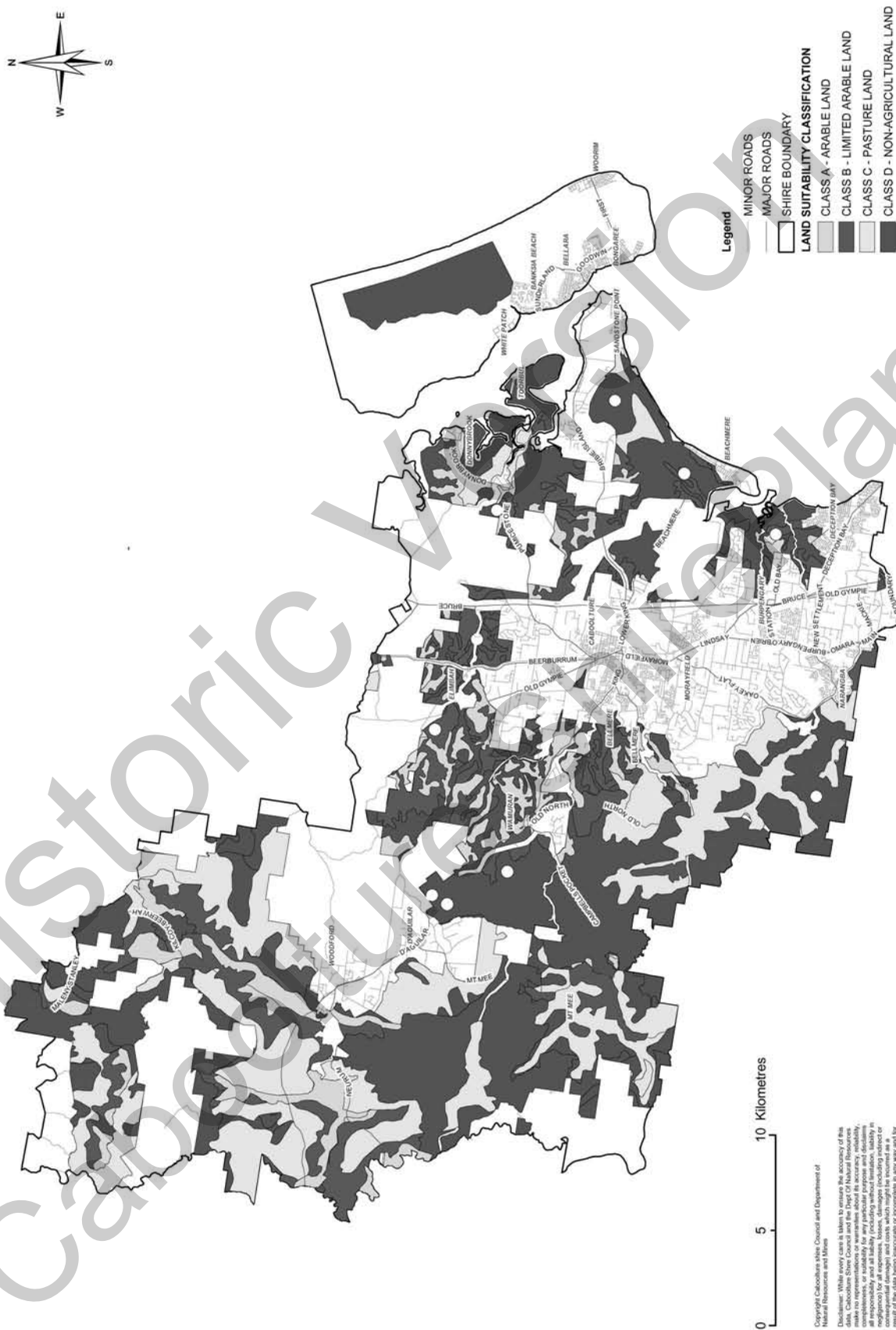
Chicken meat production (broiler farms) in the Shire has expanded in recent times and now accounts for about 9% of State production. Pig production in the Shire has been declining. The deregulation of the dairy industry is likely to result in the decline of dairy activities in the Shire in the future.

There are large areas of non-agricultural land within the rural designation in the 1993 SLUP, some of which require further investigation to determine the most appropriate designation (eg greenspace). It should be noted that some areas of high quality agricultural land are not currently providing a highest and best use (eg pineapple plantations on Class A-Arable Land).

Forestry

Private forestry, also referred to as 'farm forestry' is an emerging rural use in the Shire and millable logs will not be produced for some years. It is anticipated that logs will be processed at the Caboolture mill. The existing timber supply for the mill is generally sourced from State forests. The planning scheme will need to recognise this activity as a use in its own right through appropriate provisions.

FIGURE 8.2 AGRICULTURAL LAND SUITABILITY



State forests managed or owned by the State Government are given their own designation in the 1993 Strategic Land Use Plan, however the use satisfies the definition of 'forestry' included in the 1988 Planning Scheme. This definition applies to any commercial timber plantation, regardless of whether it is under private or government ownership. Forestry is by nature a rural use and this is reflected by its inclusion as a self-assessable ('as of right') use within the Rural Zone in the 1988 Planning Scheme.

Processing

Overall, the Shire contains very little processing of its rural primary produce. Most of the value adding or processing of Caboolture Shire's primary produce occurs outside the Shire. The main horticultural crop processed is pineapple, which is transported to the Golden Circle plant in Northgate, Brisbane. Golden Circle has advised that alternative supplies could be found within Queensland if pineapple production in the Shire were to decline. Golden Circle also purchase bananas grown in the Shire for fruit salad production. There is one cooperative packhouse for strawberries in the Shire. Most production of other crops is sold via fresh fruit markets.

Although there is a small poultry abattoir and horse abattoir in Caboolture, most slaughtering of the Shire's animal produce occurs in Brisbane and Caloundra.

Processing of dairy produce generally occurs outside the Shire (eg South Brisbane). The milk processing plant at Caboolture is now used as a laboratory and receiving plant.

Markets

Pigs bred in the Shire are sent to various abattoirs outside the Shire. Most poultry bred in the Shire is sent to abattoirs in Caloundra and Brisbane, however a small quantity is processed within the Shire. Although a small amount of bananas are sent to Golden Circle for processing, most are sold fresh to markets in the Brisbane region.

The majority of dairy produce is market milk sent for processing outside the Shire at plants in the Brisbane region. Other quantities of dairy produce are sent to Toowoomba and New South Wales for production of cheese and yoghurt. The majority of pineapples grown in the Shire are sent to Golden Circle for processing, however small quantities are sold fresh to markets in the Brisbane region. Existing strawberry produce in the Shire is sold fresh to the domestic market. Mushrooms produced in the Shire are all sold to fresh food markets. Aquaculture produced in the Shire includes food fish and ornamental fish sent to diverse markets.

Review of Planning Scheme Provisions

The Shire has a land area of 1216 square kilometres of which 631 square kilometres (or 51%) is included in the Rural designation of the SLUP.

The 1988 Planning Scheme for the Shire of Caboolture includes a Rural Zone and a Special Rural Zone. Although the primary intent of the Rural Zone is to provide for general rural activities, it also includes large areas of flood prone land and land with environmental significance that is not suitable for rural activities. The Special Rural Zone provides for restricted rural activities adjacent to existing or future urban areas until expansion of the urban areas is required.

The 1988 Planning Scheme includes the following definitions that involve rural uses: agriculture, animal husbandry, aquaculture, catteries, forestry, kennel, lot feeding of stock, piggery, poultry farm, roadside stall, rural industry, rural worker's cottage, stable, and stock saleyard.

Subdivision provisions within the 1988 Planning Scheme allow for a minimum allotment size of 16 hectares generally, in the Rural Zone, and 4 hectares in some locations within Division 4. An analysis of rural land use requirements suggests that many of the existing rural activities (eg dairying, pineapple plantation) within the Shire require much larger areas of land to remain viable in the long term. The *Rural Lands Study* identifies more appropriate allotment sizes for the range of rural activities within Caboolture Shire.

Due to historical reasons, there are a number of allotments in rural areas of the Shire that are well below the minimum allotment size of 16 hectares. The 1988 Planning Scheme also provided Council with discretion to permit family reason subdivision in the Rural Zone with minimum allotment sizes down to 4000m². Existing family reason subdivisions have created issues such as lot fragmentation and land use conflicts.

The State Government is concerned about inappropriate rural subdivision and its impact upon sustainable agricultural production for the following reasons:

- Farming should be a long term commitment to ensuring sustainable land management practices in achieving an economic return from the land, and not be regarded as an interim form of land use pending a future highest and best return from non-farming activities.
- As good quality agricultural land comprises only some 5% of the State, other rural lands are also required to support and maintain its viability for sustainable agricultural production.
- The creation of allotments too small for sustainable farming ultimately results in a change of use from commercial agricultural production to one where the predominant use is residential.

The *Rural Lands Study* suggests that the 1988 Planning Scheme provisions relating to rural areas effectively make them function as a 'non-urban' zone. The most significant rural lands issue for Council to consider during the preparation of the new planning scheme is the competition between rural and urban development, particularly where good quality agricultural land is involved.

Community Consultation

The issue of rural allotment sizes was raised by the Woodford community with the recommendation to investigate suitable minimum lot sizes to maintain viable rural pursuits.

A small amount of residents, mainly in the rural areas of the Shire, indicated that rural lands were considered to be a valuable feature of the Shire worth protecting. Residents in rural areas indicated that they appreciate the quiet lifestyle of rural areas.

The preliminary public consultation for the planning scheme review also identified a desire to protect rural areas and the rural character of the Shire. This sentiment was particularly expressed in the western part of the Shire where rural uses predominate.

During the initial stages of the planning scheme review, the Department of Primary Industries and the Department of Natural Resources and Mines identified a need to preserve areas of good quality agricultural land and expressed an interest in being involved in future planning for rural land uses in the Shire. Both Departments were represented in the steering committee for the *Rural Lands Study*.

Discussion

The *Rural Lands Study* has identified the range and extent of rural land uses throughout the Shire. The quality of agricultural land within the 1993 SLUP Rural designation has been reviewed and many areas of non-agricultural land have been identified.

Overall, the Shire contains only a small degree of processing of its primary produce. As a result of this, the majority of the markets for Caboolture Shire produce are located outside the Shire.

Competition between rural and urban uses is likely to continue to put pressure on good quality agricultural lands. The *Rural Lands Study* has provided Council with improved base data to inform planning decisions where such land use conflict arises.

The planning scheme provides Council with an opportunity to ensure the protection of rural lands, including good quality agricultural land and land suitable for intensive animal husbandry, through more appropriate provisions based on a comprehensive knowledge of land use and soil quality distribution.

The three main tasks concerning rural land uses for the Council to consider in preparing the planning scheme are to allocate preferred land uses, address their environmental implications and identify appropriate infrastructure.

Conclusions

The analysis of existing and future rural land requirements in the Shire has enabled the following conclusions to be reached.

- (1) Urban uses such as residential and industrial development are competing with rural uses for rural lands, including good quality agricultural land.
- (2) There is potential for conflict between adjoining rural uses and between rural and non-rural activities depending upon the land use practices involved and the associated environmental effects.
- (3) There are a number of potential threats to the continuing viability of certain rural pursuits (eg pineapples, dairying) within the Shire.
- (4) There is a range of existing and potential rural processing activities that value-add to rural produce.
- (5) There are concerns about the suitability of private forestry in areas outside the Rural designation (eg rural residential areas).
- (6) Family reason subdivision contributes to the fragmentation of viable rural areas. The fragmentation of rural land has a variety of cost implications for Council.
- (7) Rural areas of the Shire have a valuable character and provide scenic amenity.

Section 9- Extractive Resources

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Extractive Resources

Introduction

Extractive materials are major resources for the Shire and region. The extraction of resources is an important function for any developing area as construction and road building is dependent upon supplies of sand, gravel, quarry rock and clay. The value of these resources is recognised at both the State and local level through various legislative provisions. As the population continues to increase for South East Queensland and the Shire, the demand for all types of extractive resources will also increase over time.

The implications for the planning scheme are that it needs to identify the extent of resource deposits across the Shire along with protecting the resource in order to limit the chance of incompatible development encroaching upon the extractive industry. The planning scheme also needs to include the necessary measures to minimise the adverse impacts of extractive industry operations which may occur upon the community and the natural environment.

Issues

To assist with the investigation of extractive resources and industries within the Shire, the *Caboolture Shire Extractive Resources Study* has been prepared. The study had a number of purposes outlined as follows:

- to review current planning provisions;
- to gain an understanding of industry trends and requirements;
- to identify all known and potential resource deposits within the Shire;
- to develop a set of strategies that can guide the planning scheme with the management of extractive resources in the Shire.

The outcomes and recommendations of the study are discussed at length within the following sections.

State and Regional Provisions

The identification, protection and management of extractive resources and industries is regulated through State Government legislation. There are no less than twenty-four (24) individual statutes, regulations, policies and local laws that affect the establishment and operation of extractive industries within the Shire. The extent to which they apply is a complex matter and varies depending upon the nature of the activity, its location, and the type of material being extracted.

The *Mineral Resources Act* defines as a "mineral", a range of resources which may be explored and extracted in accordance with the provisions set out in the Act and accompanying regulations. Extraction under this Act excludes soil, sand, gravel and rock when used for construction purposes. The extraction of resources in these circumstances is defined as development under the planning scheme. The provisions of the *Integrated Planning Act* and *Local Government Act* come into play by providing the framework for the assessment and operational aspects of extractive industries.

The exploration and mining of resources under the *Mineral Resource Act* is not subject to the development assessment provisions of the planning scheme, however, the location of mining claims, must be identified in the planning scheme.

The *Environmental Protection Act* also plays a major role in the regulation of extractive activities by imposing a general environmental duty upon everyone to take all reasonable and practicable measures to prevent or minimise environmental harm. Extractive industries above a specified volume are environmentally relevant activities (ERAs) under the provisions of the Act and so must therefore comply with a number of provisions contained within the Act and its associated Regulations.

The South East Queensland Regional Framework For Growth Management (RFGM) 2000 identifies as an objective, the need to preserve and protect the natural economic resources of the region for future use and ensure they are managed in a sustainable manner. Extractive resources fall within this category where State Agencies are responsible for the identification

and establishment of regionally significant extractive resource areas including haul routes and buffer areas.

For this, it should be noted that one of the priority actions of the RFGM is the development of a State Planning Policy for extractive resources and industries which will focus on the identification and establishment of regionally significant extractive resources including haul routes and buffer areas. The process to prepare this policy commenced in September 2001.

Extractive Resources Overview

In its broadest sense, extractive industries includes the mining of coal, minerals, oil, rock and earth materials as well as metallurgical processes for separating minerals from ore. However, in the context of Queensland, the term applies to the extraction and processing of soil, sand, gravel, hard rock, clay and like materials used in building and construction. The distinction between mining and extractive industry is largely based on the separate administrative and legislative provisions.

Resources such as sand, gravel, rock and clay are extracted and processed into a wide range of products. A hard rock quarry may have up to thirty (30) stockpiles with fifteen (15) to twenty-five (25) different products. Quarried products are used in the manufacture of a diverse range of building products and in industrial processes such as pre-mixed concrete and concrete products, poles, stumps, manholes, pipes, beams, roof tiles, asphalt, mortar and grout. They are also used for recreational facilities such as artificial beaches, golf bunkers, tennis courts, and playgrounds.

Extractive industry operators range from sole operators to multi-national corporations. Market areas served by a particular operation are dynamic and depend on a number of factors including access, physical constraints, infrastructure, population distribution, customer preference and construction project requirements. Extractive resources are high bulk, low cost materials with transport costs being a significant proportion to the end user.

Past geological events determine the location of resources and hence the location of extractive industry. The economic viability of deposits depends upon a number of factors such as deposit type and characteristics, infrastructure, competition, production costs, market prices, process design and capital investment. Extractive resource deposits do not follow cadastral or local government boundaries.

It is acknowledged in the *Caboolture Shire Extractive Resource Study* that determining future demand for extractive resources is difficult at a Shire-wide level and would need to involve the design of a detailed economic model. The demand for quarried products is driven by construction activity and is dependent upon population density, size and growth, disposable income, economic activity, demographic change, and technological change.

At a regional level, there are twelve (12) major nodes of extractive industry activity in South East Queensland. Two of these nodes include areas within the Caboolture Shire. The formation of these twelve areas has evolved over time as extractive industry activities have tended to consolidate in order to remain competitive and contain capital and operating costs. Sole operators will remain in the market although the number of them is likely to decrease in the future.

With regards to the future for extractive industries in the region and Shire, no major changes to the use or methods of operation are anticipated. For example, it is difficult to envisage alternative construction materials displacing concrete as a building product for the foreseeable future. As with most industries, there is continuous improvements in methods and equipment to achieve more efficient production as well as implementing more effective health and safety measures and controls to protect the environment. It is expected that over time the major fixed crushing and screening plants will be fully enclosed and fitted with dry dust collectors.

The trend towards more dense urban lifestyle will marginally reduce the need for quarried product. However, standard of living and lifestyle expectations will probably tend to increase the demand for quarried products for facilities associated with sporting and entertainment, leisure and recreation, travel and accommodation, and infrastructure such as bikeways, walkways, parks and quality landscaping.

The issues that have been identified in the *Caboolture Shire Extractive Resources Study* as being particularly important for Caboolture Shire are listed as follows. These do not necessarily represent the views of the Council.

- extractive resources are located within Caboolture Shire that are of regional significance;
- significant extractive resources have been sterilised in the Shire particularly due to rural residential subdivision and subdivision of rural land;
- it is essential for the two existing major hard rock quarries to be protected from encroachment of incompatible land use;
- although significant quantities of sand will be manufactured from hard rock sources, the availability and inventory of land based natural sand will rapidly deplete;
- the most obvious long term source of fine sand appears to be the large deposits located within Moreton Bay;
- rural local authorities surrounding the metropolitan area will increasingly be the source of quarried product as older sources closer to built up areas are depleted;
- scope exists for improvement of land management of the internal bufferland controlled by extractive industries to contribute to the environmental values of local areas;
- scope exists for improvement of surface water management of lands and workings managed by extractive industries;
- production from existing quarries in the Caboolture Shire will increase as manufactured sand replaces natural sand and the population of the Shire and the surrounds increases;
- as operations at existing resources are developed or expanded there is potential for local visual impact;
- the major issue for quarrying sites relates to the off-site impacts associated with the distribution of products on public roads;
- haul routes and/or transportation corridors need to be identified and protected for the distribution of quarried products;
- since extractive industries embrace a wide range of methods, types and scale of operations including small local resources, temporary and project operations, development assessment should be flexible enough to accommodate the range in the scale and nature of operations;
- a rational balance needs to be struck between nature conservation and exploitation of extractive resources.

Extent of Resources

The Shire contains deposits of quarry rock, gravel, sand and clay at a variety of locations. The *Caboolture Shire Extractive Resources Study* has investigated the extent of each of these resources within the Shire.

In broad terms, the main areas of quarry rock where extractive industries operate from are at Narangba and Bracalba with smaller deposits in the western portion of the Shire. Sand and gravel deposits have in the past been identified along the waterways of the Shire at Six Mile Creek, Lagoon Creek and Burpengary Creek. The areas to the north and west of Beachmere township, and at Donnybrook have been identified as the two main areas containing extensive deposits that are mined for sand.

Clay deposits are found within the central and eastern parts of the Shire although the extent of rural residential development has limited the availability of this resource. The operators of the sites have indicated that the existing deposits will last for more than twenty years, however the clay resources are not of regional significance.

In combination with the identification of existing and resource investigation areas, the Study identifies the haulage routes that should be outlined on maps within the planning scheme. The recommended areas are:

- the entire Bruce Highway within the Shire
- the entire D'Aguilar Highway within the Shire
- the entire Kilcoy-Beerwah Road within the Shire
- from the Bruce Highway, along Pumicestone Road to Donnybrook Road then to the entrance of the Readymix Holdings Pty Ltd operation
- from the Bruce Highway, along Bribie Island Road to Bestmann Road then along this road to the entrance of the Southern Pacific Sands operation

- from the Bruce Highway, along Caboolture-Beachmere Road to Wallace Road and then to the entrance of the Excel Quarries operation
- from the Bruce Highway (intersection with Deception Bay Road) to Old Gympie Road to New Settlement Road to Oakey Flat Road to Raynbird Road then to the existing entrance to the quarry operations of Boral Ltd.

Following the identification of the existing areas, the Study then refers to the Key Resource Area (KRA) concept of designating areas containing known or potential extractive resources on planning scheme maps. In addition to the geological component, the designation also includes the buffers and haul routes to the activity. The designation of such areas requires considerable site specific studies to be undertaken. Further investigations would involve extensive field work and drilling that was beyond the scope of the *Caboolture Shire Extractive Resources Study*. It is concluded that it would be inappropriate to designate any locations as KRAs within the Shire.

The Study has nonetheless, based on the information it has gathered, identified seven sites within the Shire as containing potential resources. The Study recommends that these sites be designated as "Resource Investigation Areas" and are therefore to be the subject of further detailed investigation with regards to identifying the long term suitability as an extractive industry area. While this approach has some merit, there is always the concern that extractive resources have the potential to occur within any part of the Shire. The designation of extractive industry sites in the past has, in some instances, incorrectly given the perception that these are the only locations within the Shire where extractive industries can be expected to occur. This is simply not the case especially when natural resources occur everywhere and have a different value depending upon the nature of the resource in place and for what purpose it is to be used. It would be prudent, at this point in time, not to include the investigation areas within the planning scheme.

Major Features of Extractive Industries

The *Caboolture Shire Extractive Resources Study* has identified the following constraints for the purposes of planning for and identification of resource areas within the Shire.

Location

Distances from centres of demand is an important factor in determining the economic viability of an extractive industry. If resources are not close by, material will need to be transported over long distances to satisfy the demand.

Geology

The geological history of an area determines the location of resources and the siting of extractive industry. The eastern sector of Caboolture Shire is underlain by sedimentary rocks which are not prospective for locating high strength deposits suitable for quarrying. The most prospective areas for locating additional resources are along the contact zones of the Dayboro Tonalite and Neurum Tonalite at Moorina/Narangba and Bracalba respectively. Large reserves of coastal sand deposits are known to exist in the Ningi-Beachmere area.

Transport Infrastructure

The cost of transportation is a major factor in the total cost of quarried product for the end user. New operations are required to compete with existing operations which have evolved with incremental upgrades of infrastructure over time. Impacts associated with the distribution of quarried products is probably the single most issue of concern with the general public.

Residential Uses

By their very nature, extractive industries generate noise and dust and have the potential to cause nuisance at nearby residences. Blasting at hard rock quarries also results in air and ground vibration and may also give rise to dust, fumes and flyrock. The extent to which these issues impact on the amenity of residential areas depends upon the specific situation, management controls and separation distances. If adequate separation cannot be achieved or if alternative controls cannot be implemented then the prospective resources probably should be considered sterilised.

Land Use

The impact on the availability of extractive resources due to other proposed or existing land uses needs to be considered. Poorly planned extractive operations may cause unacceptable scarring and diminish landscape values, particularly if viewed from a scenic lookout or major

tourist area. Extraction of off-stream sand and gravel often requires disturbance of alluvial soil which may be classed as good quality agricultural land.

Biodiversity Values

Extractive industry is often located on elevated, stony ground reflecting the strength and resistance to weathering of the underlying rock. Their workings involve the complete clearing of vegetation and associated animal habitat. They also provide significant habitat for native plants and animals within buffer areas. Quarrying operations although intense, do not need to be extensive. If progressive rehabilitation and/or restoration of other cleared areas on the property or elsewhere can be undertaken then the loss of habitat may be minimised.

Topography and Access

Very steep land may be unfavourable for establishing extractive industry due to the limitations of constructing wide and safe roads, increased cost of haulage, and potential for scarring. Convenient and safe access is also constrained by slope.

Real Property

The tenure, ownership and land parcel size and shape must be favourable along with topography and geology for an extractive industry resource to be available and viable. Subdivision of rural holdings means the large holdings in the ownership are becoming increasingly uncommon. The need to deal with multiple landholders to amalgamate a land parcel for quarrying and associated buffer area may be difficult to achieve thus sterilising a resource.

Water Resources

A reliable source of water is essential for a major extractive industry operation. Water supplied may be required for dust suppression at the processing plant and on internal haul roads. Due to the disturbance of the land surface quarrying has the potential to impact on downstream water quality if appropriate controls to prevent erosion and stormwater contamination are not implemented.

Implications for Council and the Planning Scheme

With regards to the future management of extractive industries and resources for Council, the Study provides a number of suggestions to assist with the assessment of development. This includes definitions as well as guidelines that outline the range of issues that need to be considered as part of the assessment, approval, and management of extractive industries. These include, but are not limited to:

- site based management plans
- vegetation clearing
- drainage, sediment and erosion control
- rehabilitation
- air, noise and water quality
- cultural heritage
- emergency response
- fire management.

The *Caboolture Shire Extractive Resources Study* has identified a range of issues that are to be considered in planning for extractive industries within the Shire. Not all of these can be addressed in the planning scheme and would require implementation and management from outside of the local government and planning framework.

Identification of Resources

- The planning scheme is to identify all nominated key resource areas, known resource areas, and extractive resource sites;
- All existing approved extractive industry sites must be shown as extractive resource sites;
- Council is to consult with State and regional agencies with a view to develop a more detailed geological and environmental assessment of nominated resource investigation areas.

Protection of Resources

- Existing extractive industry sites must have a buffer area of at least 250 metres where development that conflicts with extractive industry is to be discouraged;
- Applications for assessable development in a buffer area or an extractive resource area are to be supported by a development proposal report which assesses the magnitude of the potential impacts and the risks associated with any measures to control potential impacts.

Identification and Protection of Haul Routes

- Major extractive haulage routes must be shown on the planning scheme maps;
- Development within these areas must not be sensitive to haulage activities.

Management of Operations

- Site planning, development and operations of an extractive industry shall be in accordance with good practice guidelines and statutory regulations.

Rehabilitation Plans

- All extractive industry operations must have an approved rehabilitation plan and programs for implementation. The plan must describe performance standards for post extraction land suitability, quality of surface waters leaving the site, land stability and vegetation establishment.

Managing Demand

- Council should provide leadership for a regional review of measures that may assist in the reduction of demand for quarried products. Such measures could include:
 - encouraging building designs that assist in the dismantling of used buildings and the reuse or recycling of materials;
 - review of road construction and maintenance practices;
 - encouraging recycling industries.

Long Term Transportation and Distribution Systems

- The investigation of long term transportation needs to be considered from a State and regional perspective. In particular, the feasibility of offshore unloading of fine sand and pumping ashore for distribution north and south will need to be addressed in the future.

Review of Planning Scheme Provisions

The 1988 planning scheme contains a number of measures relating to extractive resources. At the broad level, the 1993 Strategic Land Use Plan sets out on the map the general location of extractive resources within the Shire. These symbols are not the only location of resources within the Shire and are only indicative of actual resource location. The types of materials extracted that are depicted by these symbols include sand, gravel, clay and hardrock. The Strategic Land Use Plan also includes an objective which seeks to protect valuable extractive and mineral resources from encroachment of development in order to enable such resources to be utilised as required.

At the next level of planning, there is an Extractive Industry Zone which provides for the operation of extractive industries in the Shire. This principally only refers to larger scale extractive resource operations although given that extractives can be accommodated within the Rural Zone without the need to change the zoning, the use of the zone is not widespread. The scheme also includes a definition of Extractive Industry.

For operational matters, Council has an Extractive Industry Local Law and accompanying Local Law Policy which are used as the basis for determining annual licence renewals.

Community Consultation

The location and impact of extractive industries has been raised during community consultation. Identifying the location of resource areas and the corridors to access these areas should be clearly indicated on planning scheme maps. This will assist in preventing incompatible land uses being located in close proximity to each other in the future. As identified in this section, the identification of extractive resource locations is an important component of the planning scheme review. It has also been suggested that some extractive industry designations be removed from the Strategic Land Use Plan Map.

There was concern raised about the operational aspects of extractive industries in the Shire where there are different levels of approval needed for different aspects of an operation. To some extent, this will be addressed where the provisions relating to the establishment of an extractive industry will be included within the planning scheme. However some operational components will still be administered by the Local Law due to legislative requirements.

Discussion

Extractive resources are a major land use within the Shire as evidenced by the designation of land for such purposes in the planning scheme. The future planning for extractive resources and the accompanying industries should continue to be an integral component of the planning scheme. The *Integrated Planning Act* requires areas of economic value (such as extractive deposits) to be addressed in the planning scheme while the RFGM recognises such areas as being of State and regional significance and an integral part of the growth and development for an area.

Modern communities use large quantities of sand, gravel and crushed rock for buildings, road construction and other infrastructure. The State Government has the responsibility to identify and protect existing and potential extractive resource areas that are of State and regional significance. Council's role is to assist by appropriately recognising such uses in the planning scheme. The protection of the resource ensures that the encroachment of incompatible land uses is avoided.

The manner in which extractive industries are established and operated is also an important consideration for Council. The recognition of an extractive resource does not guarantee that an industry can operate from a site without a comprehensive analysis of potential impacts being undertaken by an applicant. Through the planning scheme, the Local Law and the environmentally relevant activity (ERA) licensing procedure, the necessary provisions can be imposed to minimise the potential for adverse off-site impacts occurring.

The mapping provided by the *Caboolture Shire Extractive Resources Study* provides a significant layer of information for the planning scheme. The existing and potential resource investigation areas have been identified. The appropriate planning mechanisms can therefore be put in place that will ensure they can operate for the long term.

Conclusions

Based on the foregoing discussion of issues for extractive resources, the following conclusions are made.

- (1) There are extractive resources within the Shire that are of State and regional significance which need to be identified and protected. Potential resource investigation areas need to be the subject of further research and investigation in order to determine the suitability of the extractive resource for the long term.
- (2) The provision of buffers and the location of haul routes form an integral component of extractive industries, hence they also need to be identified and protected.
- (3) The day to day operational components of extractive industries have the potential to impact upon our communities and natural resources, so they must therefore be addressed.

Section 10- Infrastructure

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Infrastructure

Introduction

The *Integrated Planning Act* places a high importance on infrastructure by listing it as one of the core matters which a planning scheme must take into consideration. Therefore, Council has a responsibility to investigate infrastructure provisions in preparing a planning scheme for the Shire. Infrastructure constitutes a major investment of monetary, physical and social resources. The efficiency of a system is an important consideration which can be maximised by matching growth with staged development of new infrastructure in the Shire.

While some services are provided by developers, it is the long term network planning that Council must undertake to ensure that the appropriate standards of service are provided which, while meeting community expectations, also consider economic and environmental constraints.

The purpose of this section is to outline the issues which must be considered for the provision of infrastructure within the Shire.

Issues

Transport

Transport plays a central role in our lives. Whether it involves going to work, or school, accessing recreational activities, or moving goods from one destination to another, transport is an important consideration in what we do. Land use and transport are therefore inextricably linked.

In its simplest form transport involves the movement of people or goods from one place to another. There are a number of different ways in which that movement can be undertaken.

The core elements of transport which will be considered for the preparation of a planning scheme encompass planning for the road network, public transport, and for cycle and pedestrian movements. There are a number of impacts and considerations that come under each of these major headings which also need to be addressed.

The focus of transport planning has shifted, particularly within the last ten years, from one where policies only involved providing roads to cater for projected traffic volumes, to now being more encompassing where a full range of impacts and influences are taken into account. Possibly the most significant change in planning and transport policy has been the increase in environmental awareness. There is recognition at all levels of the need to adopt more sustainable ways of living if the damaging effects of human activity on the environment are to be controlled and reduced. Policies which encourage selective use of private motor vehicles and provide choices for non-car use are now being promoted.

To this end, there are a number of strategies which have been and are in the process of being prepared to address these very issues in the Shire and within South East Queensland. These will be discussed in the following sections.

For the planning scheme, its role will be to establish the policies which integrate land use and transport planning in the context of social, ecological, and economic considerations.

Regional Framework for Growth Management (RFGM)

The RFGM contains principles and priorities based on sixteen major themes including transport. The objective of the transport section within the RFGM is to improve the functioning of existing and future transport networks and facilities in terms of accessibility, costs and environmental impacts. Its principles include:

- Identifying the need for the pattern of development to take into account other principles of the RFGM thereby maximising the efficient use of public transport and minimising transport costs;
- Having the region served by high quality, frequent, efficient and integrated public and private transport systems which reduce dependence on the private motor vehicle and encourage increased use of public transport, cycling and transport costs;

- Supporting the achievement of urban growth, residential development, employment growth and major centres objectives;
- Giving priority in resource allocation to improving the accessibility and effectiveness of Key Centres and encouraging greater levels of self-containment thereby improving the relationship between the distribution of employment, services and population;
- Noise pollution and air quality effects of transportation systems should be reduced to national standards.

These objectives include a number of priority actions that principally support the provisions of the Integrated Regional Transport Plan (IRTP) which is further discussed in the following section. Council's support for this strategy is mainly provided through the preparation of specific transport strategies as well as providing support for the preparation of regional and State transport planning documents. From a land use perspective, the key element which the RFGM promotes is the link between land use and transport planning.

Integrated Regional Transport Plan (IRTP)

The IRTP was introduced in 1997 by the State Government. It is a 25 year plan which seeks to manage ongoing growth in private vehicle movements by promoting alternate transport modes, including cycling and walking. Consequently, the IRTP supports the provisions of the RFGM.

As the population increases, there will be a corresponding increase in transport activity. Unless the growth in transport activity is managed the natural tendency will be for unconstrained usage of private vehicles. Unconstrained growth in private vehicle usage is not sustainable from a variety of perspectives and highlights the need to plan a more sustainable transport system. One of the major features of the IRTP is that while it recognises that adding new road capacity will provide some relief and support for the development of new communities, such a strategy is not a viable solution in the longer term. This is because road development cannot keep pace with the anticipated level of growth within South East Queensland and will result in unacceptable levels of air pollution.

The prevailing land use patterns over the past 40 years have seen residential development spread out thereby increasing the separation between jobs, housing and other services like education and recreation. As a result, car dependency has continued to rise with over 78% of all trips in South East Queensland now undertaken in private vehicles.

The IRTP balances the future needs for public transport, freight, general motor traffic, non-motorised transport and travel demand reductions by aligning transport and land uses considerations with a key aim being to moderate unrestrained traffic growth. To achieve this, the IRTP establishes targets for increased public transport, ride sharing, walking and cycling.

The IRTP recognises that a major shift is needed towards more efficient, environmentally friendly modes of transport which can provide people with access and mobility without the undesirable impacts of single occupant car travel. This will require a concerted effort by government and private sector operators to improve the quality and coverage of public transport. Pedestrian and cycling facilities will have to be improved and better integrated into land use planning. The need to expand road capacity has not been ignored but this is balanced by a desire to more efficiently utilise road space and hence capacity. Planning and ultimate construction of a road network in developing areas will support passenger transport, freight, economic development and provide a system for local trips.

The approach which the IRTP takes is that it recognises that the transport system must be managed and developed alongside decisions about broader urban development and lifestyle choices. It uses a new, better integrated approach to transport planning which considers public transport, road traffic capacity, non-motorised transport and travel reductions together.

Sustainable Transport

The IRTP considers that South East Queensland needs an integrated transport system which can reduce dependence on the private car and encourage increased use of public transport and shared rides, as well as more opportunities for walking and cycling. Meeting the transport task with less vehicle trips will also have flow-on effects including less congestion for road freight movements, and less emissions of pollutants and greenhouse gases to the environment.

The objectives which the IRTP has developed are:

- *Developing a more sustainable transport system* - by increasing the proportion of trips made by public transport, walking and cycling, and in shared rides, and reducing growth in peak commuter car travel;
- *Restraining the growth of peak period car travel demands* - by reducing the predominance of single occupant vehicle travel, increasing ride-sharing, improving

public transport, eliminating unnecessary trips and better sharing of the load around the network to make the most of the existing transport system;

- *Providing efficient and sufficient road capacity* - by planning to meet moderated traffic demands and accommodate the growth of the region's urban areas;
- *Ensuring the efficient movement of freight* - by high quality rail, road, air, and sea links and intermodal facilities;
- *Providing improved facilities for pedestrians and cyclists;*
- *Coordinating transport and land use planning* - by supporting more compact, better designed urban development which supports public transport and allows people to walk and cycle more;
- *Ensuring social justice* - by a more inclusive transport system which shares the costs and benefits of transport equitably across the region;
- *Maintaining environmental quality* - by cleaner vehicles and better approaches to providing transport infrastructure.

Transport 2007

This is a strategy released in December 2000. It is a companion document to the IRTP and provides a detailed action plan for transport in South East Queensland until 2007 as opposed to the IRTP which provides a 25 year solution for a more sustainable transport system. It updates provisions of the IRTP with a review of demographic and travel trends. It sets strategic transport priorities to guide the development of a 3 year rolling program of IRTP action. In effect *Transport 2007* seeks to establish achievable mile-stones that support the principles of the broader IRTP document.

Transport 2007 focuses on achieving the following outcomes:

- ensuring social justice by providing a safe and equitable system for all;
- providing an ecologically sustainable transport system;
- making better use of our existing system through travel demand management;
- creating transport-friendly communities through better land use planning;
- developing a high quality, integrated public transport system;
- providing improved facilities for cyclists and pedestrians;
- developing a road network which links people, goods and services; and
- ensuring the efficient movement of freight.

These desired outcomes are similar to those for the IRTP. It also identifies specific targets, based on those within the IRTP, such as increasing trips involving public transport, cycling and walking.

Transport 2007 identifies a number of challenges which exist for transport and land use planners:

Increased population means an increased number of trips per day and increased demands on the transport system. Population growth with reduced household size will lead to urban sprawl. In addition to extra trips, they will become longer and there will be fewer opportunities for people to work and participate in leisure activities locally. Smaller households will mean it will be more difficult to car pool with others in the household.

An **ageing population** means changes to off-peak travel patterns, with more people accessing suburban locations such as shopping centres, recreation facilities and hospitals rather than traditional mass transport market of inner city workplaces. Public transport will have a stronger social justice role to cater for less mobile aged people.

Changing household types, densities and land use all influence the ability to provide cost-effective transport systems. Increased densities in inner suburban areas tend to be in areas that can be cost-effectively serviced by public transport, while increased low density expansion in outer areas tends to be very costly to service with cycling and walking facilities, roads and public transport. If future growth is dispersed away from rail and busway corridors, more investment will be needed to support new residential areas with attractive public transport options. The ability to provide even basic transport services to residential areas will be compromised.

Caboolture Transport Model

Council, in conjunction with the Department of Main Roads (DMR), has undertaken the preparation of a computer based travel forecasting model for the purposes of:

- assessing road network linkages and major road junction configurations;
- planning a functional road hierarchy;
- providing design forecasts and network evaluation data; and
- providing a framework for a road infrastructure charges plan.

The traffic model will use 1999 as the base year and establish future base year networks for 2011, 2016 and 2031 as well as providing traffic forecasts for selected conditions. The road hierarchy that is to be established as part of the Model is to be included in the planning scheme.

The model will be capable of being upgraded to include:

- assessment of transport policy initiatives to meet IRTP targets;
- public transport planning;
- assessment of transportation impacts on land use scenarios; and
- assessment of new development traffic impacts.

Bicycle and Pedestrian Network Strategy

The Caboolture Bicycle and Pedestrian Network Strategy is the second of the transportation strategies being undertaken by Council. It is aimed at encouraging and increasing walking and bicycle usage as a viable alternative mode of transport as well as assisting to curb increased demand for travel by private motor vehicles. It is also intended that the strategy will put measures in place for improved lifestyle, accessibility and recreational opportunities for Caboolture residents, particularly in relation to linkages with the Caboolture parks and open space network. The key deliverables from the study are:

- Development of a rationale for on-street and off-street cycle lanes and paths;
- Development of a pedestrian and cycle strategy based on the forecast Land Use plan to 2016;
- Development of a works program for the construction of the highest priority pathways;
- Development of standards for on-road, off-road, combined and separate walkways and cycleways.

As demonstrated by these key outputs, the Bikeway Strategy demonstrates Council's commitment to advancing the provisions of higher order principles outlined in the RFGM and the IRTP.

Water and Sewerage

The 1993 Strategic Land Use Plan's basic principles centred on consolidating existing and future developments within the areas designated for urban residential and rural residential purposes. This approach had a significant benefit when planning for infrastructure such as water and sewerage as future land use planning for the Shire did not have a major impact upon such services.

The Shire has extensive water supply and sewer networks servicing most of the urban residential and rural residential (for water supply purposes) areas of the Shire. Construction of new developments usually requires extensions and/or augmentations to the system at the time of development. In new green field developments, the developer is usually responsible for provision of reticulation pipes and trunk mains. Council is responsible for operation and maintenance of the system and for providing augmentations for the trunk system.

Council has undertaken the preparation of Forward Plans, Demand Modelling and Infrastructure Charges Plans for Water and Sewerage in the Shire. Council is seeking to revise its headworks charges for water and sewerage and to make the revised schemes compatible with the Infrastructure Charges Plans required under the *Integrated Planning Act*. A major outcome of this project will be the establishment of a water demand forecasting capability for the Shire which can then be used as a basis for prediction of sewage generation, and ultimately to plan water and sewerage reticulation systems to meet the predicted demands.

Water Supply

The Shire's water supply comes from both internal and external sources. Forty to sixty percent is imported as treated water from Brisbane City Council. Within the Shire, water treatment plants located at Caboolture, Bribie Island, and Woodford extract water from the Caboolture River, Bribie Island sand aquifer and the Stanley River respectively. The reticulation system is such that water from any source can be transported and used anywhere in the water-supply area except that until a pumping station is completed it is possible to export from, but not supply water to Woodford.

The Caboolture plant has a capacity of 15 megalitres per day and distributes water to Caboolture township, Bellmere and parts of Morayfield, Elimbah, Wamuran, Ningi, Beachmere and Bribie Island. The treatment capacity is limited by the river flow stored behind the impounding weir. Council has assessed the viability of augmenting this system by the inclusion of the former Moodlu quarry as a water supply reserve.

The Bribie Island Treatment plant treats ground water from trenches located in the southern section of the Island. The plant has a capacity of 6 megalitres per day but in dry weather is limited by the level of ground water in the aquifer.

The Woodford plant has a capacity of 6 megalitres per day but practically can deliver a maximum of 3.5 megalitres per day.

Reservoirs are located in close proximity to the water treatment plants, the entry point into the shire for the water from Brisbane and at strategic high points throughout the shire. These locations are:

Water Treatment Plants

Bribie Island
Caboolture
Woodford

Reservoirs

Beachmere
Bellara
D'Aguilar
Elimbah
Morayfield
Narangba
Deception Bay

A strategic plan for water was carried out in 1995 and identified sufficient water to supply population growth to 2011. The plan is being updated in 2001 with a planning horizon to 2016. Since the last plan was finalised there has been a slowing of population growth, a decrease in per capita water consumption due to pricing and education, and the use of recycled water for irrigation and industry. The Shire is seeking to develop a borefield in the pine forest in central Bribie Island to the north of the urban area. This borefield would provide an additional 7 megalitres per day. Accordingly, the infrastructure and sources identified for construction by 2011 together with the borefield will provide for the Shire up to and beyond 2016 if there is no change to the availability of water from outside of the Shire.

Sewerage

There are 4 sewage treatment plants within the Shire at South Caboolture, Burpengary East, Woodford and Bribie Island with capacities of 9.6 megalitres per day, 9.0 megalitres per day, 0.69 megalitres per day and 5.8 megalitres per day, respectively.

Since 1993, Council has sewered the areas of Ningi, D'Aguilar, and Baker's Flat. A feasibility study is being undertaken for Toorbul, Donnybrook and Meldale. While this is incomplete, the initial findings suggest that while a sewerage scheme may be appropriate for Donnybrook, there is little justification to sewer Toorbul or Meldale. In late 2000, the Council decided not to proceed with a scheme to provide sewerage to Elimbah until there was more certainty regarding the development of the area.

Council has recently let consultancies to expand the capacity of the South Caboolture and Burpengary East plants. There is spare capacity at the Woodford and Bribie Island plants both of which were expanded and improved in 2000. The limiting factor for the provision of increased sewerage treatment capacity is the limits of certain pollutants such as organic nitrogen and phosphorus that can be discharged into Moreton Bay, as set by the EPA. Once the limit is reached, population increase will have to be satisfied by increasing the level of treatment.

Stormwater

Council has a responsibility to develop a more integrated approach to stormwater management in the Shire. There is a growing awareness of the problems associated with stormwater and its effects on regional waterways. The existing drainage system within Caboolture Shire consists of a network of pipes, open drains, natural creeks and rivers, and overland floodways. Protection of the natural drainage system and overland floodways from encroachment of development is a priority for ensuring the effective operation of the system. Localised deficiencies in the drainage network may impact upon specific redevelopment opportunities. Where the problem occurs at the lower end of a drainage catchment, it may affect the development potential of the whole of the catchment.

An important drainage consideration for new development is the potential to increase flooding risks to areas upstream or down stream of the development. This is particularly relevant where the site is located within or adjacent to flood prone areas or where the existing drainage system is near capacity. These factors are normally considered on a site by site basis as part of the development assessment procedure.

Identification of existing drainage deficiencies and priority areas for remedial works should be undertaken by Council in order to assist planning of areas for higher density development or new development areas. The general increase in the quantity of stormwater due to urban development combined with an increase in the amount of pollutants results in increasing loads of pollutants being discharged into waterways each year.

To this end, Council commenced in 2002 a long term project to prepare waterway management plans for all of the Shire's catchments. This will help to identify the future network planning required to be undertaken and then to also have a charging regime where new development will be required to contribute to the provision of stormwater infrastructure.

Addressing the impacts of stormwater is also a response to the community's increasing expectations in relation to the protection and enhancement of water quality in urban catchments. There is a requirement now to provide water quality infrastructure in developing catchments as well as the requirement, in some instances, to retrofit water quality infrastructure (such as gross pollutant traps, inception devices and the like).

The preservation of waterways used as drinking water supplies provides obvious commercial and public benefits by reducing the requirement for drinking water treatment and reducing public health risk. Healthy waterways also provide economic and social benefits to the local fishing, aquaculture, agriculture, grazing, commercial and tourism industries.

The *Environmental Protection Act* now requires greater regard to be given to the installation of such provisions in order to avoid causing environmental harm. Catchment management objectives also call for the impacts of stormwater discharge to be addressed.

Waste Management

The investigation into waste management has identified a number of land use planning issues that need to be addressed in the planning scheme to ensure the protection of existing and future waste management facilities. Waste management facilities in the Shire are traditionally operated by Council and include transfer stations and landfill stations catering for household and non-household solid waste. The Caboolture landfill site also incorporates the transfer station. In the future, it is likely that the Shire's waste management may involve private operators and regional waste management facilities located within or outside the Shire.

The South East Queensland Regional Framework for Growth Management 2000 (RFGM) includes the following objective for waste management:

'To provide a coordinated regional approach to the management of solid waste and wastewater across the region.'

There are also a number of priority actions involving local government to achieve this overall objective, however most of these relate to operational issues rather than land use planning. Council, along with Redcliffe City and Pine Rivers Shire Councils, have jointly funded regional waste management reports which will be used as a tool in the future to assist the viability of joint waste facilities.

Future urban growth within the Shire will continue to put pressure on existing waste management facilities and subsequently demand for new facilities to be provided. In the past there has been little focus on planning for waste management facilities within the Shire. Some of the existing facilities are located in close proximity to incompatible land uses (such as residential development) and are included in unsuitable land use zones that do not provide for their long term protection.

Council's existing waste transfer stations are located at:

- Pasturage Road, Caboolture;
- Boundary Road, Deception Bay;
- Pumicestone Road, Toorbul; and
- D'Aguilar Highway, Wamuran.

It is expected that the operation of the transfer stations will continue beyond the life of the planning scheme.

Council's existing landfill stations are located at:

- Pasturage Road, Caboolture;
- Bribie Island Road, Ningi;
- Caboolture River Road, Upper Caboolture; and
- Golf Course Road, Woodford.

There are areas within the Shire that are outside the catchment areas of existing facilities, however at this stage, due to low population densities, there are no plans to service these locations.

The 1988 planning scheme is not consistent with regard to waste management facilities. The Strategic Plan provides for major Council infrastructure to be located within the Special Purpose designation. The extent of existing zonings and designations within the planning scheme does not provide for future waste management facilities (including the relocation of existing facilities) within the Shire. Waste disposal sites available within the Shire to meet ongoing needs are limited having regard to amenity and operational issues.

Existing waste management facilities are located on a range of allotment sizes. Most sites are below 10 hectares, however the Caboolture landfill site involves a significantly larger site of about 60 hectares.

Desired sites for future waste management facilities should be identified as early as possible to enable them to be protected in the planning scheme. The scheme should also consider suitable alternative uses such as passive recreation for sites after the closure of the waste management facility. Council's Compliance Services Unit is undertaking a Shire-wide study to identify suitable locations for future waste management facilities including possible land acquisitions. Council plans to expand the extent of landfill operations at the existing Caboolture landfill. Existing waste facilities at Upper Caboolture and Ningi are under pressure to relocate due to the encroachment of incompatible land uses such as residential development. In 2002, it was proposed to convert the Upper Caboolture site to a transfer station facility.

Planning for waste management facilities requires an understanding of the operational requirements involved. Suitable sites for the disposal of waste are limited due to the constraints that apply to an acceptable disposal location. Amenity issues relating to noise, odour, dust, appearance, traffic (including heavy vehicles), and accessibility need to be considered. In response to these issues, waste management facilities should be provided in suitable locations that enable adequate buffers (eg 100-200 metres), appropriate accessibility (eg within 12 kilometres of catchment population), suitable hours of operation, good site planning and design and provision for future expansion if necessary.

Telecommunications

Telecommunication services include communication networks and transmission facilities provided by government, semi-government and private authorities. While Telstra was the principal operator of these facilities, in recent years the growth of the telecommunications industry has seen a number of private companies become major stakeholders in the operation of facilities and networks. Basic telephone services are available throughout the Shire and are provided on an as-needed basis as development expands.

Within Caboolture Shire, there are a number of public and private telecommunications facilities operating. One of the largest is the site operated by Telstra who has a major communication facility just west of Ningi township on the Bribie Island Road. Other communication facilities are evident along the coastline and within the hinterland areas of the Shire.

Deregulation of the telecommunication industry has seen the introduction of other competitors to the market, most notably by the providers of mobile telephone services. In 2002, there were five Telecommunication Facility providers within the Shire with the potential for more operators to be established. The biggest impact of their operations is the establishment of mobile phone towers which has generated a great deal of interest and concern regarding amenity particularly in terms of visual and health considerations.

The location of telecommunication facilities is largely determined by the location of the user. Within Caboolture Shire, most of the population is centred around the growth corridors in close proximity to the Bruce Highway, consequently, most of the phone towers are located within this area. Future facilities are likely to be within this area as well as any other location which is the centre for population growth. The need to ensure that the future location and design elements for phone towers is an important consideration in the preparation of a planning scheme.

Electricity

Electricity is available, or capable of being provided to all areas within the Shire. The issues relating to the provision of electricity include the impact of urban sprawl versus consolidation, the location of high voltage powerlines, potential radiation from these lines and other facilities, underground cabling versus above ground provisions within developed areas.

These issues are addressed through the provisions contained within codes, most notably the reconfiguration of a lot code. The future planning and determination of residential uses and occupation will need to consider the impacts of high voltage powerlines within the Shire.

Gas

The provision of reticulated gas within the Shire is strictly limited to the Narangba Industrial Estate. A supply to residential areas is not provided and there are no plans to extend the service at this point in time to other parts of the Shire. Service providers have indicated that future planning will include possible extension of the service to as far north as Nambour with the pipes being located within the Bruce Highway road reserve. The provision of reticulated gas is determined by the level of demand with the potential for some industries in the Shire to use natural gas in its operations.

There are plans to construct a Gatton to Gympie gas pipeline which will traverse the north-western parts of the Shire. If sufficient demand is demonstrated, then consideration to servicing other areas of the Shire will be considered.

Review of Planning Scheme Provisions

Transport

The current planning scheme contains a number of provisions which consider traffic and transport impacts. The 1993 Strategic Land Use Plan contains two objectives that encourage the provision of a functional road system in order to facilitate safe and convenient movements, and encourage the development and use of public transport systems throughout the Shire. The SLUP also contains a road hierarchy map setting out the current and future roads for the Shire.

The implementation of these objectives is delivered through the assessment of development applications where proposals which detrimentally impact upon the functioning of the existing and future road network will either be conditioned appropriately or not be favourably considered. Consideration is also given to the provision of roads and any impact upon the natural environment by way of taking into account Council's Atlas of Natural Assets. With regards to public transport, Council will ensure that future development is located and designed in a manner which permits the optimal use of existing and planned public transport systems.

The planning scheme also consists of a number of other provisions which address traffic and transport impacts. These include subdivision requirements that address road network and design, car parking provisions for individual land uses, and visual and open space considerations where buffers are to be encouraged along major transport routes in the Shire.

While the current provisions have, to an extent, worked well in terms of addressing the land use and transport planning issues, they need to be reviewed to reflect current practices. As indicated earlier, planning and providing for a successful transport system is dependent upon taking into account a range of community, traffic, land use, environmental, social, and economic considerations.

Water and Sewerage

The 1993 Strategic Land Use Plan recognises some of the water supply and sewerage treatment plants within the Shire through the "Special Purposes" designation on the planning map. Specifically these are for the Caboolture Water Treatment Plant, Caboolture North and

Caboolture South Sewerage Treatment Plants, the Bribie Island Water and Sewerage Treatment Plants, and a future sewage treatment plant east of the Bruce Highway at Morayfield.

The Caboolture North STP was decommissioned in 2000. The investigation into a possible sewage effluent disposal area at Morayfield was discontinued due to environmental constraints and is no longer considered suitable by Council. The designation covering both of these sites will need to be removed.

All of the water and sewage treatment plants within the Shire are included within the Special Purpose zone on the planning scheme maps. For most sites, this also includes other infrastructure such as water reservoirs. As Council has acquired new sites for water supply and sewerage purposes, these have been rezoned to Special Purpose to accommodate the intended use. In situations such as the establishment of the South Caboolture Treatment Plant at Weier Road, an impact assessment for the site was undertaken.

Other Infrastructure

As the establishment of such uses generally requires the approval of State environmental licensing authorities such as the Environmental Protection Agency, Council is committed to establishing infrastructure which meets current and emerging industry standards.

Utilities such as electricity, gas and telecommunications are recognised and provided for within the planning scheme principally through the Special Purpose zone. It is expected that specific designation or recognition of important infrastructure will continue.

The existing Town Planning Scheme for the Shire of Caboolture includes a Special Purpose Zone and Special Facilities Zone which provide for waste management facilities. The existing facilities are generally included in the Special Purpose Zone, however there are also facilities included in the General Industry Zone and Rural Zone.

The Caboolture Shire Council Strategic Land Use Plan 1993 (SLUP) provides for major infrastructure items such as waste management facilities to be located within the Special Purpose designation. However, the location and extent of the Special Purpose Areas identified on the Strategic Plan Map does not include existing waste transfer stations and landfills.

Community Consultation

Transport

The transport issues raised during the consultation could be grouped into one of three main categories, i.e. safety and mobility, public transport, bikeways and walkways. These are identical to the three main transport groupings identified previously. Overall, transport issues scored consistently high across the Shire during the consultation process.

Specifically, the need to improve pedestrian walkways and bikeways figured prominently as did the need to improve the condition of roads within the Shire. Traffic congestion problems were upper most in the views of many respondents, particularly in the Caboolture and Morayfield areas. Ensuring that appropriate transport links exist between outer areas such as Bribie Island or Ningi and Caboolture was also considered important for the future. Other traffic related problems such as noise, speed, heavy vehicles, and the need to review on-site car parking provisions were also identified.

Public transport was an important issue attracting a response from most localities of the Shire and at all public meetings. There is an identified need to provide such a service to most areas of the Shire while those who already have some form of transport considered that more frequent services, such as for buses, was needed. While acknowledging these responses achievement of acceptable outcomes may be difficult in all areas given the fragmented nature of development in the Shire and the high percentage of rural and rural residential areas with relatively low population densities.

While issues such as improving mobility through public transport, bikeways and pedestrian walkways can be supported and considered to an extent within the planning scheme, many of the issues raised regarding local maintenance or street improvements cannot be specifically addressed by the planning scheme.

Water and Sewerage

The issue of water supply and sewerage was not raised as a major issue during the community consultation. The need to sewer outlying areas of the Shire was raised as a priority, which is an issue that can be addressed in the future planning for the sewer network. However, the technical difficulties and financial constraints arising from extending services to the outlying areas act as a constraint. Council may consider undertaking a study in the future to test the

feasibility of small package sewage treatment plants being used to service rural residential developments as an alternative to on-site disposal.

Other Infrastructure

There were not any issues raised regarding waste management, the provision of electricity or gas within the Shire during the community consultation period. For telecommunications, the concerns about the health and visual impacts of mobile phone towers continues to be raised by the community.

Discussion

As indicated in the introduction, infrastructure is listed as one of the core matters to be addressed in the preparation of a planning scheme. The discussion on each of the infrastructure items identified in the foregoing highlights the vast range of issues which need to be addressed. Not all of these can be provided for within the planning scheme but the scheme can provide support for higher order strategies and objectives advanced by Council and State Agencies. At the very least, the planning scheme needs to include appropriate provisions which support and protect infrastructure.

The summaries provided above for each of the State or regional documents emphasise that there are a number of issues which need to be addressed for transport planning in South East Queensland and for that matter, Caboolture Shire. It is clearly evident that land use and transport planning are linked but land use policies by themselves cannot address all of the issues and challenges which transport planning faces now and in the future. Transport planning needs a suite of strategies, for which land use policies can assist, in order to deliver outcomes for the higher order objectives contained within transport strategies.

For the planning scheme, there are some fundamental principles which can be considered that involve both new and redeveloped communities. These are outlined as follows:

- concentrating new urban development around major public transport interchanges and railway stations to restrain urban sprawl and concentrate passenger demand within easy reach of public transport routes;
- ensuring residential and other compatible land uses are better mixed;
- putting the right businesses in the right places, so those businesses to which people can walk are located near public transport, and those businesses which require car and truck access are located near major roads or interchanges;
- concentrating major employment growth and other activities in agreed major centres which are well served by public transport;
- improving accessibility to bus, cycling and pedestrian options and ensuring connectivity and access to economic and social activity centres;
- reviewing car parking rates for various uses especially those within centre developments;
- encouraging developers to support early operation of public transport services.

The foregoing comments in this section indicate that the existing water supply and sewerage network has sufficient capacity to accommodate the future population growth that is anticipated for the Shire. Council has continually improved and augmented various schemes over the years to improve the quality of life of the users. It has been important for these services and upgrades to be provided in a logical manner to ensure that the costs of having to service any out of sequence development does not burden the wider community.

The planning scheme needs to identify the location of any water and sewerage network facility to ensure their long term protection from incompatible land uses.

The commencement of a series of waterway management plans in 2002 represents a major advancement in the identification of issues and solutions for stormwater planning and management across the Shire.

The existing waste management facilities in the Shire involve a number locational and amenity issues that need to be addressed in the planning scheme. For gas and electricity, the scheme needs to identify the location of major infrastructure corridors so that future land uses are not compromised and that development does not impact upon the location of important infrastructure for the Shire and region.

For utilities such as mobile phone towers, the planning scheme needs to include appropriate measures through codes to ensure that the community does not suffer amenity and health risks which can potentially be created by such facilities.

Conclusions

Based on the foregoing assessment of infrastructure issues, the following conclusions are made.

- (1) Land use and transport planning need to be integrated.
- (2) There is a need to develop an efficient road network system for the Shire while recognising that the demand for all forms of transport will increase.
- (3) Transport issues impact upon the environment eg. high dependence upon the car poses a serious threat to the air quality of a region.
- (4) Alternative forms of transport to the private motor vehicle such as public transport, pedestrian and cycle ways need to be promoted and accommodated.
- (5) There is sufficient capacity within the current water supply and sewerage network systems to provide for the projected population growth in the Shire.
- (6) To remain viable in the long-term, all infrastructure items (such as water supply and sewage treatment plants, and waste management facilities) require protection from encroachment by incompatible land uses.
- (7) The provision of private infrastructure facilities is an important consideration in the future planning for the Shire.
- (8) The potential impacts of land use on stormwater runoff need to be appropriately managed.

Section 11- **Cultural Heritage**

Introduction

Issues

State Context

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Cultural Heritage

Introduction

The issue of the management, identification and protection of sites and places of cultural heritage significance has become a major consideration in the future planning for our communities. Legislative requirements now require Council to actively consider these matters in preparing planning schemes.

In order to understand what is meant by cultural heritage, guidance is provided by the Australian Natural Heritage Charter which describes cultural heritage as those sites, places, landscapes and items of aesthetic, historic, scientific, cultural or social values for past, present or future generations. Other descriptions of cultural heritage will be included within this section for comparison and discussion purposes.

For the purposes of the planning scheme, cultural heritage issues are divided into the following two broad categories:

Indigenous Cultural Heritage: sites, places, landscapes, items and values of cultural heritage significance generated by indigenous traditions and associated with local traditional owners;

European Cultural Heritage: sites, places, landscapes, items and values of cultural heritage significance associated with the shared history of all cultures within the local community since non-indigenous settlement.

Issues

The requirements to address cultural heritage issues for a planning scheme fall under the control of a number of different legislative provisions that will be discussed as follows.

State Context

For planning schemes, the starting point is with the provisions of the *Integrated Planning Act* (IPA). Cultural heritage is addressed at the outset of the Act. The purpose of the IPA is stated as seeking to achieve "ecological sustainability". Ecological sustainability is about allowing for growth and development that represents a balance between ecological, economic, and community and social wellbeing considerations. Cultural heritage issues are one component of the community and social dimension. Specifically, the IPA states that:

"The cultural, economic, physical and social well being of people is maintained if:-

areas and places of special aesthetic, architectural, cultural, historic, scientific, social or spiritual significance are conserved or enhanced".

With regards to preparing a scheme, the IPA outlines the three core matters that need to be considered. One of the core matters is "valuable features". Cultural heritage also forms one component of this aspect as described in the following:

"areas or places of cultural heritage significance (such as areas or places of indigenous cultural significance, or aesthetic, architectural, historical, social or technological significance, to the present generation or past or future generations)."

The other State legislation that needs to be considered includes:

- **Aboriginal Cultural Heritage Act 2003 and Torres Strait Islander Cultural Heritage Act 2003** – which are new legislation that took effect in 2004 for the recognition and more stringent protection of Aboriginal and Torres Strait Islander cultural heritage. Some key features of the legislation are: a new statutory duty of care; protection of areas as well as objects that are particularly significant because of indigenous tradition and custom or history; formalisation of a cultural heritage database recording sites, places and objects; identification of registered native title claimants as the relevant indigenous party for cultural heritage issues; and cultural heritage requirements may be triggered by environmental and planning processes.

The legislation is particularly important for entities involved in the construction of new projects or other activities which involve disturbance to land. A key component of the process is the preparation of an approved Cultural Heritage Management Plan.

The primary source of data for indigenous cultural heritage in Queensland are the listings maintained for sites and places of indigenous significance maintained by the Cultural Heritage Branch of the Environmental Protection Agency (EPA). To protect the sites from potential vandalism, the detailed listings and any accompanying information are not available for public access. However, under QCHIP (Queensland Cultural Heritage Inventory of Places) which is a GIS database project currently being developed by the EPA, extensive data will be available for public research and assessment methods.

The Australian Heritage Commission maintains the Register of the National Estate, which identifies places of natural, indigenous and historic significance. The Abbey Museum of Art and Archaeology is a private museum situated within the Shire and it too has compiled a list of sites of indigenous significance.

The EPA has also been proactive in assisting Councils to address cultural heritage issues in preparing planning schemes through the release of the *Guidelines for Cultural Heritage Management*. The Guidelines are well set out in terms of describing cultural heritage and legislative requirements such as those outlined above, the process to identify sites, and the best manner in which to manage heritage in the planning scheme.

Regional Context

The Regional Framework for Growth Management 2000 (RFGM) includes a priority action to:

"continue a program of indigenous cultural heritage surveys and mapping, and develop and maintain inventories of significant indigenous heritage places and sites." These are to be undertaken for both indigenous and non-indigenous cultural heritage.

The SEQ Cultural Development Strategy has as one of its key actions the collection, conservation and management of the region's cultural heritage information. Council has also undertaken some studies that will address the priority actions contained in the RFGM. These will be discussed in the following section.

Local Context

Caboolture Shire is considered to be rich in cultural heritage resources, both indigenous and non-indigenous in origin. A number of indigenous clans and tribal groups occupied the area and generated a rich legacy of material culture such as archaeological or ceremonial sites, and places of cultural significance. The majority of these places are located along the coast and on Bribie Island. The non-indigenous history of the area has also generated extensive cultural heritage, whether as buildings, townscapes, individual items or cultural landscapes.

Indigenous Cultural Heritage

At present, there is an incomplete understanding of the nature and extent of indigenous cultural heritage in the Caboolture area. A number of archaeological sites are well known, including a number of bora ceremonial sites, the traditional fish trap and middens at Sandstone Point, axe grinding grooves on Glass House Mountain Creek, and a number of midden sites. Other site types that would be expected in the area include scarred trees, artefact scatters, and quarry sources of stone material.

There are also landscapes of great cultural and spiritual significance, such as the Glasshouse Mountains and Mount Neurum. Additionally, a number of sites and places important in indigenous history since European settlement, such as massacre sites, camping places and former mission settlements are also significant elements of local indigenous history.

The relatively limited number of known and identified sites in the area should not be interpreted as an absence of cultural heritage. Rather, the absence of archaeological assessments and studies in the area should also be taken into account, along with the impact of natural and economic changes on cultural heritage.

Council has co-sponsored two projects which have documented the Shire's Indigenous history. The first one is the *Indigenous Ethnographies* which set out to:

- identify sites of Aboriginal cultural heritage significance;
- identify statutory and non-statutory mechanisms for protecting Aboriginal cultural heritage in the Shire;
- document, where appropriate, information relating to Aboriginal occupation, culture, stories, interaction with European settlers.

The study has taken the form of Ethnographies that are to:

- recount an Aboriginal perspective in the history of the Shire,
- assist in interpreting sites of Aboriginal cultural heritage significance;
- promote Aboriginal culture to the present generation and to future generations.

It is intended that this is to be achieved through obtaining stories from elders of groups who identify traditionally with the Shire as well as obtaining stories from those Aboriginal people who have a historic relationship with the Shire.

The second study is the *Pumicestone Passage, Its Catchment and Bribie Island: Integrated Management Strategy – Archaeological Component* which provides an assessment of the significance of local archaeological and cultural heritage in the defined region and provides general recommendations regarding the mitigation of the impact of any proposed development in the area.

It is intended to embellish the information already collected with additional studies and identification of sites over time.

For the longer term, Council will be developing a program that will be seeking to identify indigenous cultural heritage within the Shire. While the two studies already undertaken have proven to be an enormous benefit, they are only the first stage of a journey that needs to be undertaken with regards to consulting, identifying, managing, and understanding the value of indigenous heritage in the Shire and region.

European Heritage

A number of sites, items and places within the Shire possess considerable heritage significance on the basis of their historical, social or cultural associations. These have been identified in the *Caboolture Shire Cultural Heritage Survey*. The objectives of the study were:

- to identify the principal historical themes and processes which have shaped the Shire;
- to identify significant events, people and places which have contributed to the history of the shire;
- to provide a context within which places of potential cultural heritage significance can be surveyed and assessed;
- to provide researched historical information to inform recommendations relating to land use development applications;
- to contribute to a staged assessment and identification of the cultural heritage values of Caboolture Shire.

While a number of sites have been identified, like the indigenous heritage studies undertaken, this project also represents the first stage of an on-going process involving the identification and management of cultural heritage sites and places within the Shire.

With the information gathered so far, the planning scheme can ensure that the significance and value of sites are retained and protected through implementing appropriate measures such as codes. The scheme alone however, cannot protect all of the sites, particularly those on land which is designated as community infrastructure under the provisions of the *Integrated Planning Act* and so is therefore not bound by the planning scheme.

A number of sites are also not situated within registered allotments eg. they are within the road reserve for which the planning scheme has no jurisdiction over. Other identified features may be upon a site such as a reserve or park that will never be subject to a development application but could be subject to routine maintenance. In these instances, proper care and attention may be the most appropriate form of action to retain the site.

Review of Planning Scheme Provisions

The 1988 planning scheme and the 1993 Strategic Land Use Plan did not have any specific cultural heritage provisions in place. Given the lack of heritage registers and a reliance on the (now repealed) *Cultural Record Act* and the *Heritage Act*, developments were assessed on a case by case basis and where relevant, through the environmental impact statement process.

The only planning document with design and heritage considerations is the existing Woodford DCP. The aim of this document is:

"to encourage and ensure that future development within Woodford is of a consistent character and style so as to promote an Australian country town theme which will provide an 'environmental' experience, and an enhanced quality of life for residents and visitors alike".

The driving provisions of the document are the design guidelines established for Woodford township which focus on the 'main street' as well as those elements of the urban and rural landscapes which dictate Woodford's image.

The establishment of a Heritage Register has been undertaken by some other local government authorities as the basis for protecting places of cultural heritage significance within their areas. Accompanying design and development provisions to preserve heritage places generally supports the Heritage Register established by these Councils.

Community Consultation

During the community consultation undertaken as part of the Statement of Proposals phase of the Scheme review, the issue of preservation of the Shire's heritage was raised. Although not identified as one of the most common topics of community concern or importance, it warrants consideration as part of the planning scheme review process and it was suggested that it be integrated within the planning scheme.

In March 2003, Council conducted an information session with landowners and residents whose properties have been identified on the heritage register list in the *Caboolture Shire Cultural Heritage Survey*. The purpose of the session was to provide an outline of the issues relating to the register and at the same time provide an opportunity for landowners to raise any issues for further discussion.

The general feedback from that session was that there is support from the community for the protection of places and buildings within the Shire that have a strong link to our past. The manner in which the protection is to take place will vary depending upon the circumstances but it is considered that at the very least, no demolition or removal of a building should occur.

Discussion

There are legislative requirements for why cultural heritage needs to be considered in the preparation of a planning scheme. The *Integrated Planning Act* sets out the provisions relating to the protection and enhancement of areas of cultural heritage significance. The other reason for incorporating cultural heritage within a planning scheme and the activities of local government is that cultural heritage has as much to do with the present and future as it does with the past. Protecting heritage places has two very important functions for local communities:

- they are a link with the past, a reminder of special events or developments in lives, history or culture; and
- they are part of a location's special identity and can help to foster a sense of belonging and community, as well as bringing economic and other benefits to an area.

Caboolture Shire has experienced rapid change in the past twenty years. The former predominantly rural character of the Shire has been replaced by extensive residential development. In the midst of this rapid change, it is important to provide a sense of identity both to older residents and to those who have settled more recently. The identification and conservation of heritage places can contribute to the Shire's identity.

While many places associated with the Shire's Indigenous and European history no longer survive, those that do provide an important link with the past and can enrich the understanding of what has happened in the Shire. These places can help to shape the Shire identity as more than a dormitory suburb of a larger metropolitan area.

Conclusions

Based on the foregoing assessment of cultural heritage issues for the Shire, the following conclusions are made.

- (1) The key issues for cultural heritage are:
 - identification of places of significance;
 - conservation of places of significance;
 - incorporation of appropriate measures within the planning scheme to identify and protect the places of significance.
- (2) A heritage register list promotes the identification of places of cultural heritage significance through the application of criteria based on the Burra charter.
- (3) It is important to provide a sense of identity both to long-term residents and to those who have settled more recently.
- (4) Cultural heritage assists in providing a sense of belonging to the community and is an important element in providing links with the past and shaping the Shire's future character and identity.
- (5) The planning scheme should address relevant cultural heritage provisions and the priority actions of the RFGM in order to protect cultural heritage values.

Section 12- Community Wellbeing

Introduction

Issues

General Issues

Regional Context

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Review of Planning Scheme Provisions

Community Consultation

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Community Wellbeing

Introduction

The *Integrated Planning Act* (IPA) requires social, economic and ecological considerations to be integrated in planning schemes. Importantly, effective integration of community wellbeing issues also depends on the processes adopted in preparing and implementing planning schemes.

The ways by which planning schemes influence the community include managing the use of community resources (land, people, infrastructure, natural environment, public investment), managing impacts on people's way of life, their culture and their community and promoting opportunities for communities to participate and be represented.

The umbrella covering community wellbeing matters encompasses a wide variety of factors many of which are unable to be included within the scope that the planning scheme allows. While planning is concerned with the integrated and balanced development of a community's resources, it is important to emphasise that it is limited in its scope and should be integrated with other planning processes that influence the use and development of the community's resources.

Social and community issues cover such a wide spectrum of areas that the responsibility to provide for these matters is spread throughout Council's different functions and more importantly various State government agencies depending on jurisdiction, abilities and expertise.

Issues

Planning has always been concerned with community wellbeing issues. Assessing and managing the social effects of development is something that planners deal with on a regular basis through consideration of amenity, accessibility and community wellbeing issues. However, in practice, the social effects of development are not always comprehensively understood or anticipated. The IPA provides an opportunity to address these issues by requiring social, economic, and ecological considerations to be integrated in planning schemes.

General Issues

The IPA requires governments to consider issues of "community well being" as part of the planning agenda. Advancing this Act's purpose includes providing opportunities for community involvement in decision making. As outlined in other sections, the IPA states that ecological sustainability is a balance that integrates –

- protection of ecological processes and natural systems at local, regional, state and wider levels;
- economic development; and
- maintenance of the cultural, economic, physical and social wellbeing of people and communities.

Specifically, the IPA states that *"the cultural, economic, physical and social wellbeing of people and communities is maintained if –*

- (i) well-serviced communities with affordable, efficient, safe and sustainable development are created and maintained; and*
- (ii) areas and places of special aesthetic, architectural, cultural, historic, scientific, social or spiritual significance are conserved or enhanced; and*
- (iii) integrated networks of pleasant and safe public areas for aesthetic enjoyment and cultural, recreational or social interaction are provided."*

In addition to this, the IPA provides for the Minister and/or Local Government to designate land for community infrastructure already existing on the land or that the State, local government or another entity intends to supply on the land. As part of preparing a planning scheme, all State land within the Shire has been examined with a view to establishing an inventory of existing lands and determining relevant State Agency intentions to develop their lands in the future. This review will assist with the determination of land to be designated for community infrastructure as well as facilitating land use planning surrounding these nodes.

During the Statement of Proposals consultation stage of the planning scheme preparation, State agencies were provided with an opportunity to comment. The main state agency providing comments specific to community wellbeing issues was the Department of Families (DF). The comments provided by this agency were based on promoting equality, public safety, accessibility and mobility, housing affordability, housing choice, and ensuring sound urban design principles addressing social and community well being issues are incorporated with the planning scheme. It was also recommended that Council develop a consultation strategy for the preparation of the planning scheme.

Regional Context

The SEQ Regional Framework for Growth Management 2000 (RFGM) sets out a series of objectives, principles and priority actions that are required to be reviewed by Local Governments. The following is an extract of the relevant priority actions for the Social Justice and Human Services component of the RFGM.

Priority Action 10.3

Enhance links between social planning and land use planning process by finalising and implementing planning guidelines and policies. These include:

- integrating community well being into IPA planning schemes;
- integrating State and Regional Dimensions in Planning Schemes;
- preparing Social Planning Guidelines for Queensland Local Governments;
- preparing Social Impact Assessment Guidelines;
- utilising Local Government Housing Resource Kit;
- developing an Affordable Housing Policy;
- undertaking a Trial Implementation in SEQ Local Governments;
- reviewing, evaluating and reporting on the social content in draft IPA planning schemes and the process put in place as part of planning scheme preparation, planning initiatives and IDAS;
- evaluating the relevance and effectiveness of social impact assessment practice in Local Government to inform the guidelines.

Local Context

The historical development of the Shire's townships, together with population growth has resulted in a situation where population growth is dispersed across the Shire and has outstripped the provision of facilities. Social infrastructure is an integral part of the framework that makes up a community. The onus of supplying such facilities does not fall solely on Council and needs to be a combined effort between all levels of government and community.

Caboolture Shire Council plays an important role in the development of community social programs in the Shire. In summary, key social programs include:

- The Social Infrastructure Program, which is administered by Council and funded by State Government, has been designed to ensure that council services and facilities meet the needs of residents.
- Cultural development programs that aim to enhance the quality of life of Shire residents.
- The community-based Caboolture Arts Cultural Steering Committee is the key contact between Council and residents for cultural development programs.
- Development of a Sports Development Plan for major divisions in the Shire, which will aim to manage sporting activities and opportunities in the Shire.
- Youth schemes that aim to provide facilities and services for the youth of the Shire.
- Provision and management of an array of Community Facilities including, but not limited to; community centres, youth facilities, clubrooms, swimming centres, halls, libraries, sportsgrounds, and multipurpose indoor facilities.

Population

A summary of the demographic profile of the Shire has been provided in *Section 3*. An understanding of the composition of the population and trends such as changes in household size and formation is necessary if planning is to be successful in improving the quality of life of the Shire's residents and in providing adequate facilities for the future. It is also necessary for this provision is to be undertaken in the context of equality of opportunity. If planning instruments do not recognise the particular requirements and issues concerning different

groups there is the potential for indirect discrimination against certain sectors of the population.

Community Infrastructure Plan

Council has prepared a draft *Community Facilities Infrastructure Plan*. The aim of the plan is to derive a comprehensive forward plan that analyses the needs, identifies gaps and develops goals and priorities for the logical provision of community facilities over the next twenty (20) years.

Within the context of this plan, the scope of community facilities planning will consider reviewing the provision of settled areas and planning for future residential development.

Community facilities, for the purpose of this plan are expected to include:

- Council owned and managed facilities;
- Council facilities leased to others;
- Facilities on Council owned land;
- Other government owned and run facilities;
- Other government owned and leased facilities;
- Community owned and managed facilities

The plan is expected to address the following issues:

- Identification of existing community facilities;
- Analysis and review of Shire's demographic and socio-economic issues;
- Evaluation of demand and supply of community facilities with regards to local community need and shire wide social trends;
- Identification of gaps in the provision of community facilities;
- Determination of catchment boundaries and population of the community and size of the potential user population;
- Coordination of funding infrastructure consistent with preferred sequence of development;
- Supply of community facilities in an orderly, coordinated and efficient way;
- To forecast demand over periodic timeframes of 5 years over the next 20 years;
- To provide a structured and realistic framework for the timely supply of community facilities in the Shire.

Review of Planning Scheme Provisions

The 1988 planning scheme does not have any specific provisions relating to social matters. Despite this, there are still some provisions in place which indirectly address social and community matters. This is achieved through zonings and development requirements such as car parking, building design, site layout, landscaping, private and public open space. All these factors indirectly contribute to a community's interaction and essentially their well-being.

The Planning Scheme Policy titled "Social Planning – Social Impact Assessment" was developed to ensure that the social consequences resulting from residential development are appropriately assessed. It requires proponents to prepare a Social Impact Assessment with regards to larger scale subdivision developments exceeding 150 lots and developments considered to have a significant social impact.

The 1993 Strategic Land Use Plan through its land use designations, objectives, and supporting planning study contains a number of provisions where social considerations have been included. The provisions will need to be updated having regard to current planning practices and considerations.

For the future, a community wellbeing assessment policy should be developed. This will provide Council with an opportunity to list out the range of matters that should be considered when assessing the impacts of certain types of development.

Community Consultation

During the consultation phase of the Statement of Proposals, Council undertook consultation that included public meetings, shire wide survey/questionnaire, meetings and workshops with community groups. Below is a summary of the findings of each of these forms of consultation.

Questionnaire

Council circulated a newsletter Shire-wide informing residents of the planning scheme review. A questionnaire formed part of the newsletter asking residents to list their likes and dislikes of the Shire, suggested improvements, services required and what they considered to be the Shire's valuable features. Over 2,500 questionnaires were completed and returned to Council. Although there were many issues that are common throughout the Shire, some suggestions applied to particular localities.

Of the responses received the major likes expressed were:

- The ease of access to services (view expressed within the more densely settled areas of Caboolture, Morayfield and Deception Bay)
- The quietness of the locality within which they lived
- The areas of flora and fauna
- The Shire's Beaches
- The Shire's waterways.

Dislikes highlighted included:

- Lack of, and quality of, public transport
- Traffic congestion
- Lack of employment opportunities within the Shire
- The number of vacant shops
- Lack of pedestrian walkways and bikeways.

Suggested improvements raised by the public generally correlated with how they perceived the like and dislikes of the localities. The five main issues raised were:

- Improve public transport
- Improve pedestrian walkways and bikeways
- Improve road networks
- Prevent environmental degradation
- Protect foreshores.

The community also identified the following services that are not provided within the Shire and is required:

- Shopping facilities
- Medical services
- Entertainment facilities
- Education facilities
- Public transport.

There was general consensus over what the community considered to be the Shire's valuable features and what should be protected or enhanced. Understandably, these views focussed on the Shire's natural features, including:

- Flora and Fauna
- Waterways
- Parks
- Pumicestone Passage
- Centenary Lakes.

Community Meetings

Many of the issues raised during this course of community consultation were ones relevant to local communities. Notwithstanding this, many of these issues had applicability across the whole Shire and many of these larger scale issues were repeated throughout all the public meetings held.

The majority of issues raised by communities reflected problems resulting from development being designed primarily around engineering and infrastructure considerations. It was clearly evident that future developments need to be created in a way that fosters community spirit and sense of belonging.

The features of residential development requiring future consideration include:

- Accessibility to public transport;
- Availability to open space for a wide variety of community needs but located close to the communities it is intended to serve;
- Proximity to the facilities and services of an urban community; and
- Better traffic management, particularly through the initial design of roads rather than the retro fitting of traffic control devices.

The other significant issue raised during consultation related to the need to integrate all the relevant tiers of planning. In particular the integration of traffic and transport planning with land use planning, integration of the protection of environmental values (watercourses, riparian lands, Pumicestone Passage and significant fauna and vegetation) with urban development.

In summary the main issues expressed by the community included:

- Retention of the peaceful and quiet environs;
- Protection of the Shire's significant environmental attributes (natural bushland, wetlands and mangroves, fauna and flora water quality issues, wildlife corridors, foreshore),
- Effective management of environmental impacts,
- Retention of the country atmosphere and the unspoilt character of the area.
- Provision of parkland and associated facilities,
- Provision of public transport, cycleways and walkways,
- Water quality of the waterways including the Pumicestone Passage,
- Facilitate/Encourage economic development with emphasis toward creating employment,
- Development of suitable design codes for all types of land uses,
- Access to facilities and services,
- Suitable design and management of traffic and transport,
- Improvement of retail and commercial activities (lowering vacancy rates in certain areas, revitalisation of centres and provision of a greater variety of services),
- Addressing community image,
- Preservation of the Shire's heritage,
- Assessment of social infrastructure,
- Provision of purpose built buildings to meet the needs of community sectors (the aged, youth),
- Public safety and security,
- Retention of larger lot sizes - rural residential development,

A number of other issues raised also demonstrated the need to have programs directed from the level of the Corporate Plan and implemented throughout the different Units of Council.

Community Groups

Several community groups were consulted during the period of consultation for the Statement of Proposals. These included meeting with the Social Infrastructure Program (SIP) – which includes representatives from 15 separate community groups, undertaking a workshop with Environment Groups, and a meeting with Youth groups. As expected these groups raised issues relating to their particular interests.

Strategic Framework Consultation

In March and April 2002, Council conducted an extensive consultation program for part of its planning scheme. The process involved targeted and area based workshops. Council had developed a draft strategic framework containing the desired environmental outcomes, strategies, overall outcomes and saw the need to test these provisions.

The outcome from the session was that feedback was provided that confirmed many of the issues considered and also identified ones that needed to be included. The consultation was also supported by two newsletters.

Other Consultation

Council has undertaken considerable public consultation in the past when undertaking projects such as the Corporate Plan, Community Action Plans, preparation of various other planning documents, Management Plans, Open Space Strategies and the like.

All comments received during the Statement of Proposals consultation phase have been summarised into separate reports.

Discussion

The major issue to emerge is that for preparing a planning scheme, community well-being issues are wide-ranging and depend as much upon the process to prepare the scheme as they do for policy content. The various guidelines that have been developed to date have been utilised in the preparation of the planning scheme.

For policy content, community well-being is reflected in the decisions made for all land uses and themes covered by a planning scheme.

Conclusions

Based on the foregoing discussion of the community well-being issues and having regard to the provisions contained within documents referred to in this section, the following conclusions are made.

- (1) The Integrated Planning Act is explicit in its requirements for community wellbeing issues to be addressed in the preparation of policies and outcomes for the planning scheme.
- (2) The Regional Framework for Growth Management requires social planning to be integrated with the broader land use planning and the provision of human services.
- (3) For integrating community wellbeing issues, the principles of equity and justice, community participation and development, and integration and coordination are important for the future planning of the Shire's communities. The ability to involve the community in the process is just as important as the preparation of policies and outcomes.
- (4) The preparation of a *Community Facilities Infrastructure Plan* will assist the planning scheme to identify future land use requirements for the Shire so that development takes into account the needs of current and future residents.
- (5) Liveable communities should be developed through integrated land use, transport, recreational, transport and social infrastructure planning. Consideration regarding the impacts of development should include:
 - people's way of life;
 - shared beliefs, customs, values and aspirations; and
 - community identity, facilities and services.

Historic Version
Caboolture ShirePlan



Section 13 - Natural Resources

Introduction

Issues

*Commonwealth and International
Considerations*

State Legislative Provisions

State and Regional Strategies

Studies and Research

Review of Planning Scheme Provisions

Community Consultation

Discussion

Conclusions

Natural Resources

Introduction

Caboorture Shire is an area containing and surrounded by a diverse range of natural assets. From the mountains of the D'Aguilar Ranges to the mangrove-lined estuaries of Deception Bay and Pumicestone Passage, the many landscapes support a rich abundance of natural life and systems. The identification and protection of valuable features within the Shire is an important task to be undertaken in order to ensure that these assets are preserved for future generations.

Issues

There are a number of international, national, state, regional and local provisions in the form of legislation, strategies and guidelines that aim to protect, manage and enhance our natural resources. The purpose of this section is to outline the range of issues that need to be considered in addressing the Shire's natural resources for the planning scheme. Specifically, this section will provide an overview of each of the legislative provisions that the planning scheme needs to consider both for its preparation and on-going administration. This will be followed by an outline of the range of individual projects and tasks that have been undertaken, and then a summary of the implications for the planning scheme.

Commonwealth and International Considerations

There are provisions at the Commonwealth and international levels that need to be considered in relation to planning for natural resources within the Shire. While not all of these contain specific actions they do provide a context in broad terms, upon which biodiversity and sustainability principles are developed and implemented within State legislation and regional planning programs.

The Environment Protection and Biodiversity Conservation Act.

Under the Act, actions that are likely to have a significant impact on matters of national environmental significance are subject to a rigorous assessment and approval process. An action includes a project, development, undertaking, activity, or series of activities. There are six matters of national environmental significance in the EPBC Act:

- world heritage properties
- Ramsar wetlands of international significance
- nationally threatened species and ecological communities
- migratory species
- Commonwealth marine areas
- nuclear actions

The EPBC Act also applies to actions that are likely to have a significant impact on the environment of Commonwealth land (even if taken outside Commonwealth land) and actions taken by the Commonwealth that will have a significant impact on the environment anywhere in the world.

The areas within Caboorture Shire that are affected by the provisions of the EPBC Act mainly include the coastal areas of the Shire where Ramsar sites are located.

RAMSAR

The Convention on Wetlands, signed in Ramsar, Iran, in 1971 is an intergovernmental treaty which provides the framework for national action and international cooperation for the conservation and wise use of wetlands and their resources. There are presently 123 contracting parties to the Convention, with 1060 wetland sites, totalling 80.6 million hectares, designated for inclusion in the Ramsar List of Wetlands of International Importance.

The Ramsar site affecting south-east Queensland includes the whole of the Moreton Bay area, inclusive of the Pumicestone Passage.

JAMBA and CAMBA

Australia has also become signatories to international agreements. The Japan–Australia and China–Australia Migratory Birds Agreements (called JAMBA and CAMBA respectively) provide for cooperation between the governments involved to protect shared migratory species and their habitats.

Species covered by CAMBA and JAMBA are included regardless of their status or habitat requirements. These include the Whimbrel, Bar-tailed Godwit, Cattle Egret and the Grey Plover. The areas affected by these agreements include all migratory bird habitats that are generally located along the coastal parts of the Shire.

Local Agenda 21

Local Agenda 21 is a global approach that recognises the potential to progress towards Ecological Sustainable Development (ESD) by harnessing local knowledge and coordinating actions. It originates from Chapter 28 of Agenda 21, the document developed at the United Nations Conference on Environment and Development (UNCED) held in Rio de Janeiro, Brazil, in 1992 (the Rio Earth Summit). Council, through many of its programs and initiatives can support and advance the ESD principles advanced under this program.

Cities for Climate Protection

Cities for Climate Protection is an innovative program, which assists local governments and their communities reduce greenhouse gas emissions. There are two delivery components to the program.

- a five-stage milestone campaign, which is delivered through the Council for Local Environmental Initiatives; and
- a series of specific packages of assistance (Local Greenhouse Action Modules), to enable councils to identify, quantify, verify and undertake actions to reduce greenhouse gas emissions.

Council has already demonstrated its support for the program by achieving Milestone 3 of the program.

State Legislative Provisions

The State legislation which requires the planning, managing and integration of natural resource issues are summarised as follows. While this list is not comprehensive, it does highlight the major ones that need to be considered.

Coastal Protection and Management Act

The purpose of this legislation is to protect and manage Queensland's coastal zone while allowing for development that improves the total quality of life, now and in the future, in a way that maintains the ecological processes on which life depends. This is to be achieved by an integrated approach to coastal planning and development control provisions consistent with the principles of ecological sustainable development. The Act provides for the development of State and regional coastal management plans.

Environmental Protection Act and Regulations

The *Environmental Protection Act* aims to protect the State's environment by allowing for development that improves the community's total quality of life whilst maintaining the ecological processes on which life depends. To support the legislation in obtaining this objective there are regulations and policies, addressing various aspects of the environment, in operation. These include:

- Environmental Protection (Air) Policy 1997;
- Environmental Protection (Interim Waste) Regulations 1996;
- Environmental Protection (Noise) Policy 1997;
- Environmental Protection (Waste Management) Policy 2000;
- Environmental Protection (Waste Management) Regulation 2000;
- Environmental Protection (Water) Policy 1997; and
- Environmental Protection Regulation 1998.

Fisheries Act

The Fisheries Act provides for the management, use, development and protection of fisheries resources and fish habitats and the management of aquaculture activities, and for related purposes. The planning scheme must have regard to this in relation to development affecting fish habitats. These fish habitat areas adjacent to the Shire are situated within Deception Bay.

Integrated Planning Act

The principal legislation within Queensland to guide the preparation of planning schemes is the Integrated Planning Act (IPA). Its main purpose is to advance ecological sustainability by identifying and integrating social, ecological and economic considerations. It also outlines, as part of the core matters, the valuable features which a planning scheme is to identify and protect in providing for future growth and development in a local authority. The IPA requires a higher level of integration of natural resources planning and management than what has occurred in previous planning schemes.

Under the IPA there are also a number of State Planning Policies that are currently in force. Not all of them relate specifically to planning and managing our natural resources. Where they are relevant, the appropriate reference is made in other sections of this *Background Study*.

Nature Conservation Act

The *Nature Conservation Act* and its associated regulations recognise that local government planning should be consistent with management plans for protected areas and areas under conservation plans (including critical habitat or areas of major interest) in order to protect biological diversity. Local governments have a responsibility for protection of rare and threatened species and their habitats, along with native flora and fauna.

Vegetation Management Act

The purpose of the Vegetation Management Act (VMA) is to regulate the clearing of native vegetation on freehold land and particularly endangered regional ecosystems. The VMA also serves to regulate vegetation clearing on freehold land and freeholding leases to maintain biodiversity and ensure ecologically sustainable land use. The fact that it directly impacts upon freehold land means that it has the potential to impact upon a large area of the Shire.

The introduction of the VMA has resulted in amendments to the IPA including:

- making the "clearing of vegetation on freehold land" operational work.
- making the "clearing of vegetation on freehold land" assessable development – code assessable.
- establishing a framework to determine assessment manager and referral agencies.

Water Act 2000

This Act provides for the sustainable management of water and other resources, through a regulatory framework for providing water and sewerage services and the establishment and operation of water authorities, and for other purposes. The Act is supported by a series of Regulations, By-Laws, and Plans.

State and Regional Strategies

There are a number of regional planning programs and initiatives that directly influence natural resource management and planning within the Shire and South East Queensland.

Guidelines for Protecting Regional Landscape Values in Planning Schemes for Local Governments in SEQ.

The Regional Landscape Strategy (RLS) is a document that supports the RFGM. The guidelines are designed to assist local governments to ensure that areas referred to in Principle 5.5 of the RFGM are identified and protected in planning schemes. The guidelines focus on regulatory mechanisms through planning schemes, however some management strategies are recognised and acknowledged.

The values include broad nature conservation, high land and water conservation, high scenic amenity, cultural heritage and social significance to a community, separation of urban areas, linking of open space lands, and outdoor recreation. The planning scheme is to coordinate and integrate these valuable features, including their State and regional dimensions, with the other core matters of Land Use and Development and Infrastructure.

Pumicestone Region Catchment Management Strategy

The cooperatively developed Catchment Management Strategy responds to a variety of water quality and land use issues identified in earlier studies, and the combination of pressures arising from competing land uses and attendant ecological, economic, and social problems that have resulted. Its value for consideration during the preparation of the Shire's planning scheme is highlighted by its focus on local issues and values that affect land uses within the Pumicestone Passage catchment.

Regional Framework for Growth Management 2000

The Regional Framework for Growth Management (RFGM) has established within its plan, principles and priority actions that seek to deal with the management of the region's natural assets. The major themes which are relevant to the protection of natural resources for the Shire and region are the *Conservation of the Natural Environment, Water Quality, Air Quality, and Regional Landscape*. There are a number of priority actions that are the responsibility of Federal Government, State agencies, or local government to implement and manage.

SEQ Regional Air Quality Strategy

Government, industry, and the community have combined to develop the South East Queensland Regional Air Quality Strategy to address air quality issues in the region. The strategy is intended to address those aspects of air quality which have regionally significant effects on the environmental values of human health and well-being, as well as ecological sustainability and amenity, which includes visibility. The focus is on those pollutants that contribute to regional pollution levels, although the need to develop strategies to deal with particular local issues is also recognised.

SEQ Regional Nature Conservation Strategy

The Nature Conservation Strategy establishes a system by which to define areas of high conservation value as a sound basis for planning, development control, environmental protection and rehabilitation. The system established is known as the Common Conservation Classification System (CCCS) and is to be utilised throughout South East Queensland enabling common and consistent mapping from one Council to the next.

The CCCS classifies the significance of mapped remnant vegetation units for nature conservation purposes, with standardised criteria and levels of data collection, that can be consistently applied throughout the region. The system is reliable and although the number of options appears initially complex, the outputs are legible and capable of flexible use in regional and local government planning and conservation management.

SEQ Regional Water Quality Management Strategy

The SEQ Regional Water Quality Management Strategy provides for future actions to protect the region's waterways and catchments. Its aim is to deal with water quality (including habitat, wildlife and ecological health) impacts from activities and point and non-point pollution sources in the region. The strategy will provide sound scientific information to decide management actions.

State Coastal Management Plan

The State Coastal Management Plan prepared by the EPA seeks to protect and maintain coastal resources and their values and manage the pressures on these resources. The Plan provides policy for the management of Queensland's coastal resources through addressing coastal use and development, physical coastal processes, public access to the coast, water quality, cultural heritage, coastal landscapes, conserving nature, coordinated management, research and information.

The Plan was effective from February 2002 functioning as a State Planning Policy. Council will be required to consider this Plan during the course of preparing its planning scheme and implementation of the IDAS process.

Strategic Guide to Natural Resource Management in SEQ

The strategic guide will assist management and conservation of natural resources in the region through the use of Natural Heritage Trust (NHT) funds and potentially, other funding sources. It is envisaged to develop partnerships amongst those involved in natural resource management developing sustainable approaches to land and water management.

The strategic guide is:

- is a long-term framework for communities to work together at natural resource management;
- provides a regional scale approach to resource management and biodiversity conservation;
- is linked and integrated with other regional planning and resource management strategies, and strategies and policies developed at the State, national and international level.

It provides valuable information regarding the incorporation of natural resource issues within the preparation of the planning scheme.

Studies and Research

The provisions of the *Strategic Guide to Natural Resource Management in South East Queensland 2000* outline a number of measures which can be undertaken to assist with the management and planning of natural resources. The framework it has established is based upon the four major themes of biodiversity, water, land, and coasts and seas. There are also two other themes that set out education and management arrangements to support the implementation of the goals for each of the major themes.

Within each theme, the Strategic Guide sets out the strategies and actions that are required to achieve the outcomes being sought. While some measures can be addressed either within the planning scheme or as part of the process to prepare the scheme, many of the suggested actions and strategies are not the sole responsibility of the planning scheme. In most cases, these are better addressed through other mechanisms and functions of Council and will not be specifically covered within this section.

The provisions of the Strategic Guide have been used extensively during the discussion of issues within this section. In some parts, text from the document has been reproduced where it has accurately provided a summary of the issues which need to be considered.

The following discussion provides an outline of each of the four major themes in the context of identifying what the strategies are, understanding what the strategies mean in the context of the planning scheme, and outlining the projects and studies that have been undertaken.

It should be noted that cultural heritage is one of the major components of the Shire's natural resources. It has been specifically addressed within *section 11* of this *Background Study*.

(A) The Strategies and Actions

Biodiversity

Biological diversity (biodiversity) is the natural diversity of native wildlife (plant and animal), together with the environmental conditions necessary for their survival. It has four components namely, regional diversity, ecosystem diversity, species diversity, and genetic diversity. The Strategic Guide identifies South East Queensland as having a wide diversity of natural resources, including biological resources.

The area contains plants and animals that are found nowhere else and a wide range of habitat types. It contains habitats of both rare and threatened species of plants and animals; sites listed under international treaties and conventions; habitats of migratory birds recognised under international treaties; and ecosystems with important ecological functions such as mangroves, riparian areas, floodplains, salt marshes, and other tidal and non-tidal wetlands.

The Strategic Guide recognises that management of biodiversity in the region needs to take into account the threatening processes. There is clear evidence that the region's biodiversity and the associated values that the community places on these resources are under threat of degradation and perhaps eventual loss. More recent pressures on the biodiversity of the region stem from rapid population growth. As a consequence, much of the remnant vegetation is being rapidly cleared and fragmented.

The dominant threatening activities operating in South East Queensland include inappropriate land clearing, land-use management and fire management, subdivision, mining, road and rail construction and expanding urban and rural residential development. These activities can be managed appropriately and sustainably to avoid the impact that can occur unchecked. Emerging issues that threaten the biodiversity of South East Queensland include:

- loss and degradation of native vegetation and fauna habitat;
- fragmentation and isolation of remaining bushland;
- increasing pressures on coastal ecosystems;
- changes in the natural biodiversity from invasive plants, feral animals and diseases;
- changes in catchment hydrology from changing land use;
- inappropriate water management (in-stream infrastructure);
- deterioration in water quality from diffuse and point-source pollution discharges;
- changes in the predation patterns on native animals;
- fauna road mortality.

The strategies and actions to address the issues facing biodiversity are:

1. gather, analyse and integrate data related to biological diversity;
2. foster and encourage community and government involvement in the protection, management and restoration of biodiversity;
3. encourage the use of voluntary land-use (property) agreements and appropriate regulatory strategies;
4. identify and implement effective monitoring and reporting strategies to help assess and better manage the region's biodiversity.

Water

The Strategic Guide identifies water as being an essential part of our natural resources and is a variable, intermittent and slowly renewable resource. The demands of this resources often exceed its availability. In-stream ecosystems must be carefully managed and monitored in order to keep the river systems and their dependant wildlife healthy and to maintain water quality.

The Strategic Guide identifies the threats to our water resources as being the decline of water quality, water availability and use, and flooding. The quality of water resources is dependent on how well we manage our catchments, waterways and groundwater supplies. Stormwater run-off and treated wastewater can contain a range of contaminants that end up in streams and rivers having a detrimental effect on water quality and native aquatic flora and fauna. The 1998 Moreton Bay Catchment Water Quality Management Strategy (now the SEQRWQMS) identified excess sedimentation, excess nutrient levels, and loss of riparian vegetation as the priority water quality issues for south-east Queensland's major catchment system.

Water availability is affected by catchment vegetation, geology, and land use. Flooding is a natural and essential feature of our ecosystem that has the potential to cause major damage and community disruption. The cost of flooding includes environmental damage and the loss of life, property, and agricultural production.

The strategies and actions to address water resource management are:

1. develop and implement policies, plans, practices and standards for:
 - sustainable domestic and industrial wastewater treatment;
 - sustainable land use and improved water quality
 - managing impoundment release patterns and flood risk
 - water extraction, efficient water use in agriculture, industry and urban areas, and environmental flow;
 - manage urban stormwater and develop plans for existing and new areas.
2. protect, manage and restore riparian corridors including management of streambank and marine areas;
3. foster and encourage involvement and networking of community, industry, business and government in water resource management.

Land

The pressures faced from urban and rural residential development, industry, agriculture, mining, tourism and recreation place an enormous burden on our finite land resources. These pressures contribute to soil, land and water degradation and ultimately their long-term sustainability. Protection, restoration and management of land resources is essential to the economic, social and environmental viability of the region.

A number of threats to our land resources have been identified. Activities such as agriculture and extractive industries place major demands by the nature which, for some, involve the use of non-renewable resources. The use of the resources must be based on sound economic principles taking into account the long term implications of their removal.

The strategies and actions to address land resource management are:

1. develop a comprehensive inventory and assessment of land resources in the region
2. develop and promote the adoption of plans for sustainable land-use management and conservation
3. develop and promote best practice for the wise use and management of land resources.

Coasts and Seas

The coasts and seas have been identified as one of the most valued natural assets in Queensland both for use and enjoyment, and their ecological significance. As with other resources, population growth is placing increasing pressure on these areas and remains as one of the major threats. Achieving ecologically sustainable management of the areas comprising wetlands, waterways, species, marine and terrestrial habitats and attractive physical features is essential for long term viability of the region.

The Strategic Guide recognises Moreton Bay as one of Queensland's most important coastal resources. It includes wetlands and foreshores listed under the Ramsar agreement. The bay also contributes to the economy of the region through a range of commercial and recreational uses.

Studies of the ecological health of coastal waters, including Moreton Bay, have identified a number of warning signs that are outlined in the Strategic Guide and where relevant for Caboolture Shire are summarised as follows:

- gradual decline of water quality and habitats of western and southern Moreton Bay and adjacent shores;
- algal blooms in Deception Bay and Hayes inlet;
- loss of biological diversity;
- loss of seagrass in Deception Bay;
- reports of fewer fish in Moreton Bay;
- loss of, and impacts on, fish spawning grounds in Pumicestone Passage as a result of human activities;
- excessive pollution in Pumicestone Passage caused by changed land use and management practices;
- effects of fishing activities on habitats and water quality.

Continued use and activities within areas such as Deception Bay and Pumicestone Passage in the manner which it has occurred in the past will eventually result in severe impacts upon the marine and coastal environments.

The strategies to address issues for coasts and seas are outlined as follows. The strategies for water resources are also relevant in the planning and managing of our coasts and seas.

1. identify, maintain and restore the biological diversity of coastal ecosystems
2. protect, manage and restore coastal wetlands so that their natural, cultural and economic values are maintained
3. manage coastal development and land use activities and processes in accordance with the principles of ecologically sustainable development
4. manage public access to the coast from both land and sea so that ecological processes are sustained.

(B) The Nature of the Strategies

The common approach to the strategies for all themes involves the collection of accurate and up-to-date information followed by the development of actions that protect and manage each of the resources. The on-going monitoring and reporting of the elements for each of the themes is the important third part of the process.

The interconnectedness between each of the four major and two supporting themes means that there is an overlap between the issues and strategies outlined in the Strategic Guide. Consequently, an action or particular study that is undertaken will invariably also address or support an issue outlined within another theme. For example, the protection of water resources is directly related to the protection of nature conservation values especially where these values are dependent on water quality and quantity and/or the habitats associated with waterways, both in-stream and those surrounding such as riparian zones and corridors. In this context, many of the issues addressed and identified under the biodiversity strategies are also relevant for water resources.

As mentioned previously, not all of the strategies are the responsibility of the planning scheme however the outcomes of some studies can be used to inform the provisions of the scheme.

For example, one of the suggested actions in the Strategic Guide is for Council to develop its own biological diversity strategy. It is considered that by addressing the land use planning implications, the scheme could in this instance, advance some of the recommendations provided in a strategy of this type. Many of the strategies identified are more appropriately undertaken as a joint venture between State Government, Council and local groups and individuals. They also need a number of documents working in combination to effectively manage and protect natural resources.

For all themes, the collection of up-to-date information should include but not be limited to surveys of:

- known and potential areas of high nature conservation value such as places supporting high biological diversity, important habitats, wildlife corridors and buffer zones;
- rare and threatened species of flora and fauna;
- ecosystems under threat of loss or degradation;
- native vegetation;
- all protected areas as defined under the Nature Conservation Act (this includes National Park and conservation reserves);
- Marine park areas declared under the Marine Park Act;
- world heritage areas;
- wetlands of regional, State and national significance;
- Ramsar sites of international importance;
- "of concern" and "endangered" regional ecosystems;
- fish habitat areas;
- riparian corridors;
- invasive pest species (both animals and plants);
- water catchments;
- on-site domestic wastewater treatment systems;
- stormwater quality;
- social and cultural values of our natural systems;
- good quality agricultural land;
- regionally significant landscapes;
- areas for sustainable native and native regrowth forestry;
- extractive resources;
- significant ecotourism resources;
- soil and land capability and suitability; and
- acid sulfate soils.

Of these elements, those such as good quality agricultural land, cultural heritage, extractive resources, soils, and forestry have been addressed separately within their own sections in this *Background Study*. The method of collecting and presenting this data is also an important part of the process and for this, the Common Conservation Classification System (CCCS) has been developed.

The establishment of actions and measures to address these strategies then forms the next major step of the process. The development of scheme provisions involving vegetation protection measures and nature conservation policies are just two examples of where the scheme can assist in this regard. Documents such as the *Regional Landscape Strategy* set out a number of measures for specific themes that can be incorporated within the planning scheme.

While the scheme can assist to some extent with the on-going monitoring of our natural resources, the Shire's State of the Environment report remains the most important strategy to document changes and impacts over time.

(C) Projects Undertaken

There are a number of projects that have been undertaken in recent times which assist in advancing many of the strategies and actions. As mentioned previously, there is an overlap between each of the four major themes with many of the projects covering elements within all four themes rather than focusing on one component.

The purpose of this section is to outline how Council has been proactive in managing, protecting and enhancing the natural resources within the Shire, not just for the planning scheme, but as part of its core business.

The *Guidelines on Protecting Regional Landscape Values in Planning Schemes for Local Government in South East Queensland* have been used to inform the process for determining the scope of background research to be undertaken. There are seven themes which can be used as the basis for developing measures for incorporation into the planning scheme. These are:

- (1) Broad nature conservation
- (2) High land and water conservation
- (3) Separation of urban areas
- (4) High scenic amenity
- (5) Cultural heritage
- (6) Linking open space lands
- (7) Outdoor recreation.

Items (1), (2) and (3) have all been addressed within the *Environmental Planning Study* prepared by WBM in conjunction with Chenoweth EPLA and Humphreys Reynolds Perkins.

Item (4) has been addressed through the Caboolture Shire Scenic Amenity Study prepared by Forest Images in 2002. This was a project jointly undertaken by Council, the SEQ Regional Landscape Strategy Advisory Committee, and the Regional Landscape Strategy Unit of the EPA.

The provisions relating to item (5) are addressed in *Section 11* of this *Background Study*.

The *Caboolture Open Space Strategy* discussed in *Section 14* of this *Background Study* addresses items (6) and (7) in more detail.

Environmental Planning Study

This study has concentrated on the elements of nature conservation, high land and water conservation, and separation of urban areas. It has involved an extensive collection and analysis of data which is explained upon the report. The purpose of the study was to update the vegetation mapping undertaken previously for the Shire. To do this, mapping and data from a number of sources such as the Queensland Herbarium, Council and other State Government agencies were used. As some of the mapping used within the State is only at a scale of 1:100 000, data at a more detailed level was sought, particularly for those areas that were facing the greatest amount of threat from development in the near future. Vegetation mapping within these areas has been undertaken at a scale of 1:15 000.

The CCCS (stages 1 and 2) has been used as the basis to present the outcomes as it is a regionally accepted process. The WBM study provides a layer of mapping for each of the criterion along with a compiled map which categorises land into State, Regional and Local significance. This satisfies the requirement to identify land of conservation significance within the Shire.

The results of the study reveal large areas of land within the Shire that are of State, Regional and Local significance. The study has found both large tracts of land as well as scattered pockets spread throughout the Shire. Fortunately, most of the larger areas of significant land are not within areas set aside for urban residential or rural residential development and so will not face immediate pressure for development. The exception to this are parcels of land at Ningi, Sandstone Point, and Bribie Island that have a conservation rating of State significance. On the 1993 Strategic Land Use Plan map. These were identified for urban residential and rural residential purposes.

The study has also identified areas considered to be important for high land and water conservation, and for separation of urban areas. The location of these areas is set out in the *Environmental Planning Study*. Specifically, this component has concentrated on the identification and mapping of significant waterways and water bodies, water catchment, coastal foreshores and riparian areas.

The study also provides recommendations in the form of strategies and codes for inclusion within the planning scheme that are aimed at protecting the nature conservation, high land, and buffer areas identified.

The Habitat 2000 Wildlife Corridors Report

The Sunshine Coast Environment Council (SCEC) has undertaken a wildlife habitat corridor study for the Shire. The study was based on a vegetation risk assessment for the Shire. Areas containing significant vegetation but at risk of clearing due to land use implications were identified and key wildlife corridors mapped. Vegetation was then prioritised in terms of risk of clearing, and in addition potential revegetation or rehabilitation areas were identified where such activities could enhance or re-connect a wildlife corridor. The study identifies and maps existing and potential wildlife corridors throughout the Shire as well as providing recommendations as to how these areas can be conserved and protected.

Atlas of Natural Assets

In 1994 Council prepared the *Caboolture Shire Atlas of Natural Assets*. The Atlas provides essential information on natural resources of the Shire to decision makers, planners, developers and the general public.

The Caboolture Shire Atlas of Natural Assets:

- identifies, categorises and qualifies remnant vegetation;
- provides information about the state of the Shire's biodiversity; and
- is designed to provide supporting information in relation to the Caboolture Shire Strategic Land Use Plan objectives and implementation criteria.

Its provisions have, to some extent, been superseded by the *Environmental Planning Study* which now provides updated and more accurate information about the Shire's vegetation. The Atlas will still be used however for informing the planning scheme and assessing the impacts of development in the future.

Atlas of Natural Assets – Riparian and Reserve Management Study

The vegetation represented in the Reserves and Riparian areas is quite diverse extending from coastal estuaries and open beach fronts across the coastal lowlands and hills to the mountain ranges in the west. The major vegetation types identified include:

- mangroves;
- melaleuca forest;
- open forest (refers to a forest that has an open canopy);
- saltmarsh/claypan (dominated by succulent herbaceous plants and grasses);
- heathland (vegetation communities which typically have no canopy and are up to two metres tall);
- closed forest (typically in moist areas, commonly known as "rainforests");
- ecotonal forest (or wet sclerophyll which are multi-layered forests with dense understorey layers, canopy and emergent layers); and
- pine plantation (monoculture of exotic pine trees, typically with no understorey or ground layers).

Caboolture Shire Scenic Amenity Study

During 2002, Caboolture Shire Council in partnership with the SEQ Regional Landscape Advisory Committee and the Regional Landscape Unit of the Environmental Protection Agency engaged the services of Forest Images and its sub-consultants to undertake a scenic amenity study for Caboolture Shire. Scenic Amenity is an important lifestyle value to be addressed in the planning schema alongside other values of open space such as nature conservation, water protection and agricultural potential. The motive for the study arose from ideas and opinions put forward by the community during the consultation stages of Council's Statement of Proposals for the planning scheme, and for the Corporate Plan.

The landscapes of Caboolture Shire provide a diversity of outdoor lifestyle opportunities for both residents and visitors. The Shire's best natural and rural assets include Pumicestone Passage and Deception Bay, the Caboolture River and other waterways, productive horticultural and farming areas, sub-tropical forests and wetlands, pine forests, Bribie Island, and the Glass House Mountains.

The approach adopted by the study establishes the importance of different landscapes by measuring the community preference for particular types of scenery, and by objectively identifying those landscapes that we see most often. This approach has four major elements:

(1) Visual exposure mapping uses a digital terrain model to assess how often a place in the landscape can be seen from different viewing locations. This mapping is based around an

inventory of travel routes and destinations used by people involved in outdoor leisure and tourism.

(2) Community surveys provide information about community preference for scenery of different types of landscape. A statistical model developed from this information is used to produce maps that indicate people's preferences, based on the land cover and topography.

(3) Scenic amenity mapping integrates the visual exposure map and the scenic preference map to identify the relative contribution made by different places in the landscape to the community appreciation of scenery.

(4) Planning tools are developed to evaluate the effect of development and scenic preference for strategic planning and to assist in assessing development proposals.

The scenic preference surveys found that:

- scenery with a *very high or high* community rating is characterised by the absence of built structure except for fences;
- scenery with a *moderately high* community rating is characterised by no or unobtrusive built structure except for fences;
- scenery with a *medium or varied* community rating is characterised by absent or mid-distant built structure;
- scenery with a *moderately low* rating is characterised by close-up built structure (transmission towers, power poles, transport embankment, industrial or commercial sheds, towers, and signs);
- scenery with a *low* community rating has many close-up built structure.

Some notable areas of high scenic preference include the steep forest of the D'Aguilar Range, Conondale Range, Mt Neurum, and the Glass House Mountains, beaches, the ocean and waterways associated with creeks. Some of the areas of lower scenic preference in the study area include industrial areas, quarries, refuse facilities, major roads, and major electricity distribution and transmission lines.

Four core policies are proposed to protect, maintain and enhance scenic amenity of Caboolture Shire. These are:

(1) Maintain the attractive natural and rural environment of Caboolture Shire for the social wellbeing of residents and the economic benefits from tourism and sustainable residential development.

(2) Develop and implement specific strategies to:

- protect areas of high scenic amenity;
- maintain the average scenic amenity of nominated catchments and strategic planning units at agreed levels over time; and
- enhance values of areas with current low scenic amenity.

(3) Define and promote the character of Caboolture Shire as the "scenic catchment of Pumicestone Passage and the Stanley River" as part of a community awareness program on scenic amenity.

(4) Establish institutional and resources strategies necessary to support ongoing implementation of these policies. A Caboolture Shire Scenic Amenity Advisory Committee would assist the implementation of scenic amenity policies.

As can be seen from these policies there are both planning scheme and non-planning scheme outcomes from the study. The planning scheme by itself cannot deliver the expected the core policies hence additional support is needed.

The Caboolture Shire Scenic Amenity Study provides the community and government with a comprehensive set of information about people's preferences for different types of scenery, the range of opinions in the community about scenery, and how development affects people's liking of scenery. It shows those public places where people view scenery, and those parts of the landscape that can be seen most often. It also provides a set of maps and a GIS database that highlight the scenic characteristics of different localities in Caboolture Shire.

Atlas of Natural Assets – Fauna and Species Conservation Significance

Key elements of the Fauna species analysis include:

- identification of the preferred habitat of each significant species in a tabular format. These include: Closed forest, Eucalyptus Forest and Woodland, Heathland wet/dry, Freshwater Wetlands, Mangroves, Saline Wetlands, Sand/mudflats, and Habitat Generalists (those that utilise a wide variety of habitats).
- a map of the areas that support concentrations of fauna that are of conservation significance. This includes areas that contain any species listed as Endangered or Vulnerable under the Queensland Nature Conservation (Wildlife) Regulation 1994 and areas which contain confirmed records of not less than four species considered Rare, Of Special Concern, Culturally Significant, Locally Significant and /or Habitat Specialists.
- thirty-one broad locations have been identified throughout the Shire. Each location includes a species list of the confirmed records.
- the distribution of the species of conservation significance within the various Natural Assets Mapping Units (NAMUs) have been recorded in a tabular format identifying the number of significant mammal, bird, reptile, frogs and fish species with a high/medium likelihood or confirmed as occurring.

This document has proved to be an invaluable resource for Council, however like other studies, the outcomes of the Environmental Planning Study will supersede its provisions. Where relevant, some of its contents will continue to be used in the future.

Urban Stormwater Management Strategy

In March 2002, Council adopted the stormwater management strategy for the Shire. The provisions of the *Integrated Planning Act* and the *Environmental Protection (Water) Policy* has placed the onus on Council to implement a stormwater management framework that will result in better management of stormwater quality and quantity and to achieve greater outcomes for the community and the environment. The legislative requirements reflect the critical need to manage stormwater in an integrated manner, and acknowledges the essential lead role that Council needs to undertake in this areas.

Council has also commenced a long term project involving the preparation of waterway management plans (WMPs) for each of the Shire's catchments. The first two WMPs will cover the Upper Caboolture and Godwin Beach catchments.

Research into Soil, Ground Water and Land Use Interactions

This research project is being undertaken and funded in conjunction with the Pumicestone Region Catchment Coordination Association (PRCCA), Queensland University of Technology, The Natural Heritage Trust, the Department of Natural Resources and Mines, and the Department of Primary Industries. The research will investigate the processes leading to surface and ground water pollution due to various land use practices. The minimisation of such pollution is critical to the health of Pumicestone Passage and the coastal zone.

The project will guide Council and the State Government towards better strategic land use and land management policies. The project will specifically investigate the processes leading to the pollution of Pumicestone Passage through the mobilisation of heavy metals and other pollutants. The mechanisms of mobilisation and transport of the various pollutants are not well understood or linked to the variety of activities that occur in the catchment. The project will undertake an integrated assessment of geology, hydrology, sediment character, environmental geochemistry, and land use patterns in order to achieve these objectives.

The Pumicestone Passage Erosion Hazard Mapping Project

The Pumicestone Passage Erosion Hazard Mapping Project was initiated to provide a tool for consistent and effective implementation of best management practices in erosion and sediment control at urban development sites. It was a joint project between the Caboolture Shire Council, the Caloundra City Council and the Pumicestone Region Catchment Coordination Association. Erosion hazard is identified based on such environmental attributes as soil type, slope and rainfall. Because of the marked seasonal distribution of rainfall in the project area, the erosion hazard of a site was determined on a monthly basis. This erosion hazard will be used to identify those management guidelines that are appropriate for a particular urban development situation - areas with a higher hazard requiring more stringent management than those with a lower hazard.

Saltwater Creek Catchment Management Plan

The Saltwater Creek Catchment is generally located in the area bounded by Anzac Avenue at Mango Hill in Pine Rivers Shire, east of the North Coast Railway Line, south of a line that partly follows Deception Bay Road and west of Elizabeth Avenue, Redcliffe. The plan provides the basis for ecologically sustainable development within the catchment and being a performance based document recommends preferred outcomes and measures necessary to achieve those preferred outcomes. Alternative proposals will need to be assessed in detail on the basis of individual stormwater management plans which recognise the overall objectives of the catchment management plan.

Caloundra to Deception Bay Coastal Rehabilitation and Management Plan

This project was undertaken as a coordinated project between Caboolture Council, Caloundra Council and the Pumicestone Region Catchment Coordination Association Inc. (PRCCA). The local plan sets a framework of planning and management actions that will result in the matters considered in the draft State Plan being incorporated into the planning scheme.

State of the Environment Report 2000

The State of the Environment Report was commissioned to establish a means for providing Council and other user groups with reliable, objective and quantitative information on the condition of Caboolture Shire's natural environment, the pressures acting on it and the success of the responses taken to address adverse trends. The Report has three main components. Firstly, it provides a framework for regular state of the environment monitoring and reporting for Caboolture which will, over time, provide vital information on trends in key aspects of the Shire's natural environment. Secondly, it provides an initial snapshot, based on currently available data, of the present condition of the Shire's natural environment, the pressures acting on it and the success of responses to adverse trends. Finally, it makes a series of recommendations for Council to establish regular, ongoing state of the environment reporting for Caboolture.

The core issues encompassed within the report include the environmental areas/themes of Cultural Heritage, Human Population, Land, Water, Atmosphere and Biodiversity. The findings and recommendations of this report provide a sound background upon which to develop and address specific environmental issues within the planning scheme.

Review of Planning Scheme Provisions

The 1993 Strategic Land Use Plan (SLUP) provides for an "Open Space" preferred dominant land use that includes lands in both public and private ownership and includes areas of environmental significance as well as local park and recreation areas. The designation encapsulates significant passive and active recreation areas, open space along watercourses, buffers, wildlife, historical and scenic areas with a view to protection and conservation of these values. The document is supported by a Planning Study which examined the environmental features including; topography, geology, soils, vegetation, fauna, climate, and hydrology. All these considerations were examined when appointing land use designations on the eventual Strategic Plan.

Recognition of the environmental values cuts across a number of different land use designations within the SLUP. Many of the supporting objectives and implementation criteria advance the protection of these values when it comes to considering the impacts of development on our natural systems. Documents such as the *Pumicestone Passage Catchment Management Strategy* and the *Atlas of Natural Assets* are referenced as important supporting documents within the objectives of the SLUP.

The 1988 planning scheme does not have any specific provisions relating to the protection of environmental areas although it does have zoning provisions for the categories of "Public Open Space" and "Private Open Space" and "Flood Prone Land". There is no specific zone set aside for conservation or protection of natural resource areas in the Shire.

The town plan is also supported by a policy that aims to protect the riparian areas of the Shire and to minimise the impacts of development.

Council's various development control plans (DCPs) that have come into force since 1996 include within them a variety of environmental provisions including land use designations and development criteria that require environmental considerations to be addressed. The Rural Residential DCP and Narangba (Industrial) DCP are the two most recent documents that contain provisions that seek to protect environmental values within the Shire.

Community Consultation

During the Statement of Proposals consultation phase an overwhelming directive was to retain, conserve and protect all aspects of the Shire's natural environment. It rated as one of the highest with regards to the attributes enjoyed and liked by the Shire's residents and was the most valued asset of the Shire. The top five items that the public identified as being a valuable feature revolved around significant environmental features, namely, flora and fauna, waterways, parks, Pumicestone Passage, and Centenary Lakes. The community are keen to see the conservation and protection of these significant environmental features.

Various State Government comments were received in relation to environmental issues. Comments, relating to the environment, were received from the Environment Protection Agency, Department of Natural Resources and Mines, and the Department of Primary Industries. Feedback received prior to, and during, the Statement of Proposals process concentrated on the conservation and protection of the Shire's significant environmental features. It was emphasised that Council must have regard to, and observe, the various statutes that regulate environmental features of the Shire.

Discussion

Based on the provisions outlined within the *Strategic Guide to Natural Resource Management in South East Queensland* the planning for and managing of our natural resources is an extensive process that involves:

- (1) auditing the resource
- (2) assessing the impacts
- (3) undertaking the appropriate planning
- (4) managing the resource
- (5) monitoring the resource.

The preparation of a planning scheme has given Council the opportunity to survey and understand the extent of the Shire's natural resources and environmental systems. The auditing process has been beneficial in this regard by giving an up-to-date picture of the Shire's natural systems that, in turn, informs the strategies that need to be undertaken both within and outside of the planning scheme. Undertaking the range of studies has also ensured that the planning scheme will be properly informed when it comes to addressing valuable features in the Shire.

The actual outcomes from individual studies has raised a number of implications for the planning scheme. The *Environmental Planning Study* has provided a layer of information where areas of State, regional and local significance have been identified. For the developable areas of the Shire, this has raised some major consequences with areas of land set aside for development in the 1993 Strategic Land Use Plan potentially not being available for that purpose in the future.

All of the studies have identified a number of features within the Shire that will need to be mapped and recognised within the planning scheme. These areas are:

- Areas of nature conservation significance
- National and Conservation Parks
- Wildlife corridors
- Marine Parks
- Ramsar sites
- Fish habitat areas
- Buffer areas

In order to either protect these areas, or adjoining sites from the impacts of development, a number of codes will need to be included within the planning scheme. Where studies have not been undertaken for some issues such as scenic amenity, the planning scheme can still incorporate some broad measures that aim to protect and enhance these features of the Shire.

The State legislation also requires the environmental quality of the Shire to be addressed with particular reference to air, water and noise provisions. The health and wellbeing of the Shire has the potential to be adversely affected by increased air and noise pollution. The sources of the pollution however are wide ranging and cannot be necessarily controlled by the provisions of the planning scheme.

The scheme however can assist with the minimisation of potential impacts through measures such as appropriate land use allocation. For example, increasing population densities in and around major centres has the benefit of reducing vehicle trips to places of employment, school and recreation facilities. Water quality issues are addressed to some extent through Council's urban stormwater management strategy. The long term plan to undertake waterway management plans for each and every catchment across the Shire will provide an opportunity for these areas to be managed and enhanced for the future.

Non-planning scheme documents across State, regional and local levels such as the studies outlined within this section will continue to have strategies and actions that the planning scheme cannot advance. Other documents such as the State of the Environment report for both the State and the Shire will continue to be used for the reporting and monitoring of changes occurring over time to our natural systems.

Conclusions

Based on the foregoing discussion for natural resources issues, the following conclusions have been made.

- (1) Commonwealth and State legislation require the Shire's natural resources to be identified, conserved and protected.
- (2) The extent of the Shire's natural assets covers broad themes of biodiversity, land, water, and coasts and seas and so consequently impacts upon all land uses within the Shire.
- (3) The protection of the Shire's natural assets is a fundamental cornerstone of maintaining the Shire's attractive image. The outcomes from the Caboolture Shire Scenic Amenity Study underline the features of the scenic quality in the Shire as well as the high values people place on these features for the community wellbeing.
- (4) The studies undertaken within the Shire have identified new and additional areas which contain natural features that are of State, regional and local conservation significance.
- (5) Where these features are located within areas previously considered to be suitable for urban residential or rural residential development, the appropriateness of such a designation will need to be reconsidered.
- (6) Council has a responsibility to ensure that water quality objectives are addressed within the planning scheme.
- (7) Protection and enhancement of the Shire's natural features can be addressed through a range of codes that either restrict or minimise the impacts of development.

Section 14 - Open Space

Introduction

Issues

Value and Meaning of Open Space

*State and Regional Planning
Provisions*

Local Planning Projects

Review of Planning Scheme Provisions

Community Consultation

Discussion

Conclusions

Open Space

Introduction

Council has responsibility for the management and planning for most of the parks and recreational facilities located in the Shire. Those uses that are excluded include State Forests and National Parks. This responsibility extends to park planning, the provision of recreation, community and sporting facilities and their operation and management. This section will concentrate primarily on the strategic planning component of open space within the Shire and how it is to be integrated within the planning scheme.

Issues

Value and Meaning of Open Space

The *Caboolture Shire Parkland Strategy – Description and Analysis 1999* recognises that there are a number of sound and self-evident reasons why a comprehensive and Shire-wide network of public open spaces ought to be planned at the local government level. These include:

- the contribution that a properly planned network of public open spaces can make to the well being of the community;
- the economic efficiencies that can be incorporated into the provision and maintenance of well designed and properly planned recreation facilities, programs and services;
- the role of proper planning in creating lifestyle opportunities by bringing to fruition services (such as extended recreation trail through a community or the protection of urban bushland) that would not be expected to occur naturally;
- the fact that the provision of parkland is a very visible service of Council, and one that can directly involve the community in its own development.

The Strategy further recognises that Council will come under increasing pressure from increasing community expectations for additional and higher standards of community facilities, and increasing demands for accountability and efficiency. Hence there is a potential conflict between the desire to expand the range and number of recreation, community and sports facilities and the need to limit budget expansion.

State and Regional Planning Provisions

Integrated Planning Act

As open space includes a number of different elements, the issues which need to be considered are a part of each of the three core matters identified within the IPA i.e. land use and development, infrastructure, and valuable features. As a land use, open space within the Shire needs to be identified for both the current and future residents. The traditional way to identify these areas within a planning schemes is to include them within a zone or as preferred land uses for the future.

The provision of open space is also an infrastructure item. The IPA gives Council the ability to prepare infrastructure charges schedules (ICSSs) for development infrastructure items. This includes, amongst other things, infrastructure for local community purposes. This term is further defined in the IPA as public recreation predominantly serving a local area, or other purpose prescribed under a regulation. Consequently, Council is able to prepare an infrastructure charges plan to gain contributions towards the acquisition of parkland or require land from developers for the purpose of parkland. The extent and range of what the ICP can charge for is subject to ongoing refinement by the State Government.

Valuable features for the Shire includes elements of ecological significance and high scenic value. This will include some of those components of open space described in this section previously and so therefore means that these elements need to be considered and addressed in the planning scheme.

Regional Framework for Growth Management

The Regional Framework for Growth Management 2000 (RFGM) addresses the issue of Open Space through Principle 5.5 under the Regional Landscape theme of the Plan. Specifically, local government planning schemes are to incorporate regional landscape strategy lands and protect land having regional significance for amongst other things, outdoor recreation, linking open space lands, and sustainable nature based recreation.

Under the Liveability theme, the issue of open space for recreational purposes is identified through Priority Action 11.8 which seeks to coordinate the planning and funding of regional sports, cultural, recreation and leisure facilities and to ensure these are integrated with Key Centres, open spaces and other regional land uses. The planning principles outlined in the report "Open Space for Recreation and Sport" are to be promoted and implemented.

Local Planning Projects

Caboolture Shire Parkland Strategy 1999

In November 1999 Council completed the *Caboolture Shire Parkland Strategy*. The Strategy provides an inventory of all the publicly owned parkland existing in the Shire as at 1999 and also provides a series of recommended criteria to be addressed when reviewing future open space provisions. The criteria identified includes accessibility, recreation needs, site suitability and quantity. The Strategy is essentially a database of open space throughout the Shire.

One component of the Strategy involved undertaking a workshop with individuals and groups from the community. The purpose of the session was to gain input from the community about issues related to the planning and management of open space in the Shire.

Caboolture Open Space Strategy and Infrastructure Charges Schedules

In August 2001, Council commissioned Chenoweth EPLA to prepare an open space strategy and accompanying infrastructure charges schedule (ICS) for the Shire. The aim of the project was to:

- Update strategic directions for the development and management of Council's open space resource, including the securement of new parkland to meet future growth;
- Offer strategic direction for open space and recreation to the planning scheme;
- Consider the implementation of those strategic directions, specifically with the preparation of an ICS to meet the requirements of the IPA.

The project draws together recommendations of past open space planning to create a working strategy within the new and evolving planning context. A particular feature of the project has been coordination with the processes and outcomes of concurrently running studies, specifically in relation to bikeways planning, community facilities planning, and environmental planning. While the strategy does have a particular focus for the planning scheme, there will be a number of other functions within and outside of Council that can contribute to the overall achievement of the recommended outcomes. As at September 2004, the project was not completed however some of the draft provisions of the strategy were completed and are summarised as follows.

(A) Open Space Settings

The open space planning undertaken by the draft Strategy is informed by the principle of diversity of recreational opportunity and the concept of recreational opportunity spectrum. This implies a diversity of recreation open space settings in which activities can occur. To ensure that setting diversity is built into the project outcomes, including both the assessment and policy stages of planning, a classification system for open space settings has been applied to the inventory of current open spaces in Caboolture Shire and to the identification of future open space projects.

The draft study identified eight open space settings. In some situations, parks fulfil a number of functions, which is intentional in certain circumstances.

- Civic Places/Cultural Spaces – urban squares and courtyards, settings to civic buildings and formal open space associated with shopping centres or main streets.
- Picnic/Play Parks – informal parkland that allows for picnicking, children's play and scenic amenity.
- Sports/Courts – outdoor sporting fields and courts and may include clubhouses, change rooms and associated buildings.

- Special Purpose – indoor sports centres, swimming pools, lawn bowls clubs, equestrian centres and other specific purpose sporting uses.
- Foreshore/Estuarine – parkland along beaches and mangrove estuaries.
- Riparian/Link Land – parkland along creeks, rivers, or drainage channels and land specifically designed for access or to make links.
- Urban Bushland – bushland reserves close to or adjacent urban or residential areas not associated with waterways. Reserves primarily for informal recreation use and scenic amenity rather than an ecological or conservation purpose.
- Conservation Areas – bushland, mangrove estuaries for recreation or scenic amenity purposes but with other primary uses such as cemeteries, depot settings or water reserves.

An open space hierarchy was also adopted for the project for use within each of the above settings. The parks have been described by the scale and catchment as being either regional, Shire-wide, district, or local.

(B) Quantity Evaluation

In assessing the quantum of open space provision, the draft strategy gives regard to:

- the area of open space
- the numbers of parks and reserves
- the size of parks and reserves
- the distribution of parks and reserves, and
- community responses from previous surveys.

In summary, it has been found that Caboolture Shire provides levels of open space well in excess of common standards and at levels comparable with other local government areas. The results of previous consultation indicate an overall satisfaction with Caboolture's parklands along with support for:

- better access to parks including walkway, cycling and horse riding trails
- protection of environmental values in parklands
- additional cultural events in parks
- effective and efficient management of parkland and development of the land resource.

Changes are predicted in the way people will want to use open space. Future trends suggest a broadening of the types of facilities expected and in particular for nature based recreation.

The draft strategy has established benchmarks for the future provision of urban parklands. Most were based on current provision levels with some modification.

(C) Quality

The quality evaluation takes into account the performance criteria developed in the *Caboolture Shire Parkland Strategy 1999*. It introduced four criteria listed as follows:

- Adaptability – a measure of how easily a reserve can accommodate a change in demand, either from shifting recreation trends or evolving demographics.
- Compatibility – a measure of impacts between the park and its surrounding land uses.
- Safety and street frontage – the perception of safety in using a park or reserve is determined by a range of factors including slope, visual access, and the like.
- Appropriate location within the urban context – it is suggested that parks with a high intensity use should be located close to centre of populations, while lower intensity parks could be located more remotely.

In addition to these, the draft *Caboolture Open Space Strategy* identifies a range of other quality issues that should be considered. These are:

(1) Access – the most critical factor in determining regular use of open space and ranges from providing play space within walking distance from home for children, to land that allows for easy access for senior members of the community, to visual access to parkland and its contribution to the scenic quality of the Shire. Components of this element include access to local parks, visual surveillance and lighting; slope and access for those with a visual or mobility complaint; perceptions of access, facilities and signage; and access to transport.

(2) Recreational Opportunities and Multiple Use – there is a need to create a diversity of settings, such as those identified above and that flexibility is maintained for the long term that allows for the effective and efficient allocation of both land and facilities.

Allocation of open space in the past has been made on the basis of lack of suitability for other land uses, in particular using flood prone land for recreation. However, this is not always the best approach as infrastructure such as clubrooms and equipment can be seriously damaged by frequent flooding.

(3) Connectedness – most recreation surveys indicate that movement oriented recreation, such as walking, is the most frequently enjoyed outdoor activity. A system of recreation links throughout the Shire can be considered at the regional, district and local levels. The strategy provides a list of detailed district trail options.

(4) Environmental Management – there have been a number of studies that have identified the environmental values of the Shire. These are discussed further within *Section 13* with the most recent and significant study that has been completed being the *Caboolture Shire Environmental Planning Study*. There are a number of mechanisms in place that enable protection of environmentally significant land, ranging from the securing of the land itself to agreements for conservation made with private landholders. Each mechanism is appropriate to different situations.

(5) Scenic Amenity and Cultural Heritage Protection – scenic amenity values and cultural heritage have long been recognised as significant components of the open space setting.

(6) Private Open Space Facilities and Tourism – there is always the potential for a number of private facilities to be established that contribute to the Shire's open space and recreation resource.

(D) Policy Directions

The draft *Caboolture Open Space Strategy* sets out some general principles that should be taken into consideration for the provision of open space within the Shire. While these are framed around documents such as Council's Corporate Plan, they are based on legislative requirements such as the Integrated Planning Act that are now in place. In terms of achieving sustainable outcomes for the provision of open space the following needs to be addressed:

- Environmental sustainability – there is a need to create sustainable environments by encouraging biodiversity, habitat quality, and water/soil conservation;
- Social sustainability – there is a need to create sustainable communities by encouraging spaces for cohesive community events, allowing for diverse recreation opportunities and protecting and enhancing local landscape identity;
- Economic and management sustainability – there is a need to create a sustainable open space network by encouraging multi-use, minimal life cycle costs, and effective open space planning and management.

In addition to the direction set by the legislative framework, the general direction for future open space planning should focus on the following specific policies:

(a) general directions – there is a need to recognise that policies should provide diversity and flexibility in the type of recreational settings that Council provides. The balance of the eight different settings, as outlined previously, should be maintained and enhanced. In combination with this, the multiple use of parkland by a range of groups or community sectors along with the co-location of high level facilities are key principles in achieving sustainable recreation and open space outcomes and minimising lifecycle costs within the network as a whole. Community and in-house education are also important components for meeting sustainability goals.

(b) quantity and quality – the use of benchmarks assists with providing an equity in the level of provision of parkland. Benchmarks need to be tailored for the different lifestyle areas and communities of the Shire while ensuring and enhancing access to parks and reserves is a key factor in maximising the usability of open spaces resources.

(c) connections and links – making links between Council's open space resources is a key feature in expanding recreation opportunities and maximising access to the Shire's parkland. A hierarchy of link systems should be adopted to allow for diversity of creation opportunity, to provide for both local; pedestrian use, cycle use and for horse trails and to ensure that each level of link serves a broader purpose. The presence of strong east-west waterway links suggest that they form an important component of the network system.

(d) Shire-wide frameworks – Council and State owned open space can contribute substantially to broader open space values such as scenic amenity and environmental protection. Where possible, open space acquisitions should incorporate these values.

(E) Desired Standards of Service

To meet the policy directions outlined above, the draft Strategy identifies clear and definable standards of service that have been developed for the delivery of the open space and recreation resource within the planning time period. The standards of service relate to both the quality and quantity of land.

FIGURE 14.1 DESIRED STANDARDS OF SERVICE - QUANTITY

Hierarchy	Civic/cultural	Picnic/play	Sports/courts	Special purpose	Urban Bushland
Shirewide	1:115,000	1:100,000	1:35,000	1:100,000	N/A
District	1:38,000	1:8,000	1:8,000	1:10,000	1:10,000
Local	1:38,000	1:7,000	N/A	N/A	1:2,500

The draft study identifies the number of parks and reserves across the Shire required for the life of the planning scheme i.e. until 2016.

Size of Open Space Setting

The size of open space settings will be determined as opportunity exists however site size should in general meet the following minimum guidelines:

FIGURE 14.2 DESIRED STANDARDS OF SERVICE - AREA

OPEN SPACE SETTINGS	REGIONAL	SHIREWIDE	DISTRICT	LOCAL
URBAN PARKLAND				
Civic/Cultural	As required	As required	As required	As required
Picnic/Play	N/A	10 ha	4 ha	0.5 ha
Sports/Courts	As required	10 ha	5 ha	N/A
Special Purpose	As required	As required	As required	As required
Foreshore/Estuarine	As required	As required	As required	As required
Riverine/Links	20-80 m	20-80 m	20-80 m	20-80 m
Urban Bushland	N/A	N/A	5 ha	2 ha
OTHER OPEN SPACE				
Conservation Areas	As required	20 ha	10 ha	N/A

Distribution of Open Space Settings

In general, Council should site parks and reserves to achieve the following minimum guidelines:

- Rural areas – urban parkland located as opportunity exists
- Rural Residential areas – urban parkland located within 750 metres or approximately 15 minutes walk from most property boundaries
- Urban Residential areas – urban parkland located within 500 metres or approximately 10 minutes walk of most property boundaries.
- Economic and management sustainability – there is a need to create a sustainable open space network by encouraging multi-use, minimal life cycle costs, and effective open space planning and management.

Usability of Open Space Settings

The draft *Open Space Strategy* identifies access, slope and flooding criteria that should be met for each of the eight open space settings. Access, topography and flood levels for conservation areas should be determined on the basis of location and habitat type.

Allocation of Open Space Settings in Lifestyle Areas

The draft *Open Space Strategy* identifies three lifestyle areas within the Shire: ranges and foothills, central corridor, and coastal settlements to reflect the diversity of community and lifestyle options that exist. For each of the eight open space settings, the draft Strategy identifies the priorities within each of the lifestyle areas.

FIGURE 14.3 DESIRED STANDARDS OF SERVICE – ALLOCATION OF OPEN SPACE

OPEN SETTINGS	SPACE	RANGES AND FOOTHILLS	CENTRAL CORRIDOR	COASTAL SETTLEMENTS
Civic/Cultural		<ul style="list-style-type: none"> Minimum one reserve in each settlement Should incorporate facilities of picnic/play parks 	Reserves to provide for urban links	Reserves to focus on sites adjacent to the foreshore/estuaries and to provide for urban links
Play/Picnic		<ul style="list-style-type: none"> Local provisions and facility allocations may be consolidated into district reserves District reserves may be consolidated with civic and sports/courts reserves where appropriate 	Reserves to be provided as per benchmarks	District level provisions may be sited adjacent to foreshore/estuaries where opportunity exists.
Sports/Courts		<ul style="list-style-type: none"> District level reserves only Reserves to incorporate significant picnic/play facilities 	Reserves to be provided as per benchmarks	Reserves to be provided as per benchmarks
Special Purpose		To be allocated where opportunity exists	To be allocated where opportunity/ demand exists	Reserves to be provided as per benchmarks
Foreshore/Estuarine		Provision may be allocated to riparian/link reserves	Provision may be allocated to riparian/link reserves or to buffer spaces	Reserves to be provided as per benchmarks
Riverine/Links		Reserves to be provided as per benchmarks	Reserves to be provided as per benchmarks	Reserves to be provided as per benchmarks
Urban Bushland		Urban bushland provisions may be allocated to riparian/link reserves	Reserves to be provided as per benchmarks	Reserves to be provided as per benchmarks
Conservation Areas		Reserves to incorporate tourist facilities where appropriate	Reserves to be provided where opportunities exist	Reserves to be provided where opportunities exist

(F) General Planning and Management Directions

The draft Strategy provides a series of policies accompanied by actions and projects that are to be pursued at all levels and by a wide spectrum of Council areas. Some of these policies will require incorporation into the planning scheme while the implementation of others will be the specific responsibility of park planners and managers.

The recommended policies are:

- Diversity of recreational opportunity – in planning future open space provisions Council will maintain as a minimum, the existing balance of open space settings and park hierarchy.
- Multi-objective planning – in locating new parks Council will promote a multi-objective approach that seeks to maximise the range of values for open space including environmental, recreational, hydraulic, scenic, cultural heritage and educational.
- Multi-use and co-location – in locating and developing new parks Council will adopt an approach that co-locates parks with other setting types or with other community centres and that includes a range of recreational opportunities on the one site.
- Community education and involvement – Council will both inform and involve the community in the delivery of its recreation and open space services.
- In-house education and publicity – Council will ensure all the relevant Council departments are aware of and have an understanding of the Open Space Strategy.

- Equity of provision built into a benchmark – Council will provide to new residents, as a minimum, the same level of park provision as is currently enjoyed by the community.
- Access and land suitability – Council will ensure that new parkland meets minimum access and suitability requirements for recreation, safety and usability.
- Safety in parklands – Council will ensure that new parkland meets minimum standards for community safety.
- Minimum size of parklands – Council will set a new minimum size for parklands.
- Existing urban parkland: shortfalls and excesses – where possible Council will provide equitable access to open space to meet the benchmark for future provision.
- Community facility settings – Council will provide land to meet the needs for community facilities.
- Recreational trails – Council will create a linked system of multi-purpose trails Council-wide and locally.
- The broad open space network – Council will protect environmental, scenic and cultural values within the open space system including the protection of open space along waterways.

Review of Planning Scheme Provisions

The 1993 Strategic Land Use Plan (SLUP) includes open space as a preferred dominant land use within the Shire. The extent of the open space network is set out on the 1993 SLUP map. It is also supported by eight objectives with accompanying implementation criteria that describe the manner in which open space is to be identified and protected within the Shire. The purpose of open space within the Shire is to:

- provide for active and passive recreation needs;
- provide for waterway protection, buffers and wildlife corridors;
- protect ecological, environmental, cultural, scientific, scenic sites;
- provide local and regional sports facilities;
- provide areas for play, recreational, and visual amenity;
- secure land for flood mitigation purposes;
- develop a bikeways network; and
- retain and promote the Pumicestone Passage and Deception Bay as areas of aquatic recreation and environmental resource.

The open space provisions in the 1993 SLUP were determined having regard to a previous study prepared for the Shire which was the *Park and Recreational Facilities Strategy Plan* in 1991. This study conducted a full review of the open space provisions for the Shire looking specifically at current and future supply, and the standard of provision at different localities and for different types of uses. The Planning Study to the SLUP summarises the major outcome of the 1991 Strategy Plan and provides recommendations and implications for the 1993 SLUP. Buffer distances for certain land uses are also included within the Planning Study and are referred to when assessing development applications in the Shire.

Upon completion of the *Open Space Strategy and Infrastructure Charges Plan* project, the provisions of the documents will be included within the planning scheme. Until that occurs, the provisions of the 1993 SLUP, including the mapping component, will be retained within the Shire's planning scheme.

The 1988 Planning Scheme addresses the issue of open space through two separate zonings namely, the "Public Open Space Zone" and the "Private Open Space Zone". These zones have been implemented to provide land for public and private, use for recreation, sports or leisure purposes.

As part of the subdivision provisions, the scheme gives Council the ability to require park contributions from developers. Schedule 20 "Public Garden and Recreation Space" of the subdivision provisions within the town planning scheme enables Council to collect developer contributions for the purposes of parkland. This schedule effectively repeats the legislative requirements and specifies the monetary contributions to be made in lieu of land.

Various development control plans (DCPs) also include provisions for the dedication of open space. The 1999 Narangba (Industrial) DCP contains the Saltwater Creek Conservation Precinct which serves a number of functions such as providing for stream corridor protection, providing a wildlife movement corridor, and retaining significant areas of remnant vegetation. The 1998

Rural Residential DCP includes an open space designation that is established to identify areas for screening, parkland, and drainage purposes.

The planning scheme is also supported by a number of planning policies that address park dedication and stormwater drainage.

Community Consultation

During the consultation period for the Statement of Proposals, open space (the provision of appropriate parkland) was raised as an issue that required attention and needed to be addressed as part of the planning scheme review. Although, the public was relatively satisfied with the availability and accessibility to open space within the Shire some residents raised the issue of providing suitable parkland that met the local community needs. An example of this included provision of suitable facilities that met the needs of the youth.

Discussion

Open Space is a major land use within the Shire and so therefore forms an integral component of the overall planning scheme. The IPA provides some guidance with regards to the major considerations for Council in the preparation of a planning scheme. The two main considerations are, firstly, to have a sound and comprehensive open space strategy and secondly, to have a supporting infrastructure charges regime in place that will enable Council to fund the provision of appropriate parkland. The preparation of the draft *Caboolture Shire Open Space Strategy and Infrastructure Charges Schedules* means that the necessary work has been undertaken to inform Council and most importantly, be incorporated with the planning scheme.

The strategy has been comprehensive in identifying the specific elements for open space provision both in spatial terms e.g. where local and district parks should occur, and through other means such as the desired standards of service. The strategy also has outcomes that will be advanced by non-planning scheme measures.

Conclusions

Based on the foregoing discussion for open space issues within the Shire, the following conclusions have been made.

- (1) A well planned network of open space can make a large contribution to the wellbeing of a community.
- (2) The extent of land and activities included within open space is broad. All of the recreational, ecological, and social elements to open space are major contributors to maintaining and enhancing the Shire's liveability.
- (3) There is an increasing awareness within the community of the importance of open space within the Shire. Consequently, there is a need to ensure the provision of timely, adequate, and suitable open space to meet the needs of the current and future communities within the Shire.
- (4) The various outcomes and recommendations of the draft *Caboolture Shire Open Space Strategy* will serve as the basis for the open space provisions to be included within the planning scheme.

Historic Version
Caboolture ShirePlan

Section 15- Special Uses

Introduction

Issues

State Controlled Special Uses

Council Controlled Special Uses

Other Special Uses

Review of Planning Scheme Provisions

Community Consultation

Discussion

Conclusions

Special Uses

Introduction

Caboolture Shire includes a range of Special Uses within the Special Purpose Zone or the Special Facilities Zone in the 1988 Planning Scheme. Special Uses within the Shire generally involve community facilities and infrastructure located on land under the control of Local, State or Federal Government. There are also a number of institutional facilities and public infrastructure items that are under the control of other organisations (eg semi-government) that are considered to be Special Uses.

Local Government controlled lands within the Shire currently include special uses such as community halls, drainage reserves, recreation and camping reserves, caravan park, surf lifesaving club, water and sewage infrastructure, animal pound, works depot, quarry and showgrounds.

State Government controlled land within the Shire includes such uses as forestry, educational facilities, industrial development, public housing, correctional facilities, police services and emergency services. However, not all of these uses are considered to be special uses. Special uses generally refers to activities that, due to their characteristics, cannot be located within another zone and therefore require specific provisions.

Issues

State Controlled Special Uses

State Government responsibilities cover a wide range of land uses. This section focuses only on major special uses that have particular locational requirements that cannot be addressed by other land use designations and zones. Some infrastructure items, such as facilities operated by the Department of Families require further consideration to determine whether they should be considered Special Uses in the planning scheme.

The existing Special Purpose Zone is intended to provide for all forms of Governmental, semi-Governmental and public or institutional development under the control of the relevant department. There are a number of allotments that are not currently being utilised for their original intended special purpose. These allotments may either be surplus to existing and future requirements or may be land banked for future development in accordance with projected demand.

Education Queensland owns a number of parcels throughout the Shire providing for existing and future primary and secondary school sites. Existing educational facilities are scattered throughout the Shire servicing the main population clusters. It is likely that as student demand levels change, the existing land stocks will need to be reviewed. Some proposed school sites have now been identified as surplus and may become available for alternative land uses. Education Queensland is also considering opportunities for land acquisitions for schools in areas of growth not yet serviced, as well as upgrading existing facilities where there is a need. Due to the constantly changing levels of demand for educational facilities, the planning scheme needs to provide flexibility to allow for suitable alternative uses.

The Queensland Police Service currently owns four police station sites in the Shire located at Caboolture, Deception Bay, Bribie Island and Woodford. The Queensland Ambulance Services own four ambulance station sites within the Shire located at Bribie Island, Caboolture, Deception Bay and Woodford.

The Queensland Fire Service operates three fire station sites within the Shire located at Bribie Island, Caboolture and Deception Bay.

The Department of Primary Industries operates the Deception Bay Fisheries Research Station and the Bribie Island Aquaculture Research Centre.

Queensland Rail landholdings in the Shire include rail corridors (primarily the North Coast Railway) and train stations at Narangba, Burpengary, Morayfield, Caboolture and Elimbah. Rail corridors may include existing operational lines and disused lines (eg Wamuran Branch Railway).

The Department of Families currently owns four community facilities in the Shire at Caboolture, Bribie Island and Deception Bay and vacant land adjacent to the Bruce Highway that is considered surplus. The amenity of existing facilities should be protected through the planning scheme.

Queensland Transport (QT) is responsible for a range of special use maritime infrastructure items (eg public boat ramps and pontoons providing access to Caboolture River, Deception Bay and Moreton Bay) within the Shire. QT maintains boating facilities at Deception Bay, Beachmere, Bongaree, Bellara, Ningi, Toorbul and Donnybrook and has plans for further projects such as the upgrading of facilities at Bellara and Donnybrook. Queensland Transport has requested that the planning scheme protect the operational requirements of existing facilities and provide for potential location of future transport infrastructure.

Council controlled Special Uses

Council controlled special uses include a wide range of facilities and infrastructure throughout the Shire. The existing uses, generally within the Special Purposes Zone include (but are not limited to) drainage and open space reserves, community halls, camping grounds, water and sewerage infrastructure, animal pound, machinery depot, and quarries.

Council owned land within the existing Special Purposes Zone might include vacant land that is now surplus to Council's requirements.

Other Special Uses

There are examples of other special uses within the Shire where more than one land owner is involved. The Caboolture airfield is located on land held in ownership of the State Government and under the control of Council through a lease agreement. As the existing lease expires in 2018, the long-term viability of the airfield in its existing location is currently being reviewed.

There are a range of other non-government owned special purposes, generally involving single land parcels, including uses such as churches, child care, war veterans home, senior citizens centre and schools.

Review of Planning Scheme Provisions

The 1993 Strategic Land Use Plan (SLUP) designates a number of Special Purpose Areas including uses such as Council's major infrastructure facilities, an authorised aircraft landing area, the Woodford Prison, Shaftsbury Campus and the Aquaculture Research Station. The objective for the Special Purpose Areas designation is *"To locate special purpose uses in areas which best accommodate their function and offer maximum benefit to the public"*.

The existing planning scheme includes a Special Facilities Zone and a Special Purposes Zone providing for all special uses within the Shire. The Special Purposes Zone is intended to provide for all forms of Government, semi-Government and public or institutional development. The intent of the Special Facilities Zone is to provide for uses (other than government controlled uses) which, because of their nature or the particular circumstances of the site concerned, cannot be satisfactorily located in any other zone.

Whilst the zoning provisions of the 1988 town planning scheme provide for a range of special purposes, the extent of these zones tends to reflect the location of existing special purposes (i.e. the zone has tended to be reactionary). There are many special purposes and special facilities currently located within other zones, however this situation is not generally appropriate.

Community Consultation

There are a number of State Agencies that have specific concerns and land interests involving special uses.

Whilst land under control of State Development (DSD) is generally included in industrial zones and not considered to be a special use, the Department has expressed concern regarding the future of the existing Caboolture airfield, which is located on land currently leased by Caboolture Shire from the Department of Natural Resources and Mines. DSD has a major interest in the potential of this land to provide for long-term economic development.

The Department of Families indicated that the planning scheme should ensure that development adjoining departmental land is compatible with the existing and future community facilities.

Queensland Transport indicated its concern that maritime infrastructure items (eg public boat ramps and pontoons) are highly accessible and protected from adjoining incompatible uses. The Department has requested that maritime infrastructure items, both existing and future, are

identified by the planning scheme. The Department also identified a need for the planning scheme to recognise the State Planning Policy 2/92 by protecting the operations of the existing Caboolture airfield.

Queensland Rail requested that the planning scheme protect and enhance existing and future rail corridors and associated facilities, especially with regard to the avoidance of adjoining incompatible land uses.

The Department of Main Roads has expressed concern regarding the scope of use of State controlled roads. It has also been suggested that the planning scheme clarify the purpose of such infrastructure by designating haulage routes (eg rural, hard rock) and restricting the volume of local traffic.

The Caboolture Shire Council owns and controls a range of special purpose land uses throughout the Shire. These uses involve public utility items (such as water and sewage treatment) right through to community facilities (such as community halls). The planning scheme will need to ensure that existing and future requirements of Council controlled operations are provided for and protected within the planning scheme.

Discussion

There is a vast range of land uses included within the Special Purposes and Special Facilities zonings throughout the Shire. The majority of these uses are owned or controlled by Council and the State Government and may involve significant land areas (eg State Forest). Other non-government owned special purposes, generally involving single land parcels, include uses such as churches, child care, war veterans home, senior citizens centre and schools.

Due to their nature, special uses are generally situated in areas dominated by alternative land uses (eg schools within residential areas) and therefore require careful planning and protection to ensure that they are compatible with surrounding amenity. This protection may be achieved through a number of planning approaches. Firstly, the scheme needs to recognise and provide for both existing and future planned special uses. High impacting uses such as public utility infrastructure will require suitable buffers to ensure that sensitive uses are not adversely affected. Other uses, which are required to be directly accessible by the catchment they serve, need to ensure that they adopt suitable design and operational standards so as to integrate with the amenity of the surrounding area.

Conclusions

The analysis of existing and future special uses requirements has led to the following conclusions.

- (1) Many existing special uses can be accommodated within a zone other than the traditional Special Purpose or Special Facilities zones.
- (2) There is a wide range of activities that are commonly referred to as special uses for planning purposes.
- (3) It is no longer suitable for planning schemes to separate special use provisions based on ownership.

Section 16 - Natural Hazards

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Natural Hazards

Introduction

Caboorture Shire faces risk from a number of natural hazards. The mitigation of risk improves community safety, sustainability and prosperity. The planning scheme has a responsibility to address natural hazards such as bushfire, earthquake, flood, severe wind, storm surge, erosion and landslide. Land use planning can play a key part in reducing current and future community risk by identifying in advance the areas with increased risk and ensuring that new development does not occur or occurs in a controlled manner within those areas.

Issues

The analysis of issues as complex as community risk from natural hazards and associated mitigation strategies is highly dependant on the availability of appropriate data and information.

Hazards alone do not cause risks. Hazards need to interact with vulnerable elements to cause risks, however it is important to limit hazards to those that have at least some realistic chance of occurrence.

A hazard is a situation or condition with the potential for loss or harm to the community or environment. Hazards may include:

- Natural hazards such as bushfire, storm, flood, cyclone, storm tide, earthquake, and extreme heat and cold;
- Technological hazards caused by the failure of socio-technical systems. These include structural failure such as dam/levee collapse, and systems failures related to agriculture, food contamination, industrial sites, infrastructure and transportation;
- Biological hazards such as the spread of disease among plants, animals or people; and
- Civil/political hazards such as terrorism, sabotage, civil unrest, hostage situations and enemy attack.

Many of the above hazards cannot be addressed by the planning scheme.

Natural Hazards are meteorological or geological phenomena that have the potential to negatively impact on communities and the environment. Even relatively minor impacts of natural hazards can become significant over time in terms of ongoing economic, social and environmental costs. Land use planning and planning standards can make a significant contribution to minimising risks to the community and the natural environment from these types of events.

Managing the potential impacts of natural hazards is more difficult in certain areas of the Shire where substantial development in a hazard prone area has already occurred. This is particularly the case where the frequency and severity of the hazards involved are not easily measured. For instance the risk of an earthquake is far more difficult to address through land use planning than the risk of flooding. The level of accuracy of available information varies considerably depending upon the particular hazard being considered and the most accurate information available to Council generally relates to hazards that occur most frequently such as flooding.

Risk is considered to be the chance of something happening that will have an impact upon objectives. It is measured in terms of consequences and likelihood. Elements at risk include the population, building and civil engineering works, economic activities, public services, utilities and infrastructure in a given area. Risk to Caboorture Shire from natural hazards varies significantly.

Some meteorological hazards such as tropical cyclones, bushfires, floods and severe storms (including wind, rain and hail) occur frequently in Australia, from several to many times a year, causing regular disruptions and hundreds of millions of dollars worth of damage annually. Others, such as severe droughts occur once or twice a decade usually for extended periods, while still others such as storm surges have affected urban areas less frequently.

All coastal areas of the Shire are at risk of cyclones and storm surge, with some areas more vulnerable than others. Destructive storm surges do not happen very often, but as our coastal population grows the risk increases.

Historical records suggest that flooding and fire cause the greatest risk to communities within Caboolture Shire. There is no evidence to suggest that Caboolture is under threat from major tremors or earthquakes.

In terms of the community, factors such as age, ethnicity and socio-economic status are typical of the kinds of information that may assist in ultimately contributing to vulnerability analysis. Human and social factors of risk include fatalities and serious injury, loss of income, loss of employment opportunities and homelessness. Effects on the built and natural environment may include damage to buildings and infrastructure, damage to significant cultural and heritage sites, damage to ecological sites, and loss of soil quality. The effects on the economy include damage to industrial facilities, loss of crops and livestock, loss of workforce and loss of markets and business opportunities. Frequency of occurrence is a significant factor in evaluating the risks of natural hazards.

The Department of Emergency Services is preparing a State Planning Policy on "Natural Disaster Mitigation" in accordance with the *Integrated Planning Act 1997*. The policy will address natural disaster mitigation through land use planning and development assessment and will apply throughout Queensland. There are three main natural hazards to be addressed by the policy including flooding, landslides, and bushfires. The issue of storm surge will be addressed and managed through the State Coastal Management Plan and will not be included in the State Planning Policy.

Risk to the Caboolture Shire from natural hazards varies significantly thorough the different localities. The following section identifies the various natural hazards affecting Caboolture Shire and the levels of risk that have been identified.

Bushfires

Bushfires are the uncontrollable burning of forest or wooded areas, usually occurring over vast expanses of land on multiple fronts and as the result of dry and hot weather conditions.

The Queensland Fire and Rescue Service, in conjunction with the Department of Local Government and Planning, has prepared guidelines for Bushfire Hazard Planning in Queensland. These guidelines indicate that bushfire is a relevant planning constraint and that it be given due consideration in the development process.

Bushfires do destroy property (including urban property) and they can result in fatalities. The most notable bushfire events affecting Caboolture Shire in recent years occurred in September and November 1994. These fires affected more than 4,800 hectares of exotic pine plantation and destroyed both urban and rural property within Caboolture Shire. The history of bushfires in the South East Queensland region has, until very recently, been poorly recorded however bushfire is a serious threat in Caboolture Shire. Areas most at risk from bushfires are generally on the urban fringe, or at the interface between the bush and built up areas. The major threat within the Shire remains in rural and rural fringe areas, including rural villages such as Mount Mee and Elimbah.

The increasing popularity of rural residential living and the preservation of natural areas within urban developments brings with it an increasing level of risk from bushfire.

Further investigation is required to determine the areas of the Shire most susceptible to bushfire. Identification of these areas will allow Council to determine which development applications should be required to address bushfire management.

Cyclones

Cyclones are intense low pressure systems that are characterised by a spiral circulation pattern with dense clouds and mean surface winds exceeding gale force (60km/h) near the centre.

Tropical cyclones pose a significant threat to urban communities in South East Queensland. A tropical cyclone is an intense tropical low pressure weather system where, in the southern hemisphere, winds circulate clockwise around the centre.

The most active cyclone season on record was in 1962/1963. During this time seven cyclones passed into the region. The most significant regional impact by a tropical cyclone in recent history was the severe and widespread flooding caused by Tropical Cyclone Wanda in 1974.

The three components of a tropical cyclone that combine to make up the total cyclone hazard are strong winds, intense rainfall, and oceanographic effects including high energy waves, strong currents, storm surge and resulting storm tide.

Most tropical cyclones occur in the months between December and March. Tropical cyclones are accompanied by strong winds, with potentially destructive gusts. These strong winds can persist for many hours or even days causing widespread building and infrastructure damage and even loss of life. This damage can be caused directly by the wind and/or by the debris it propels, frequently with great force.

It is not possible to accurately assess storm surge scenarios for the Shire with existing available data. Broader issues such as storm tide modelling for Moreton Bay should be addressed in the short term. Such modelling, considering future climate changes, will be essential to guide land use planning including the siting of key facilities and infrastructure.

Earthquakes

Earthquakes are a shaking or trembling of the earth's crust caused by the release of huge stresses due to underground volcanic forces, the breaking of rock between the surface, or by a sudden movement along an existing fault line.

The Australian continent is distant from the boundary between the Australian and Pacific plates that involve a narrow band of earthquake activity affecting Papua New Guinea, the south west Pacific countries and New Zealand. South East Queensland is situated more than 1500 kilometres from this plate boundary, however strong earthquakes have occurred in Australia and more are expected to occur in the future.

Earthquake hazard can vary significantly across the Shire, primarily due to local site geology. Although damaging earthquakes are rare in Australia, the high impact of individual events on the community has made them a costly natural hazard. With increasing urbanisation and the reliance on power, water and telecommunications, Australian communities are becoming increasingly vulnerable to the impact of earthquakes.

Earthquakes threaten communities most through building damage. Dwellings (houses and flats) comprise almost 94% of all buildings within Caboolture Shire.

The earthquake hazard for Caboolture is low by global standards. The Shire faces a moderately low risk to its residential buildings from earthquakes. The level of earthquake risk in Caboolture is certainly significant and earthquakes should be considered in risk management strategies. Although the overall earthquake hazard for Caboolture is low, it is higher in the many parts of the Shire that are built on unconsolidated sediments as these ground conditions are expected to amplify the ground shaking from future earthquakes.

The risk from earthquakes in the Shire is most appropriately addressed through building design standards. There are areas of the Shire that can be distinguished in terms of susceptibility to earthquake risk. Susceptibility is generally related to the existing location of dwellings throughout the Shire as opposed to land areas that may be affected by earthquakes.

Due to a lack of existing base data it is not possible to accurately estimate future earthquake activity and associated damage within the Shire.

Flooding

Flooding is the inundation of land by expanses of water, where the land is normally dry. Flooding may be caused by prolonged or heavy rainfall, severe thunderstorms, monsoonal rains in the tropics, or tropical cyclones. Historical records show that flooding in the Caboolture area has resulted in damage to buildings and agriculture, and loss of life, in addition to disrupting normal services (eg mail and rail).

Bribie Island is primarily affected by tidal variations. There are no existing records of flooding on the island, however small incidences of localised flooding may occur in severe conditions.

Downstream of Caboolture CBD, the Caboolture River floodplain is very flat and consists of scattered swamps and extensive areas that are floodprone. Other than the townships of Caboolture and Morayfield, Beachmere is the only other significant urban area on the lower floodplain. The remainder of the floodplain is characterised by various rural activities including pastures and pine forest plantations.

The Burpengary Creek system, directly south of the Caboolture River catchment, also flows in an easterly direction to the northern end of Deception Bay, just south of the Caboolture River mouth. The Burpengary Creek catchment is generally flat and the land uses are largely rural, however there are some flood-affected residential properties. Flooding of Caboolture River and Burpengary Creek pose a moderate natural hazard risk to Caboolture.

Caboolture has always experienced nuisance flooding affecting properties along the Caboolture River, King John Creek and Lagoon Creek, as well as closing local roads. Burpengary Creek at

Burpengary has historically suffered reasonably consistent low level flooding problems in areas around Dale Street, Henderson Road, Springfield Drive and Matthew Crescent. It should also be noted that all coastal areas may be subject to flooding resulting from storm surge.

One of the largest floods affecting Caboolture occurred in 1972, although the 1931 event was probably more severe. The flood occurrences of December 1991 and January 1974 were also severe.

Heatwaves

A heatwave is generally considered to be a prolonged period of excessive heat and humidity. In South East Queensland, heatwaves generally occur between the months of November and February, with January being the most common month in which heatwave events have been recorded.

The most severe heatwave, in terms of fatalities, in South East Queensland occurred in January 1940 and was responsible for around 80 deaths. A more recent heatwave in January 2000 was responsible for around 20 deaths in the region.

Heatwaves are responsible for more deaths than any other natural hazard experienced in Australia and a large percentage of these deaths have occurred in Queensland.

In addition to significant loss of life, heatwaves can also cause significant economic losses due to affects upon livestock, crops, roads railways, bridges and power reticulation. Regardless of these potential impacts, heatwave remains one of the most under-rated of all natural hazards.

People over 65 years of age and living alone are considered to be the category of the population at the greatest risk from heatwaves. This segment of the population is represented in most areas of the Shire, however the largest concentration is at Bongaree on Bribie Island.

Landslide

Landslides are the downslope movement of a soil or rock mass as a result of shear failure at the boundaries of the mass. A landslide is the movement of a mass of rock, debris or earth down a slope. Although the causes of landslides may be complex, the results generally involve the failure of part of the soil and rock materials that make up a hill slope being driven by gravity. The most common trigger for a landslide is an episode of intense rainfall. In Caboolture rainfall events of such magnitude have an average recurrence interval of less than one year.

The SPP 1/03 requires all land with a slope of 15% or greater to be identified in planning schemes. Applications for development in these areas are to be assessed against provisions set down in this policy in order for adverse impacts on human life and property to be minimised.

Severe storms

Severe storms develop when dense, cold air overlies less dense warm, moist air. Solar heat, a front or a trough triggers them.

South East Queensland is a region particularly susceptible to severe thunderstorms, particularly during months of October through to April. Thunderstorms are typically short-lived (up to one hour) and limited in size but are capable of inflicting significant damage.

While tropical cyclones are potentially capable of greater destruction on a wider scale, severe thunderstorms dominate the annual wind speed records in South East Queensland, and together with flooding and lightning, are responsible for most of the annual damage to property. Bureau of Meteorology records suggest that approximately 30% of all severe thunderstorms produce damaging hail.

Storms have six main adverse impacts:

- Disruption of power supply from lightning strike or downed power lines.
- Road and rail access cut because of flash flooding, traffic accidents, or fallen debris (eg power lines and vegetation).
- Damage to houses due directly to severe winds, hail or stormwater, or indirectly by wind blown debris.
- Personal fear, injury or death from both direct and indirect causes.
- Significant insurance losses to both buildings and possessions such as cars.
- Fires and and/or fatalities caused by lightning strikes.

The impacts of thunderstorms within the Shire will tend to be localised and random in their distribution. The likely impact of thunderstorms within Caboolture Shire will relate to the materials of buildings, especially roof and wall materials, within the area affected.

Storm Surges

A storm surge is a raised dome of seawater typically 60km to 80km across and two to five metres above the normal sea level. As a cyclone reaches the coast the huge winds whip up the sea and push the dome of water over low-lying coastal areas.

The South East Queensland region has extensive low-lying coastal lands and these are impacted by storm surge. All tropical cyclones on or near the coast are capable of producing a storm surge, which can increase coastal water levels for periods of several hours.

A storm tide is capable of causing significant destruction of near shore buildings and facilities if large ocean swell penetrate the foreshore regions.

The localities of Beachmere and Bribie Island are the most exposed coastal areas of the Shire and therefore susceptible to storm surge flooding.

Review of Planning Scheme Provisions

The 1993 Caboolture Shire Strategic Land Use Plan (SLUP) includes an objective for Residential areas that ensures such development occurs on flood free land. The SLUP also limits residential development within coastal areas so as to minimise beach erosion.

The current planning scheme includes limited provisions to address the Shire's risk from natural hazards. Council has adopted a Flood Plain Management Policy that requires development to be above the level of a 1 in 100 year flood event.

Natural hazards such as bushfires, storm surges, tropical cyclones, thunderstorms, earthquakes and heatwaves are not addressed in the existing planning scheme.

Community Consultation

While the impacts of natural hazards was not raised as a specific issue during Community Consultation, the impacts of some of the elements such as flooding continue to be held as being extremely important for the Shire's residents.

Discussion

Caboolture Shire is at risk from a wide range of natural hazards. These hazards have differing levels of risk to community, including people and assets. Historical records and the existing level of information make it difficult to determine the likely occurrence and effects of particular hazards. Among the most frequently occurring natural hazards affecting the Shire are flooding and bushfires, however to date, flooding has been given major regard in the planning scheme.

There are direct, indirect, tangible and intangible costs associated with natural hazards and natural disasters. These costs include: loss of life; physical suffering; emotional suffering; damage to property; reduced productivity; degraded environment; loss of species and habitats; damaged infrastructure; weakened economy; loss of employment; associated loss to businesses and primary producers; increased costs of insurance; and reduced quality of life.

Land use planning can be used to control where and how development occurs. By controlling the extent and form of development in at-risk areas, the potential for damage in the event of a

disaster occurring can be reduced. Little can be done in relation to land use planning to prevent damage as a result of severe storms or cyclones, however some of the related impacts from these hazards can be addressed by land use planning measures.

Conclusions

Based on the foregoing assessment of natural hazards affecting the Shire, the following conclusions have been reached.

- (1) Some urban residential areas of the Shire are affected by flooding. Further flood studies are required to identify the extent of flooding throughout the Shire.
- (2) Bushfires and landslide pose a threat to many areas of the Shire with varying levels of risk involved. The provisions of SPP 1/03 are to be incorporated into the planning scheme.
- (3) The Shire is at risk from heatwaves. The community risk from heatwaves can be minimised by ensuring that building and site design is sympathetic to extreme climatic conditions.
- (4) Many natural hazards cannot be directly addressed by the planning scheme. Such hazards may include tropical cyclones, severe storms and earthquakes.
- (5) To properly address natural hazards through the planning scheme, further study is required to identify areas of the Shire susceptible to each of the major natural hazards. Such study will need to include some level of supporting mapping.

Historic Version
Caboolture ShirePlan

Section 17- Environmental Health and Safety

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Environmental Health and Safety

Introduction

The issues associated with environmental health and amenity are diverse. Environmental health can be divided into issues of the physical and natural surrounds as well as public health issues that consider the wellbeing of people and communities. The broad issues triggered by this topic includes food premises; hair salons; hallmark events such as festivals; environmentally relevant activities; advertising devices; overgrown land and unsightly premises; animal control; nuisances by the emission of noise, smoke, dust, fumes, light or odour; pests; amenity of the built environment; overhead powerlines and telecommunication cables.

Many of these issues are managed through local laws or legislation. Examples are the *Environmental Protection Act 1994* or the *Food Act 1981* and their respective policies and regulations. As a consequence of these laws it will generally be shown that each area is being adequately managed and controlled, however there are some areas of health and amenity that may have implications for the planning scheme or some changes may trigger the need to amend some Local Law Policies.

Issues

Activities and Uses

Each of the issues covered by environmental health are discussed as follows:

Food Premises

The public and environmental health issues regarding food involves a range of businesses or industries such as those that value-add to primary produce (eg canneries, dairy product manufacturers and soft drink factories) to those that have direct customer contact (eg supermarkets, take-away food premises and restaurants). All of these businesses or industries are required to be registered under the provisions of the *Food Hygiene Regulation 1989* consequently health and amenity issues are adequately addressed.

The diversity and size of food premises may trigger environmental and amenity issues. A cannery for example has very different impact than a fast food outlet or a restaurant with kerbside dining.

Hair Salons

Part 5 of the *Health Regulation 1996* manages the health of individuals attending hair salons. The impacts of hair salons on the environment is triggered by the waste products of the business. The main waste product is water borne chemicals and dyes. These waste products are adequately managed at sewerage premises however there is a planning issue for such activities on non-sewered premises.

Hallmark Events

Significant events such as folk and river festivals and air spectaculars have a combination of environmental health and amenity issues. Most activities such as food stalls, toilet facilities and emergency access can be addressed by the relevant permits and registrations required under legislation.

Environmentally Relevant Activities

The businesses listed as an Environmentally Relevant Activity (ERS) in Schedule One of the *Environmental Protection Regulation* are considered to have the potential to impact on the environment. These activities range in use from aquaculture and poultry farms to motor vehicle workshops, chemical manufacturing plants and refineries. Each activity is managed on an operational level by the issue of a development permit with conditions.

Advertising Devices

Council's Local Law No. 25 (Control of Advertisements) regulates all advertising devices in the Shire. It considers placement of signs, size, visual impact and the like, all of which affect health and amenity. Advertising devices are defined as operational works under the *Integrated Planning Act 1997* and therefore provisions relating to the regulation of signs may be included within future planning schemes.

Overgrown Land & Unsightly Premises

Council has Local Laws that address issues of this type. Unsightly premises in this case refers to untidy and poorly kept properties. (The issue of unsightly premises in terms of a building or structure that clashes with the amenity of an area by its shape or colour is considered under the heading "Built Environment").

Animal Control

Local Law 24 (Keeping and Control of Animals) and the 1988 planning scheme in some cases specify occupancy rates for some types of animals. The Local Law has the capacity to manage all issues for animals on land.

Nuisances (noise, smoke, dust, fumes, odour and light)

A wide range of issues are managed under the provisions of the Environmental Protection Act 1994 and the nuisance provisions of the Environmental Protection Regulation 1998. Council's Nuisance Local Law also has the capacity to deal with many types of health and amenity issues. Uses that may need further consideration could include a new two storey residential (commercial and private) developments located beside collector, sub-arterial and arterial roads. The second storey of these dwellings may be subjected to high levels of road noise and consequently it may be necessary to ensure they are constructed to a standard to ameliorate the road noise.

Pests

Certain animals, insects and plants are classed as pests because of their potential to produce disease or influence the amenity of an area. The animals, insects and plants that are designated as pests receive the classification through State Government legislation or Council local laws that require the pest, depending on its level of risk, to be managed or eradicated. The *Rural Lands Protection Act 1985* declares certain plants and animals as pests while the *Health Regulation 1996* declares mosquitoes as pests. The Council's Local Law No 9 (Control of Pests) gives the power to declare an animal or plant of a specified species as a pest.

Storage of Flammable and Combustible Liquids

The storage of these liquids above specified quantities is regulated by the *Building (Flammable & Combustible Liquids) Regulation 1994*. The purpose of regulating these liquids is to protect the health and amenity of surrounding premises. The *Environmental Protection Regulation 1998* also specifies that certain premises require an approval as an Environmentally Relevant Activity to allow the storage of these liquids.

Built Environment

The shape and colour of buildings can have an impact on the health and amenity of an area. Currently there are no Local Law provisions to regulate any buildings in this way however Council does have a policy that addresses building amenity issues.

Power lines and telecommunication cables in new developments.

Council currently has a policy to limit the building of residential buildings near high voltage powerlines and substations to minimise the risks associated with exposure to their electromagnetic fields. As well as high voltage powerlines there are also health and amenity issues for overhead powerlines and telecommunication cables. These issues may not be directly related to electromagnetic radiation but refer more to visual amenity, risks of electrocution from contact with the overhead cable, impacts of storm damage, risks for wildlife and the hazards associated with the impact of power poles on vehicles and pedestrians.

Review of Planning Scheme Provisions

The manner in which each of these issues are dealt with by the planning scheme and other Council provisions are discussed as follows.

Food Premises

In the 1988 Planning Scheme, food related activities are identified in a broad range of zones. Examples are the General Industry zone for a brewery or cannery, the Light Industry zone for cordial and cereal food manufacture, the Central Commercial and Local Shopping zones for restaurants and take away food premises, and the Residential A zone for home occupation (making of food) for food stall events. The planning scheme will need to consider the various impacts of food premises to determine what scale and intensity is suitable for a given area. For example, with regard to noise, a cannery would have different impacts than a take away café or restaurant and this has been successfully managed in the 1988 planning scheme by the limitations imposed on certain uses through the zoning provisions.

Hair Salons

A hair salon has on occasions been approved as a home occupation. The main issue is the scale and intensity of a salon, especially for areas that are not sewered. Council has passed a resolution on this issue requiring that all hair salons in a non-sewered area must discharge their liquid waste to a holding tank so as to be pumped out by a licensed septage carrier. This issue is directly related to the home occupation provisions and will need further consideration in future planning schemes.

Hallmark Events

The main issue is that the land is adequately sized and suitably located to deal with significantly sized crowds, even for one-off events.

Environmentally Relevant Activities

All ERAs require a development application under the provisions of the *Integrated Planning Act 1997*. All ERAs within the Shire have fitted the definitions in the 1988 planning scheme and have been successfully managed in their location through the zoning provisions of the scheme.

Advertising Devices

The installation of advertising devices is considered to be defined as works under the provisions of the *Integrated Planning Act 1997*. The current practice in Council is that applications for advertising devices are dealt with under the Local Law. This will continue to be the case for the future.

Overgrown Land and Unsightly Premises

There are no issues for the planning scheme in this area as it is adequately dealt with in the Local Law.

Animal Control

The definition of Animal Husbandry in the 1988 planning scheme excludes certain animals as well as specifying the number of birds, cats, dogs, ornamental fish and poultry that are considered ancillary to normal residential use. The Local Law Policy for the Keeping and Control of Animals also has this capacity to regulate the number and type of animals kept on a property, consequently animal control can, to a large extent, be excluded from the planning scheme. In doing so, it would be necessary to amend the Local Law Policy for the Keeping and Control of Animals to take up the issues addressed in the planning scheme that are not currently addressed in the Local Law.

Intensive animal husbandry, or the keeping of animals in large numbers possibly under controlled conditions such as poultry farm or kennel still needs to be regulated through the provisions of the planning scheme in order for the impacts to be addressed where appropriate.

Nuisances (noise, smoke, dust, fumes, odour and light)

Limited provisions exist in the 1988 planning scheme with regard to this matter. However, for road noise related issues, it may be appropriate to investigate the need to include provisions that provide noise amelioration, particularly for residential buildings where they adjoin collector, sub-arterial and arterial roads. It is considered that State Government legislation and Council Local Laws adequately address other nuisance provisions.

Pests

The impact of pests in the Shire is adequately managed through State Government legislation and Council's (Control of Pests) Local Law 9. Consequently there are no issues for the planning scheme in this area. As a matter of course, all future development should be located away from areas that are likely to generate pests.

Storage of Flammable and Combustible Liquids

The storage of flammable and combustible liquids in volumes that require a licence under the *Building (Flammable & Combustible Liquids) Regulation 1994* are associated with developments that would be normally triggered under the IDAS process. Examples are service stations, transport depots and chemical manufacturing plants. Consequently there are no issues for the planning scheme to address with regard to this topic.

Built Environment

The regulation of the built environment in terms of amenity is dealt with in two Development Control Plans where design guidelines are considered important for the area. These are *Development Control Plan No.1 – Woodford Township* and certain precincts in the *Development Control Plan No.5 – Caboolture Town Centre*. There is also a policy on duplexes that deals with the preferred design of the buildings. The need to have urban design provisions is essentially determined on a case-by-case basis. For some areas of particular uses it would be appropriate to have urban design provisions in the planning scheme eg Woodford or Caboolture and Morayfield.

Power Lines and Telecommunication Cables in New Developments

The issue of minimising the impacts of these types of facilities has attracted widespread debate on a national level. The manner in which the impacts are to be addressed needs to be further considered so that a uniform approach is adopted by all local authorities in regulating such uses.

Community Consultation

Many comments were raised during the early stage of consultation for the scheme about environmental health issues which emphasises the high regard in which these matters are held by the Shire's community. The planning scheme however cannot address issues such as refuse collection and animal control. Notwithstanding this, there were some comments made about improvements that the planning scheme can assist with such as the regulation of advertising signs, reducing impacts upon the environment, and ensuring that development occurs away from areas that are affected by pests eg. mosquito breeding grounds.

Discussion

Most issues raised under the heading of health and amenity are addressed adequately through Local Laws and Policies and some State Government legislation. Some issues (such as home occupations, overhead power lines and road noise) may require further consideration in the planning scheme as they may have a negative impact on the health and amenity of the environment in certain circumstances. Consequently the nominated issues listed below may be better managed by codes or other tools in the planning scheme. This would ensure those issues do not have adverse impacts on the environment and the people who live in that locality. Other issues have also been raised where certain changes in the scheme may require some Local Law Policies to be reviewed. These changes and their impacts are also listed below.

Conclusions

The analysis of environmental health issues has developed the following conclusions.

- (1) There are a number of land uses that have the capacity to impact on the health and amenity of the local environment.
- (2) Hallmark events can have an impact on environmental health and amenity.
- (3) Some animal control provisions can be adequately addressed by Council's local law.
- (4) Some residential buildings that abut collector, sub-arterial and arterial roads and railway lines can be subject to unreasonable noise levels that affect the health and amenity of the residents.
- (5) Animal, plant and insect pests are adequately managed through State Government legislation and Council's Local Law.
- (6) The colour scheme and design of certain buildings can have an impact on health and amenity.
- (7) There are, potentially, significant health and amenity issues for overhead powerlines and telecommunications cables.

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Caboolture ShirePlan - Supporting Information

Volume 2 – The Strategic Framework

Historic Version
Caboolture ShirePlan

Historic Version
Caboolture ShirePlan

EXECUTIVE SUMMARY

The preparation of a planning scheme occurs having regard to the provisions set down within the principal legislation for planning within Queensland, the Integrated Planning Act (IPA). The Act is quite specific with regards to its purpose and the outcomes it aims to achieve.

A planning scheme must advance the purpose of the IPA which is to seek to achieve ecological sustainability by way of coordinating and integrating planning at the local, regional and State levels; managing the process by which development occurs; and managing the effects of development on the environment. Ecological sustainability in the IPA is described as a balance that integrates:

- protection of ecological processes and natural systems at local, regional, State and wider levels;
- economic development; and
- maintenance of the cultural, economic, physical and social wellbeing of people and communities.

The IPA also sets out the requirements for the plan making process which include, among other things, having to address the core matters under the broad descriptions of land use and development, infrastructure, and valuable features. The legislation has been supported in 2000 and 2002 by the introduction of scheme making guidelines prepared by the Department of Local Government and Planning.

These guidelines provide a context for the preparation of planning schemes and introduce ecological sustainability and operational principles that must be considered when preparing a planning scheme. Ecological sustainability principles describe generic environmental outcomes that need to be balanced and integrated to achieve ecological sustainability. They are derived from the IPA and provide guidance for all policy decisions made when preparing a planning scheme. The principles logically integrate the purpose of the Act, the three elements of ecological sustainability, what advancing the Act's purpose includes, and the general understanding of the respective environmental issues. The guidelines also discuss balancing and integrating the ecological sustainability principles.

The operational principles provide a reference for deciding how the exercise of preparing a planning scheme will be conducted and how the planning scheme will operate. As indicated by their description, their main focus is on ensuring the provision of a planning scheme that works in an efficient manner.

Each principle, for both the ecological sustainability and operational purposes, can only be achieved to the extent practicable in the context of seeking to achieve other principles.

The guidelines also introduce the concept of a strategic framework. In essence, this is the part of the process where the strategies for dealing with the expected growth and change that seek to achieve ecological sustainability are determined. The strategies relate to the core matters and are informed by the ecological sustainability and operational principles. The major outcome is that a planning scheme is prepared in accordance with the provisions of the IPA, in other words the scheme is seeking to achieve ecological sustainability for the Shire.

This *Volume 2 – The Strategic Framework* has been prepared having regard to the scheme making guidelines. Within Section 5, there is the framework of strategies for the planning scheme known as the Ecological Sustainability Framework (ESF). Determining the strategies commenced with a review and analysis of the core matters, based on the summaries contained in *Volume 1 – Background Study*. Key actions were then developed having regard to the analysis of the issues and the ecological sustainability principles. These key actions are broad in nature but are sufficiently detailed to inform the preparation of outcomes and strategies that appear in the ESF. Other management plans such as Council's Corporate Plan and the Regional Framework for Growth Management were also used in deriving the key actions.

The ESF presented in Section 5 is a technically and structurally complete document that can be used to guide the preparation of the outcomes for the planning scheme. These outcomes will appear in the form of codes, overlays, zones, definitions, and policies. A broader summary of the overall ESF will also be included in the planning scheme for information purposes and will therefore be a non-statutory component.

Historic Version
Caboolture ShirePlan

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LIST OF TERMS AND ABBREVIATIONS

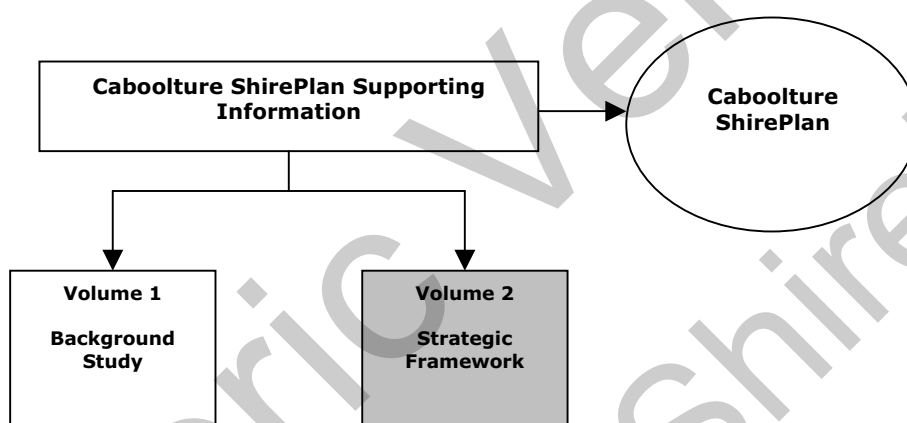
DLGP	Department of Local Government and Planning
ESF	Ecological Sustainability Framework
IPA	Integrated Planning Act
IRTP	Integrated Regional Transport Plan
RFGM	Regional Framework for Growth Management

Section 1 – Introduction

This Strategic Framework is the second component of the supporting information for the planning scheme. It follows the first volume that represents the information gathering phase of the process for preparing a planning scheme. *Volume 1 – Background Study* contains all of the facts and circumstances of the core matters that are to be addressed in the planning scheme.

The purpose of *Volume 2 – The Strategic Framework* is to take the conclusions from the analysis of the core matters in Volume 1 and develop the strategies, at a broad level, that underpin the outcomes sought for the planning scheme.

FIGURE 1.1 THE SHIREPLAN AND SUPPORTING INFORMATION



The preparation of these strategies for the planning scheme needs to be undertaken within a context. For this strategic framework and planning scheme there is the Integrated Planning Act (IPA) and the associated scheme making guidelines prepared by the Department of Local Government and Planning (DLGP). The IPA and the guidelines set out the range of aspects that need to be addressed both from a legislative and operational perspective. The guidelines are beneficial in that they provide interpretation of the ecological sustainability provisions contained in the IPA.

Volume 2 contains six other sections that each describe the components that contribute towards the preparation of strategies for the planning scheme.

Section 2 provides a background to the context for preparing a planning scheme. It outlines the legislative provisions that a planning scheme must be prepared in accordance with and details the other management strategies that must be taken into consideration by Council when preparing its planning scheme. Finally it provides an outline of the relevant provisions from the DLGP scheme making guidelines. This is a major aspect of this document as the ecological sustainability principles outlined in Section 2 dictate the nature and content of the strategies that are later developed.

Section 3 provides an analysis of the issues arising from *Volume 1 – Background Study* for each of the core matters. It also outlines the key actions that are to be progressed as a result of reviewing the issues and then considering any implications in the context of the ecological sustainability principles.

A conceptual framework for the arrangement of strategies that ultimately inform the provisions of the planning scheme is outlined in Section 4. This is a theory-based discussion demonstrating how the provisions of the IPA can influence the way in which the strategies are both developed and arranged.

Section 5 provides the Ecological Sustainability Framework that is to be the basis of the planning scheme. It is prepared having regard to the context issues discussed in Section 2, the key actions that the planning scheme is to address for the core matter in Section 3, and is set out in a manner similar to the conceptual framework presented in Section 4.

Reviewing the provisions of the ESF is important because it needs to be determined whether or not, the strategies that are to underpin the provisions of the planning scheme have been prepared having regard to the ecological sustainability principles. Section 6 outlines the components of the ESF that advance each of the ecological sustainability principles.

Section 7 provides a general overview of the structure and components of the planning scheme while also describing which components of *Volume 2 – The Strategic Framework* are to be included within the planning scheme.

Section 2 - The Context for Preparing a Planning Scheme

Introduction

The Integrated Planning Act

**Regional Framework for Growth
Management 2000 (RFGM)**

Corporate Plan 2001-2004

Scheme Making Guidelines

Summary

2.1 Introduction

The purpose of this section is to outline the various legislation, management plans, and guidelines that are to be used during the course of preparing a planning scheme. It is apparent that there is a broad range of issues that need to be considered in order for a planning scheme to advance ecological sustainability principles.

2.2 The Integrated Planning Act

A planning scheme is to be prepared in accordance with the provisions of the *Integrated Planning Act* (IPA). The Act is a framework to integrate planning and development assessment so that development and its effects are managed in a way that is ecologically sustainable. The legislation contains a number of provisions for scheme making that are discussed as follows.

2.2(a) The purpose of the Act

A planning scheme must advance the purpose of the IPA (S1.2.1) which is to seek to achieve ecological sustainability by way of coordinating and integrating planning at the local, regional and State levels; managing the process by which development occurs; and managing the effects of development on the environment.

Ecological sustainability in the IPA (S1.3.3) is described as a balance that integrates: protection of ecological processes and natural systems at local, regional, State and wider levels; economic development; and maintenance of the cultural, economic, physical and social wellbeing of people and communities.

The IPA (S1.3.6) provides an interpretation of what is meant by these terms used in ecological sustainability. It states:

- (a) ecological processes and natural systems are protected if—
 - (i) the life supporting capacities of air, ecosystems, soil and water are conserved, enhanced or restored for present and future generations; and
 - (ii) biological diversity is protected; and
- (b) economic development occurs if there are diverse, efficient, resilient and strong economies (including local, regional and State economies) enabling communities to meet their present needs while not compromising the ability of future generations to meet their needs; and
- (c) the cultural, economic, physical and social well-being of people and communities is maintained if—
 - (i) well-serviced communities with affordable, efficient, safe and sustainable development are created and maintained; and
 - (ii) areas and places of special aesthetic, architectural, cultural, historic, scientific, social or spiritual significance are conserved or enhanced; and
 - (iii) integrated networks of pleasant and safe public areas for aesthetic enjoyment and cultural, recreational or social interaction are provided.

2.2(b) Core matters

S2.1.3 of the Act identifies key elements of planning schemes. These include the coordination and integration of *core matters* including any State or regional dimensions of these matters. S2.1.3A describes the core matters as:

- (1) Land Use and Development that includes each of the following –
 - (a) the location of, and the relationship between, various land uses;
 - (b) the effects of land use and development;
 - (c) how mobility between places is facilitated;
 - (d) accessibility to areas;
 - (e) development constraints (including, but not limited to, population and demographic impacts).
- (2) Infrastructure that includes the extent and location of proposed infrastructure, having regard to existing infrastructure networks, their capacities and thresholds for augmentation.

(3) Valuable Features that includes each of the following, whether terrestrial or aquatic –

- (a) resources or areas that are of ecological significance (such as habitats, wildlife corridors, buffer zones, places supporting biological diversity or resilience, and features contributing to the quality of air, water (including catchments or recharge areas) and soil);
- (b) areas contributing significantly to amenity (such as areas of high scenic value, physical features that form significant visual backdrops or that frame or define places or localities, and attractive built environments);
- (c) areas or places of cultural heritage significance (such as areas or places of indigenous cultural significance, or aesthetic, architectural, historical, social or technological significance, to the present generation or past or future generations);
- (d) resources or areas of economic value (such as extractive deposits, fishery resources, forestry resources, water resources, sources of renewable and non-renewable energy and good quality agricultural land).

2.2(c) Relationship between local, regional, and state dimensions of planning

The framework provided by the IPA for both scheme making and development assessment requires planning to be coordinated and integrated. In the context of the core matters, this integration must occur across local, regional and State levels. A local matter is one identified by Council to be of particular interest to the Shire and have been identified during the preparation of background studies and the Statement of Proposals consultation phase of the planning scheme preparation.

S2.1.4 identifies matters of a regional dimension and refers to regional planning advisory committee reports. The Regional Framework for Growth Management (RFGM) is identified as such a report which means that State and local governments must ensure their planning instruments contain the appropriate measures and actions required to implement the RFGM. This should involve an assessment of the need to prepare or review statutory planning instruments and prepare a program for the implementation of the actions identified through this process. The provisions of the RFGM will be further discussed in Section 2.3.

KEY POINT

Planning schemes must advance the purpose of the IPA which is to seek to achieve ecological sustainability.

This is achieved by way of coordinating and integrating planning at the local, regional and State levels; managing the process by which development occurs; and managing the effects of development on the environment.

2.3 Regional Framework for Growth Management 2000

The principal document managing and coordinating growth within South East Queensland is the Regional Framework for Growth Management 2000 (RFGM). It has the Regional Coordination Committee as the primary advisory and coordination body responsible for overseeing the implementation of regional planning in South East Queensland. Its membership includes government (local, State and Federal) and non-government sectors. All spheres of government are to institute action to enable the implementation of the agreed Principles and Priority Actions contained in the RFGM. Council therefore has a responsibility to ensure that it is endorsed and considered in the course of undertaking its statutory planning, corporate planning and infrastructure provision decisions. Caboolture Shire has been an active participant since the commencement of the process in 1990.

The first RFGM was released in 1994 with a number of reviews having taken place since then. The planning scheme and supporting information will be referring to the priorities outlined in the December 2000 version of the RFGM.

The document consists of a vision statement and details of the institutional arrangements to manage the whole process. The focal point of the strategy are the principles and priority actions which seek to deliver specific outcomes that will ultimately result in the achievement of the vision for South East Queensland. The principles and priority actions have been devised for each of the sixteen themes listed in the RFGM as follows:

- Conservation of the Natural Environment
- Natural Economic Resources
- Water Quality
- Air Quality
- Regional Landscape
- Urban Growth
- Residential Development
- Major Centres
- Economic Development and Employment Location
- Social Justice and Human Services
- Liveability
- Cultural Development
- Indigenous Involvement
- Transport
- Water Supply
- Waste Management

The priority actions for each of these themes affect Council directly and must be taken into account in the future planning for the Shire. The responsibility for implementing the actions can be either Council or a nominated State Agency or a combination of both. The level at which these priority actions impact upon the planning scheme varies from the broad, where it influences major policy decision, to the specific where plans, actions and operational programs are to be prepared.

KEY POINT	<p>The RFGM is the principal planning document managing growth in South East Queensland.</p> <p>Council is required to takes its Principles and Policy Actions into account when preparing its own planning and management documents including the planning scheme.</p>
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2.4 Corporate Plan 2001-2004

The Corporate Plan establishes the overall policy framework for all activities of Council. These policies are then carried through into the various planning and management documents of the Council. They provide a framework for operational planning within the Shire. The planning scheme is one of these other management documents and therefore needs to be prepared having regard to the provisions of the Corporate Plan.

The Vision of the *Corporate Plan 2001-2004* is:

Our Shire is a vibrant and attractive place, with a friendly and safe community where innovation and lifestyle really count.

The following Mission Statement supports this Vision:

To lead, manage and work in partnership with the Community.

The vision and mission statements are to be achieved with constant reference to the following five values:

- **Leadership**
- **Learning and Innovation**
- **Quality and Service**
- **Respect**
- **Accountability**

The Key Challenges for the Shire have been identified as:

Image/Identity Transportation Information Technology Lifestyle Planning	Safety Learning and Innovation Jobs Arts and Culture Tourism
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In response to the challenges of the future, the Shire has identified the following nine key strategic issues. These issues are supported by the objectives listed along with a number of strategies that describe the actions to fulfil the objective.

Issues	Objective
Arts and Culture	To enhance the quality of life in our Shire through community cultural development by supporting and promoting community participation in multi-cultural activities.
Economic Development and Tourism	To maximise the Shire's recognition as a Key Metropolitan Centre by the Queensland Government via the development of policies and programs that support business, tourism and employment growth.
Environmental Management	To achieve a quality built environment and maintain a quality natural environment by ensuring land use and development is planned and that the social, economic and environmental well being of the community is enhanced and protected.
Learning and Innovation	To embrace and respond to fluctuating demographic trends, societal and behavioural changes, technological advancements, and develop new approaches that add value to the organisation and the community.
Public Health and Safety	To work with the community in developing programs and initiatives that address issues associated with public health and personal safety.
Recreation	To plan, provide and maintain an integrated open space, leisure and recreation infrastructure that will enhance the lifestyle of all residents and visitors.
Shire Services and Facilities	To provide services and facilities for the community which enhance their quality of life.
Social and Community Services	To celebrate and support the communities in the Shire by affirming safety, equity and diversity and facilitating participation in planning to meet the needs of future and existing communities.
Transportation	To ensure the integration of transportation systems within the Shire.

KEY POINT

The Corporate Plan sets out the framework for the management of Council's activities.

The planning scheme is one of the management plans that helps to deliver the Corporate Plan's vision statement and strategies.

2.5 Scheme Making Guidelines

The DLGP has prepared scheme making guidelines, provided in four parts, that are to be used in the process of preparing planning schemes. The guidelines propose a practical way to effectively achieve the fundamental concepts of the IPA i.e. seek to achieve ecological sustainability; and coordinating and integrating planning and planning scheme matters. The guidelines describes a process that:

- Establishes three stages for decision making in the preparation of a planning scheme;
- Explains how planning, and planning scheme matters, may be coordinated and integrated; and

- Identifies what needs to be considered.

The guidelines also introduce principles that have been derived from the Act in terms of ecological sustainability and the operation of the planning process and the planning scheme itself. They are referred to as **ecological sustainability principles** and **operational principles**. The principles provide a context for decision making during the planning scheme preparation process.

2.5(a) Ecological Sustainability Principles

IPA Guideline No 2/00 Process For Preparing Planning Schemes – The Principles (draft) describes 16 ecological sustainability principles.

The principles are arranged in three groups:

- Protection of ecological processes and natural systems;
- Economic development; and
- Maintenance of well-being.

The principles describe generic environmental outcomes that need to be balanced and integrated to achieve ecological sustainability. They are derived from the IPA and provide guidance for all policy decisions made as part of preparing planning schemes. They should inform all stages of the planning scheme preparation. The principles logically integrate the purpose of the Act, the three elements of ecological sustainability, what advancing the Act's purpose includes, and the general understanding of the respective environmental issues. Some aspects of the planning scheme core matters are also reflected in the principles by virtue of the matters dealt with by the principles.

The Guideline also discusses balancing and integrating the ecological sustainability principles. Each principle can only be achieved to the extent practicable in the context of seeking to achieve all the other principles, given local circumstances. **This reflects the balancing and integrating that are essential for ecological sustainability.**

The 16 principles are:

(1) Protection of Ecological Processes and Natural Systems

ES1 Air Quality	Air pollution is minimised, both overall and in terms of the human population affected.
ES2 Nature Conservation	Areas having high value in terms of ecology or biodiversity at local, regional or state levels are conserved, enhanced or restored as much as practicable, and effects of development on these areas are minimised.
ES3 Land Maintenance	Land degradation is minimised.
ES4 Water Quality	Water pollution is minimised, both overall and in terms of the human population affected.

(2) Economic Development

ES5 Economic Activity	Economic activity within the local area, the region and State, now and in the long term, is encouraged and facilitated.
ES6 Resource Availability	Economically useful extractive and mineral resources, good quality agricultural land, forestry resources, fisheries and sources of non-renewable energy are available for ongoing use as far as practicable.
ES7 Energy Efficiency	Energy is used as efficiently as practicable and the use of non-renewable energy resources is minimised.
ES8 Resource Usage	The use of local water and biological resources is consistent with sustainable yields, and the use of biological resources and extractive and mineral resources generally, is minimised.

ES9 Affordability	Standards for the built environment are affordable and cost effective.
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(3) Maintenance of Community Wellbeing

ES10 Community Needs	All members of a community have appropriate access to services that meet their needs.
ES11 Infrastructure Efficiency	The use of existing and committed infrastructure is maximised and future infrastructure is provided efficiently.
ES12 Public Safety	Threats to public safety and health associated with the natural and built environments, including climatic, physical, biological, chemical, structural, traffic and fire hazards, are minimised.
ES13 Heritage Conservation	Areas and places of special aesthetic, architectural, cultural, historic, scientific, social or spiritual significance are conserved or enhanced as much as practicable.
ES14 Public Spaces	Integrated networks of pleasant and safe public areas for aesthetic enjoyment and cultural, recreational and social interaction are provided.
ES15 Amenity	Amenity is maximised.
ES16 Community Harmony	Community harmony and the sense of community are maximised.

2.5(b) Operational Principles

IPA Guideline No 2/00 Process For Preparing Planning Schemes – The Principles (draft) describes 7 Operating Principles.

The operational principles provide a reference for deciding how the exercise of preparing a planning scheme will be conducted and how the planning scheme will operate. The principles integrate the purpose of the Act, what advancing the Act's purpose includes, the statutory process, and the meaning of State interest. Not all of the principles can be applied independently and achieved without having regard to achievement of some of the other principles. Each principle can only be achieved to the extent practicable in the context of seeking to achieve other principles.

OP1 System Efficiency	The efficiency of the planning and development assessment systems is maximised.
OP2 System Effectiveness	The effectiveness of the planning and development assessment systems is maximised.
OP3 Coordination and Integration	The coordination and integration of related decision-making occurring at respective State, regional and local levels, and also within each level, is maximised.
OP4 Community Involvement	Appropriate opportunities are provided for community involvement in decision making.
OP5 Accountability	Appropriate actions are taken to make decision making accountable.
OP6 Precautionary	If there are threats of serious or irreversible environmental damage, careful evaluation must be made to avoid wherever practicable serious or irreversible environmental damage including, if appropriate, assessing risk weighted consequences of various options.
OP7 Balancing	In balancing the achievement of individual ecological sustainability principles the advancement of the principles overall is maximised.

2.5(c) Steps to Preparing a Planning Scheme

IPA Guideline No 1/00 Process For Preparing Planning Schemes – The Overview (draft) sets out a three stage process for preparing a planning scheme that is described as follows.

Stage 1: Determining the Strategic Framework

The aim of this stage is to determine the strategies for dealing with the expected growth and change that seek to achieve ecological sustainability. The strategies relate to the core matters and will be for major land use allocation, major infrastructure items related to the land use allocations, and aspects of use and development management that are an integral part of planning for the major land use allocations and infrastructure.

The process of developing the framework is informed by the ecological sustainability principles in considering the relevant environmental outcomes associated with particular ways of dealing with expected growth and change. The principles provide a frame of reference for identifying and analysing the relevant matters and deriving implications that those matters have for particular strategies. The balancing and integration required to determine strategies may mean that particular ways of advancing a principle are not adopted in certain cases because of conflicts with advancing other principles.

The operational principles are used in conjunction with the ecological sustainability principles to determine the strategy for dealing with expected growth and change that best advances the ecological sustainability principles overall. The approach should be applied at broad, local and intermediate levels. Together with the ecological sustainability principles, the broad strategies form the foundation for drafting the desired environmental outcomes in stage 3.

IPA Guideline No 3/00 Process For Preparing Planning Schemes – Stage 1: Determining the Strategic Framework (draft) sets out a conceptual approach for determining the strategies.

The elements of the approach as set out in the Guideline are:

Element 1	Description of the Element
Identify and analyse relevant matters	<p>(1) <u>Scope of relevant matters</u> These are any aspects of the environment the planning scheme should deal with to respond to development associated with the expected scale and nature of future growth and change in an area. This includes the core matters.</p> <p>(2) <u>Defining expectation of future growth and change</u> The realistic expectations for the scale and nature of future growth and change in an area need to be identified. This involves consideration of demographic trends; assessment of new trends for particular land uses; specific proposals; known infrastructure proposals; housing, transport, commerce, community, or entertainment needs. A realistic timeframe for the growth and change also needs to be determined.</p> <p>(3) <u>Identifying relevant matters</u> Specific matters in relation to land allocation, infrastructure, and environmental effects need to be considered.</p> <p>(4) <u>Analysing relevant matters</u> Consideration of the matters is undertaken having regard to the ecological sustainability principles.</p>
Element 2	
Derive implications for strategies	<p>The purpose of identifying and analysing relevant matters is to derive implications those matters have for the planning scheme's strategies. Implications are ways for dealing with expected changes and assess whether and why those ways advance or do not advance the ecological sustainability principles.</p> <p>Implications are to be framed in the context of seeking to determine a particular strategy. It is the combination of the implications derived from related matters that informs the determination of a strategy.</p>

Element 3 Balance and integrate implications to determine strategies	<p>(1) <u>Identifying required strategies</u> Strategies are the ways proposed to deal with development associated with the expected growth and change in an area. Strategies will fall into one of two categories:</p> <ul style="list-style-type: none"> • Land use allocation and infrastructure; or • Use and development management. <p>(2) <u>Balancing and integrating implications</u> This is the main step in the process where strategies are developed through applying the ecological sustainability principles and operational principles; generating strategy options if necessary; and then choosing between those options for a final strategy.</p>
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Stage 2: Implementing the Strategies

The aim of this stage is to implement the strategies identified in stage 1 to achieve the outcomes sought. This is through decisions on specific policy measures using the available planning scheme mechanisms. These decisions provide instructions for the drafting of the planning scheme measures in stage 3. This stage recognises the role of planning schemes as tools for managing development within the framework established by IDAS.

The process of considering the ecological sustainability principles in deciding planning scheme strategies continues in stage 2. The operational principles are also relevant.

There are two phases to stage 2:

Phase 1 – making decisions in terms of the relevant planning scheme mechanisms and identifying appropriate scheme structural elements; and

Phase 2 – making decisions about how the scheme mechanisms should generally be organised for logical, effective and efficient use of the planning scheme for development assessment.

Stage 3: Drafting the Scheme and Supporting Documents

This aim of this stage is to prepare the planning scheme that gives effect to the policy directions decided in stages 1 and 2.

KEY POINT	<p>The scheme making guidelines provide a practical way to effectively achieve the fundamental concepts of the IPA. The ecological sustainability and operating principles provide a context for decision making during the planning scheme preparation process.</p> <p>Preparing the strategic framework is the most important part of the process as it involves determination of the strategies for the planning scheme.</p>
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2.6 Summary

Planning schemes are prepared in accordance with legislation that provides a framework for the advancement of ecological sustainability and operational principles. There are also recognised procedures and guidelines that set out a series of steps to enable planning schemes to be prepared having regards to the legislative framework. Higher order strategies such as a corporate plan or a regional planning documents provide policy directions for the preparation of planning schemes.

Based on the issues outlined in this section, the following sets out the stages for the preparation of a planning scheme. It also outlines which parts of the Caboolture ShirePlan and its Supporting Information corresponds to these stages.

Stages	Planning Scheme Preparation	ShirePlan or Supporting Information
STAGE 1	Preparing the Strategic Framework	

Element 1	Identify and analyse relevant matters	<ul style="list-style-type: none"> Identifying the matters – Volume 1; Analysing the matters – Section 3 of Volume 2.
Element 2	Derive implications for strategies	<ul style="list-style-type: none"> Section 3 of Volume 2.
Element 3	Balance and integrate implications to determine strategies	<ul style="list-style-type: none"> Section 3 of Volume 2; Section 5 of Volume 2.
STAGE 2	Implementing the Strategies	<ul style="list-style-type: none"> Procedural matters that results in the production of the Caboolture <i>ShirePlan</i>; Reviewing compliance with ES principles and RFGM in Section 6 of Volume 2.
STAGE 3	Stage 3: Drafting the Scheme and Supporting Documents	<ul style="list-style-type: none"> Caboolture <i>ShirePlan</i>.

Section 3 - Analysis of the Core Matters and Determination of Key Actions

Introduction

Land Use Development

Infrastructure

Valuable Features

3.1 Introduction

The purpose of this section is to undertake Stage 1 of the scheme making process outlined in section 2.5(c). This will involve the analysis of the core matters based on the identification of issues that occurred in *Volume 1 – Background Information*. The next step will involve deriving implications that is undertaken having regard to the ecological sustainability and operational principles, and the issues derived from other matters that must be taken into account. The coordination and integration for planning will also require local, regional and State dimensions of an issue to be considered as well in preparing a strategy. Discussion will also involve reference to documents such as the RFGM. This phase of the determination of strategies is undertaken having regard to the core matters hence the discussion is presented under each of the three core matter headings.

Following the analysis and discussion of implications the broad key actions for the management of growth are prepared. These key actions are further developed within Section 5 where they appear in the form of principal outcomes, strategies and supporting outcomes as part of the ES framework for the planning scheme. The strategies are to be referred to as “key actions” in order to avoid any confusion with the strategies that appear later in Volume 2 as part of the ES framework.

3.2 Land Use and Development

3.2(a) Population and Residential Development

Conclusions from the Review of Issues

From the review of the population information (*Volume 1 Section 3*) and residential development (*Volume 1 Section 4*) the following conclusions have been made.

- (1) The Shire will continue to experience population growth. While the rate of growth will not be as high as previously experienced, planning will be based on future population of between 164,546 persons (low growth scenario) and 173,495 (medium growth scenario).
- (2) The age profile of the Shire’s residents is changing while it also contains significant variations within age groups between the individual localities. Overall, the Shire has an ageing population but still continues to have significant increases within younger age groups which can be attributed to migration.
- (3) The number and type of dwellings required to house the Shire’s residents will increase as a result of declining household sizes. This has implications for both established and newly developed areas.
- (4) Providing a variety of housing choice is an important consideration in planning for the Shire’s current and future communities.
- (5) Occupancy rates and household structures continue to change in the Shire highlighting the need to encourage a range of housing choices and locations across the Shire to meet lifestyle needs.
- (6) Consolidation (infill and development) is a major theme for the future development of residential land in the Shire.
- (7) A sufficient supply of land can be identified to accommodate the anticipate growth for 2016 and 2021. Any expansion beyond identified areas needs to be justified having regard to ecological sustainability principles.
- (8) This supply can be provided at a number of locations across the Shire and through a mixture of zones while also providing housing variety and choice therefore meeting lifestyle needs.
- (9) The designation of Caboolture as a Key Metropolitan Centre under the RFGM brings with it a number of challenges and responsibilities with respect to residential densities in the centre and integrating land use planning with ecological, social and infrastructure considerations.

- (10) Increased and mixed residential densities in specific areas should be provided with good access to commercial/employment nodes, community and transport facilities.

Analysis and Implications

The analysis of population and residential development reveals that future growth rates for the Shire will not be occurring at the rates previously experienced during the early 1990s. There will be one or two exceptions to this where in some localities of the Shire, strong growth can be expected to continue. The major implication of the predicted growth rate for the Shire is that the areas designated in the 1993 Strategic Land Use Plan for urban residential and rural residential purposes will not have to be expanded for the life of the planning scheme. In some instances, it will be appropriate to reduce these areas as an oversupply of land does not help to achieve efficiency under the ecological sustainability principles. The provision of future land can occur across a mixture of urban residential and rural residential zones.

The consolidation theme (infill and redevelopment) is the only option to consider in these circumstances. For new development, quality urban environments are to be encouraged that result in the establishment of communities not just the subdivision of land. Transit oriented developments, higher densities clustered around centres, community facilities and employment nodes along with walkable mixed communities are encouraged. The RFGM encourages such forms of residential development.

Consolidation provides a number of benefits such as:

- maximising use of infrastructure;
- easing the pressure for outward growth of urban development;
- an improved utilisation of public transport systems;
- an improved utilisation of existing housing stock;
- reduced energy consumption – especially for transport.

The other option which is to allow urban sprawl to continue will create adverse impacts upon the natural environment, reduce the efficiency of infrastructure, and create additional loadings upon the provision of social and community services. Therefore, any future residential development should be confined to the areas zoned for such purposes in the planning scheme.

While rural residential land continues to be a popular form of development within the shire, the RFGM clearly indicates that any expansion cannot be undertaken. The analysis of the land supply within the shire suggests that there is an adequate supply of existing zoned land that can be used to accommodate growth while meeting this lifestyle choice.

The designation of Caboolture as a Key Metropolitan Centre in South East Queensland brings with it a number of responsibilities and implications. To ensure the centre's continued success, it is important that there is a substantial population base within the catchment that will support the range of functions and activities undertaken. The planning scheme can play a major role through identifying suitable areas where medium to high residential densities should be provided. Areas such as Caboolture and Morayfield will be the most likely areas for this to occur.

Medium to high residential densities also provide other benefits in terms of advancing transport and social planning objectives. Transport and land use planning principles now encourage more compact, better designed urban communities which allow for forms of transport other than just the private motor vehicle. Improved mobility provides more opportunities for the community to use social facilities and services.

Other centres within the Shire such as those at Bellara, Burpengary and Deception Bay are major functional and activity nodes for their respective communities. This presents an opportunity for higher than usual residential densities to be provided in close proximity to the services in these centres. Areas such as Bellara have long been zoned for medium density development and should retain such provisions in the planning scheme.

Transport nodes such as the Burpengary and Narangba railways stations provide opportunities for transit oriented developments to occur. Higher densities will be encouraged around these areas. There are opportunities within the Narangba area for post 2016 to accommodate a range of low and medium density development on the eastern side of the railway line.

One other issue to emerge is the need to develop individual identities for each of the major localities within the Shire. The need to develop and maintain a strong sense of community is highly regarded by residents. Some of the features which contribute to this identity range from urban design and subdivision patterns to the interaction and linkages with other land uses in each locality. Proximity to and the availability of community and social services is highly sought after by the Shire's residents as is the provision of a diversity of housing opportunities that will lead to greater lifestyle and housing choice.

Recommended Key Actions

The key actions for the planning scheme are:

- (1) Consolidate the urban and rural residential areas in the Shire by not expanding previously designated areas, and encouraging sensitive redevelopment and infill of established areas particularly for medium density development.
- (2) Encourage transit oriented development within the major centres of the Shire eg. Key Metropolitan Centre, Bribie Island, Burpengary, and Deception Bay and around important infrastructure such as public transport nodes and schools.
- (3) Identify new areas for medium density development that are in close proximity to centres, transport, recreation, entertainment or cultural facilities.
- (4) Preserve and enhance the individual identities of towns and localities through a number of measures such as character statements and provisions, the provision of buffers and separation distances, and the creation of large allotments to provide the openness and separation.
- (5) Encourage the establishment of communities that provide an improved quality of life for residents.
- (6) No additional rural residential zoned land is to be provided. Lots close to areas such as Caboolture and Morayfield are to be retained for the conversion to urban residential development post 2016.
- (7) Encourage the provision of a wide range of affordable and accessible dwelling types, sizes and tenures while also encouraging the efficient use of existing housing stock.

Rationale

The key actions recognise that the identification and protection of residential areas to accommodate existing and future population growth is both a key goal for both the State Government and Council. Establishment of quality residential communities that encourage sense of community and foster strong identities are important key actions for the future. The overarching aim is to direct urban growth to consolidation and sensitive infill of existing urban areas and to ensure that planned urban expansion maximises the advancement of ecological sustainability principles *ES9 Affordability*, *ES10 Community Needs*, *ES11 Infrastructure Efficiency*, and *ES16 Community Harmony*.

3.2(b) Commercial Centres

Conclusions from the Review of Issues

From the review of the commercial land requirements in the Shire (*Volume 1 Section 5*) the following conclusions have been made.

- (1) There is an oversupply of retailing in the Shire indicated by high vacancy levels.
- (2) Caboolture has been identified as a Key Metropolitan Centre in the South East Queensland Regional Framework for Growth Management 2000. A Key Metropolitan Centre is considered to be *"... an important urban centre which is multi-functional and includes retail, community, cultural, and transport services."*
- (3) Observed commercial centre trends suggest a polarisation of centres towards larger mega-complexes and small convenience centres with the neighbourhood and district centres potentially becoming less popular.
- (4) In the past there has been a lack of long-term planning within the centre communities. Many existing commercial centres are characterised by disjointed layouts and existing community facilities are often not well located with respect to commercial centres.
- (5) Much residential growth has occurred around the KMC including the rapid expansion of retail at Morayfield. This growth has impacted upon the viability of convenience centres in the adjoining localities.

Analysis and Implications

It has been identified that there is no need to expand the extent of existing commercial areas within the Shire with the exception of some additional local centres. On this basis, the consolidation (redevelopment and infill) of existing centres is to be advanced by the planning scheme. Any expansion of commercial development outside existing centres within the Shire would exacerbate the existing problems including oversupply and resulting high levels of commercial vacancies.

The strategy for centres is to ensure that a network of multi-functional centres is established across the Shire that meets the needs of the broader and local communities. The strategy is to support economic development by encouraging a mix of appropriate uses to locate within centres, particularly the higher order ones. The strategy should also recognise that existing centres represent a significant investment (both public and private) in social and commercial infrastructure. This investment should not be undervalued by out of centre development.

Centres are major employment areas for the shire and should have a multi-functional role thereby providing a mix of employment opportunities for existing and future residents. Other land uses appropriate for centres are medium density residential developments, as also identified in Section 3.2(a). Increased population within and around the centres provide enormous opportunities for growth as mixed use areas.

Centres should be within good proximity to residential areas and support public transport infrastructure. With the design of centres having regard to CPTED principles, it will ensure that safe and attractive public areas are developed which can lead to active, vibrant and culturally important places for the community. It also provides opportunities for a strong identity and image to be encouraged to grow. With the identification of Caboolture as a Key Metropolitan Centre for the northern Brisbane region, all strategies need to ensure that their actions assist with the delivery of the outcomes that are being sought.

The major outcome from the background study identifies the need to provide a 3-tiered hierarchy of centres throughout the Shire. At the highest level, the Caboolture Key Metropolitan Centre will be the principal area for commercial development although its function as a centre will also include providing for other employment opportunities as well as recreational, cultural, social, educational and entertainment functions.

The consolidation and growth of three district centres at Bellara, Burpengary and Deception Bay should also be provided for in the planning schemes. Again, the function of these commercial centres should extend beyond just those of retail activities.

Supporting these four major centres throughout the Shire is a network of local centres that are principally for convenience retail shopping although in some areas such as at Woodford, their role is a larger one.

While a structured hierarchy is encouraged and to be provided, any group of centres should also function as a network recognising that each centre can play its role in achieving economic and social outcomes sought through the planning scheme and the RFGM.

Recommended Key Actions

- (1) Establish a three-tiered commercial centre hierarchy consisting of the Key Metropolitan Centre, District Centres at Burpengary, Bellara and Deception Bay, and a number of convenience centres spread throughout the Shire. It is recognised that the centres in the Shire are to function in a network sense as much as a structured hierarchical manner.
- (2) Consolidate the commercial areas in the Shire by way of not expanding previously designated areas, and encouraging redevelopment and infill of established areas particularly for the Key Metropolitan Centre and three district centres in the Shire.
- (3) Allow for limited expansion and provision of new local centres to meet the projected needs of the local markets and communities they are to service. The location of these new centres will be determined having regard to the preferred function and anticipated catchment.
- (4) The Key Metropolitan Centre and the three district centres are to provide for a diversity of functions, at a scale appropriate to the catchments they serve. Particular emphasis is placed on the provision of community facilities and increased housing densities in and around the centres.
- (5) The provision of a diversity of functions and uses will provide a greater mix of employment opportunities within the centres.

- (6) Ensure that centre developments support and encourage a greater use of public transport and mobility options such as bikeways and pedestrian walkways. The coordination and integration of infrastructure network planning for transport is a major consideration in this regard.

Rationale

The key actions for centre development recognise that there are Shire-wide economic, community and environmental benefits in concentrating the majority of commercial, entertainment, and community functions within centres. Issues of access, public transport, community identity, and provision of infrastructure all reinforce the need to promote the development and viability of centres.

The key actions recognise that a structured hierarchy approach to centre development has its value but it is the network relationships between the centres that can provide the most advantages for economic growth in the Shire. The key actions also recognise that certainty can be provided with regards to where centres are to be established but provide flexibility with respect to the range of uses that are encouraged at a variety of locations.

The key actions assist with the advancement of ecological sustainability principles *ES5 Economic Activity, ES10 Community Needs, ES11 Infrastructure Efficiency, ES14 Public Spaces, ES15 Amenity and ES16 Community Harmony*.

3.2(c) Industry

Conclusions from the Review of Issues

From the review of the industrial land requirements (*Volume 1 Section 6*) the following conclusions have been made.

- (1) There is an established framework for industrial areas within the Shire that should be further developed and enhanced to provide employment and business opportunities for the future.
- (2) Future industrial land in the Shire is required at the local and district scales.
- (3) Industrial activities by nature create external impacts affecting other land uses both within and outside industrial areas. These can be minimised through effective long-term planning.
- (4) Support from State Government Agencies, in particular the Department of State Development, will be required to undertake further investigations of potential regional scale industrial areas within the Shire.

Analysis and Implications

The review of industrial provisions has concluded that there will be a shortfall of industrial land in the Shire for 2016 if further industrial areas are not identified and designated. The strategy for industry is to ensure that a network of industrial areas is established across the Shire that meets the employment and business needs of community. It is also recognised that existing industrial areas represent a significant investment (both public and private) in social and commercial infrastructure and this investment should not be undervalued by out of order development.

The major outcome from the background analysis identifies the need to provide a 3-tiered hierarchy of industrial areas throughout the Shire at the regional, district and local levels. The areas are to function as a network as well as being part of the structured hierarchy.

The only existing Regional Scale Employment Area in the Shire is the Narangba Industrial Estate. The importance and value of this industrial area within the South East Queensland context is recognised in the RFGM and it will continue to be supported through the planning scheme. While this area should serve the region for the life of the planning scheme, any significant increase in demand for land could see the estate fully developed before 2016.

For the shortfall at the district level, an area at Morayfield on the eastern side of the Buchanan Road Interchange has been found as a suitable site for a District Scale Employment Area. Before any development is to occur, a structure plan is to be prepared outlining the extent and form of development that is to take place.

At the local level, shortfalls of land at Woodford and Deception Bay have been identified. Suitable areas can be identified during the course of determining future land allocations for these areas.

The creation of a network of industrial areas responds to the need to provide a variety of land use options and locations to support regional and local industry needs. The creation of specialist clusters provides an opportunity for specific industry classes to be located within the Shire. This diversity of job type and location provides a mix of employment opportunities for existing and future residents of the Shire.

The manufacturing sector has been identified as one of the major employers within the Shire and therefore the planning scheme needs to provide for its existing and future land requirements. With the increase in population, there will also be a corresponding increase in the range of service industries needed within the Shire. These need to be provided across the Shire within and around major concentrations of the population.

While the importance of providing for industrial activities is recognised, by nature, they have the potential to create external impacts affecting other land uses within and close to an industrial area. Some activities will need to be located in specific areas where suitable separation distances can be provided. The inclusion of the latest and best planning practice standards for all types of impacts will be a feature of the planning scheme and will be delivered through the use of codes.

Recommended Key Actions

- (1) Establish a three-tiered hierarchy consisting of a Regional Industrial Area at Narangba, and District Industrial Areas at Caboolture (Bribie Island Road Interchange Area), and a new area east of the Buchanans Road Interchange at Morayfield. A number of local industrial areas are spread throughout the Shire. It is recognised that the areas in the Shire are to function in a network sense as much as a structured hierarchical manner.
- (2) Allow for limited expansion and provision of new local industrial areas particularly at Woodford and Deception Bay to meet the projected needs of the local markets and communities they are to service. The location of these new areas will be determined having regard to the preferred function and anticipated catchment.
- (3) Provide a diversity of uses and activities that will create a greater mix of employment opportunities. The uses and activities are to be of a nature that reflect the needs of the catchment that the industrial area serves.
- (4) Address environmental impacts of industry by adopting best practice planning standards for industrial development that address reduce energy consumption, buffer areas, environmental impacts, and building and siting design.

Rationale

The key actions for industry recognise that the uses within these areas provide a major role in the economic advancement of the Shire. In the case of the Narangba Industrial Estate, this role is at a regional and State level. The industrial areas also provide for a wide range of uses that are to service the communities of the Shire.

The key actions recognise that a structured hierarchy approach to industrial areas has its value but it is the network relationships between the areas that can provide the most advantages for economic growth in the Shire. The key actions also recognise that certainty can be provided with regards to where centres are to be established but provide flexibility with respect to the range of uses that are encouraged at a variety of locations.

The key actions assist with the advancement of ecological sustainability principles *ES1 Air Quality, ES4 Water Quality, ES5 Economic Activity, ES 7 Energy Efficiency, ES10 Community Needs, ES11 Infrastructure Efficiency, ES15 Amenity.*

3.2(d) Employment and Tourism

Conclusions from the Review of Issues

From the review of the employment and tourism characteristics (Volume 1 Section 7) the following conclusions have been made.

- (1) All land uses provide opportunity for some level of employment generation.
- (2) A significant proportion of the Shire's resident labour force work outside the Shire.

- (3) Some employment sectors have only short term future land supplies.
- (4) Tourism activities are generally associated with other existing land uses and are difficult to identify as a land use in their own right.
- (5) The Shire has potential for a range of tourist activities associated with the range of land uses throughout the Shire that have varying degrees of scale and impact on surrounding areas.

Analysis and Implications

There is a range of employment generating and tourist based activities throughout the Shire that can occur within any land use setting and locality. The themes that are discussed under the core matters all have the potential to create employment and provide tourism opportunities. Where employment and tourism issues are relevant, they are also discussed within the individual sections for each of the core matters.

The detailed planning and analysis that has been undertaken within the background studies have identified the need, location, servicing requirements and locational opportunities for a variety of employment nodes throughout the Shire. Employment nodes have been identified relative to their local or regional significance. In the main, these nodes have been discussed within the commercial and industrial sections. Other industry sectors such as education, tourism and agriculture are recognised for their employment generation and are considered to have a major potential within the Shire. The Shire also has significant economic development potential with regards to day tripper tourism, eco and cultural tourism, rural tourism, and sporting events.

The background analysis identified that there is a significant mismatch between the Shire's labour force and the amount of jobs available within the Shire. Even if the amount of jobs available in the Shire matched the resident labour force it is likely that there would still be a mismatch between labour force skills and available employment sectors. Not all employment sectors that people work within can be located in the Shire. However it should be attempted to close the gap in the mismatch over time.

The designation of Caboolture as a Key Metropolitan Centre under the RFGM brings with it a number of economic responsibilities. The planning scheme must make sure that there are minimal impediments to economic growth in the areas where major employment areas have been identified. This is provided that the development is undertaken within the bounds or parameters that may be in place having regard to impacts on other core matters particularly the natural and community wellbeing systems. At the other end of the spectrum, it is widely acknowledged the contribution that home based businesses have within the community in terms of providing employment. Information tends to suggest that people working from home account for a noticeable percentage of employment numbers. In a similar manner to commercial or industrial development, home based business are to be encouraged provided that they operate in a manner that has regard to the potential adverse impacts they may have on the natural and community wellbeing systems.

Whatever the employment sectors are within the Shire, Council needs to make sure that all areas are adequately and appropriately catered for in terms of land use provision.

Employment and tourism located within the Shire also has an impact on transport and infrastructure. There is a significant proportion of the Shire's labour force that currently work outside the Shire thus increasing distances for journey to work and journey to recreational activities. The provision of future employment and tourism opportunities should aim to decrease these journey distances particularly through the provision of local jobs in appropriate employment sectors. Greater tourism attractors within the Shire would also decrease the need for people to travel out of the Shire. This would greatly increase the amount of leisure time people would have, which in turn must improve their overall wellbeing and provide a suitably balanced lifestyle.

Recommended Key Actions

- (1) Establish a network of business and tourism based nodes that encourage a mix of uses therefore creating a range of employment opportunities.
- (2) Support future land requirements for businesses and industries in order to provide for local jobs in appropriate employment sectors.
- (3) Provide for a range of tourist activities associated within rural and urban areas.

Rationale

The main aim of the key actions for employment and tourism is to encourage a diverse and dynamic economic base for the Shire inclusive of identified regionally significant economic development opportunities and a well distributed network of local employment opportunities. Many of the key actions for other core matters can assist with the creation of employment and tourism opportunities. Advancement of key actions for other themes can therefore assist with the achievement of the above key actions.

The key actions assist with the advancement of *ES5 Economic Activity*, *ES10 Community Needs*, *ES16 Community Harmony*.

3.2(e) Rural

Conclusions from the Review of Issues

From the review of the rural land requirements (Volume 1 Section 8) the following conclusions have been made.

- (1) Urban uses such as residential and industrial development are competing with rural uses for rural lands, including good quality agricultural land.
- (2) There is potential for conflict between adjoining rural uses and between rural and non-rural activities depending upon the land use practices involved and the associated environmental effects.
- (3) There are a number of potential threats to the continuing viability of certain rural pursuits (eg pineapples, dairying) within the Shire.
- (4) There is a range of existing and potential rural processing activities that value-add to rural produce.
- (5) There are concerns about the suitability of private forestry in areas outside the Rural designation (eg rural residential areas).
- (6) Family reason subdivision contributes to the fragmentation of viable rural areas. The fragmentation of rural land has a variety of cost implications for Council.
- (7) Rural areas of the Shire have a valuable character and provide scenic amenity.

Analysis and Implications

The analysis of the rural land issues in the Shire highlights the importance of protecting and enhancing the rural areas of the Shire. The major issues for a planning scheme to address include protection of good quality agricultural land, minimum subdivision of land requirements, protection of rural uses from incompatible uses, easy transition of rural uses, the scenic amenity of rural areas, the potential for tourism based activities, and the emergence of new rural uses such as farm forestry.

There is pressure for rural lands to be used for alternative non-rural activities particularly 'rural living'. Family reason subdivisions have contributed greatly to the fragmentation of rural land and especially impact on rural activities when these lots are occupied for non-rural purposes i.e. domestic living.

Investigations also found that the rural areas of the Shire provide for activities other than the usual range of rural uses. They contain areas that are of environmental value, susceptible to flooding, and in some cases, serve as transitional areas for future residential and industrial activities. Rural areas are also where extractive resources are likely to be found and utilised. Extractive industries have the potential to create major impacts upon the environment but have no other location options within the Shire.

Before any decision is made with regards to converting rural land to non-rural purposes, the value of the area must be identified in the first instance. To assist with this, the *Rural Lands Study* has provided an updated map depicting the categories of good quality agricultural lands within the Shire. This layer of information will inform the planning scheme with regards to the impacts of development on good quality agricultural land.

The planning scheme needs to protect land for existing and future rural activities within the Shire by ensuring that encroachment of conflicting land uses does not threaten the viability of rural activities. It is recognised that rural activities, by nature, create external impacts affecting other land uses within and external to rural areas.

Recommended Key Actions

- (1) Identify and protect good quality agricultural land within the Shire.
- (2) Identify and protect animal husbandry uses and recognise that the Shire has special attributes in some locations that make it appropriate for intensive animal husbandry businesses. Intensive rural activities such as poultry farms and aquaculture will be located away from prominent areas of existing and future residential development.
- (3) Recognise that rural areas have other features such as waterways, vegetation and extractive resources which are competing for land.
- (4) Ensure that viable farm sizes are maintained and impacts from rural activities can be appropriately managed. "Family reason subdivisions" cannot be supported in the future.
- (5) Provide for private forestry (farm forestry) in rural areas and in rural residential areas where appropriate.
- (6) Protect the existing scenic amenity of rural areas by maintaining low intensity rural activities and undeveloped lands in the western elevated areas of the Shire to act as a 'backdrop' to urban areas. Steep and vegetated slopes contribute significantly to the character of Caboolture Shire and will generally be protected for this reason.
- (7) Develop suitable codes for rural areas to manage emissions (eg noise, odour, runoff etc), and buffer areas (as outlined in 'Planning Guidelines for the Identification of Good Quality Agricultural Land') to ensure that land use conflicts are avoided.

Rationale

The key actions recognise that the main purpose for rural land is recognised and protected i.e. GQAL and animal husbandry activities. These uses are of value on a local, regional and State level. It is also acknowledged that a number of other non-rural based activities and features are part of the rural landscape of the Shire hence are competing for the same area. The rural sector within the Shire continues to be viable from an economic perspective and the planning scheme should be aiming to minimising any effects that will impact upon this viability for the long term.

The strategy advances *ES5 Economic Activity*, *ES6 Resource Availability*, *ES14 Public Spaces*, *ES15 Amenity*, *ES16 Community Harmony*.

3.2(f) Community Wellbeing

Conclusions from the Review of Issues

From the review of the community wellbeing issues (Volume 1 Section 12) the following conclusions have been made.

- 1) The Integrated Planning Act is explicit in its requirements for community wellbeing issues to be addressed in the preparation of policies and outcomes for the planning scheme.
- (2) The Regional Framework for Growth Management requires social planning to be integrated with the broader land use planning and the provision of human services.
- (3) For integrating community wellbeing issues, the principles of equity and justice, community participation and development, and integration and coordination are important for the future planning of the Shire's communities. The ability to involve the community in the process is just as important as the preparation of policies and outcomes.
- (4) The preparation of a *Community Facilities Infrastructure Plan* will assist the planning scheme to identify future land use requirements for the Shire so that development takes into account the needs of current and future residents.
- (5) Liveable communities should be developed through integrated land use, transport, recreational, transport and social infrastructure planning. Consideration regarding the impacts of development should include:
 - people's way of life;
 - shared beliefs, customs, values and aspirations; and
 - community identity, facilities and services.

Analysis and Implications

The major social and community issue to emerge is that for preparing a planning scheme, social and community well-being issues are wide-ranging and depend as much upon the process to prepare the scheme as they do for policy content.

For policy content, community well-being considerations are wide ranging and overlap with the consideration of all other elements of the core matters. The provision of housing choice and affordability; mobility to, from and within areas of employment, recreation and education facilities; the ability to enjoy safe working and living environments; and the recognition and support of strong social and cultural values are just a few of the issues that need to be considered and addressed.

The general premise for any strategy should be ensuring that the needs and aspirations of people who live and work within the Shire will be achieved, resulting in improved quality of life for all members of the Shire community. Planning for community wellbeing should be based on the principles of:

Equity and access which is referring to the need for services and facilities to be designed and operated to be responsive to a range of age groups and cultures. Services should be fairly distributed throughout the community reflecting cultural, social and geographic variation. It also includes having a range of housing types, and costs within new and existing development.

Community participation and development which covers aspects such as ensuring people are involved in as many stages of the planning, implementation, management and assessment of services and facilities.

Integration and coordination which encourages the integration of services where possible. Resourcing should be aligned with community need.

Flexibility is to be built into plans and program to ensure that changing community needs are recognised.

Issues identified in other core matters include the increasing and changing population characteristics of the Shire. There is an ageing of the population and changing family structure that in turn will affect the service needs and housing demand. Where people live affects their quality of life. Where new communities are built and how they are designed also affects the quality of life for people. The Shire has experienced increasing pressure on service in those urban fringe and rural residential areas where services are not available or well-matched. People also need to feel safe and comfortable in their living environments.

Where people live in relation to passive and active recreation areas is also an important lifestyle issue. Ensuring that a variety of transport options is available will assist with advancing many of the RFGM and IRTP principles as well as improving the quality of life.

Recommended Key Actions

- (1) Facilitate equitable access to community facilities and services, places of work, leisure and community activity.
- (2) Avoid or lessen the adverse effects of development on people's way of life, their culture and their community.
- (3) Ensure access to employment opportunities.
- (4) Provide housing choice and affordability that meets the community's needs. This includes providing safe, healthy and comfortable residential environments.
- (5) Provide for efficient and safe travel by a choice of transport modes appropriate to the needs of the community.
- (6) Provide opportunities to use and enjoy the natural environment.
- (7) Facilitate a cohesive community with intact character and identity, strong social networks and respected cultural values.
- (8) Encourage lively and vibrant town centres that provide a focal point for community activity.
- (9) Encourage distinctive, legible, and interesting urban design areas that promote safety, accessibility and social interaction, while offering choice and variety.

Rationale

The rationale for the key actions recognises that community wellbeing affects all of the other core matters under consideration. Each aspect of our social, economic and natural systems can positively contribute to advancement of wellbeing principles. For example, actions for residential development can ensure a variety of housing styles are on offer at a number of different locations in the Shire. The establishment of new communities must also develop strong character and community spirit. Ensuring that social justice principles are upheld and that people are provided with opportunities to be involved in the future planning of their areas are important considerations.

The key actions assist with advancing *ES10 Community Needs*, *ES11 Infrastructure Efficiency*, *ES12 Public Safety*, *ES14 Public Spaces*, *ES15 Amenity*, and *ES16 Community Harmony*.

3.2(g) Natural Hazards

Conclusions from the Review of Issues

From the review of the natural hazards provisions (Volume 1 Section 16) the following conclusions have been made.

- (1) Some urban residential areas of the Shire are affected by flooding. Further flood studies are required to identify the extent of flooding throughout the Shire.
- (2) Bushfires and landslide pose a threat to many areas of the Shire with varying levels of risk involved. The provisions of SPP1/03 are to be incorporated into the planning scheme.
- (3) The Shire is at risk from heatwaves. The community risk from heatwaves can be minimised by ensuring that building and site design is sympathetic to extreme climatic conditions.
- (4) Many natural hazards cannot be directly addressed by the planning scheme. Such hazards may include tropical cyclones, severe storms and earthquakes.

Analysis and Implications

Caboolture Shire is at risk from a wide range of natural hazards. These hazards have differing levels of risk to community, including people and assets. Historical records and the existing level of information make it difficult to determine the likely occurrence and effects of particular hazards. Among the most frequently occurring natural the hazards affecting the Shire are flooding and bushfires, however to date, only flooding has been given major regard in the planning scheme.

There are direct, indirect, tangible and intangible costs associated with natural hazards and natural disasters. These costs include: loss of life; physical suffering; emotional suffering; damage to property; reduced productivity; degraded environment; loss of species and habitats; damaged infrastructure; weakened economy; loss of employment; associated loss to businesses and primary producers; increased costs of insurance; and reduced quality of life.

Land use planning can be used to control where and how development occurs. By controlling the extent and form of development in at-risk areas, the potential for damage in the event of a disaster occurring can be reduced. Little can be done in relation to land use planning to prevent damage as a result of severe storms or cyclones, however some of the related impacts from these hazards can be addressed by land use planning measures.

The guiding principle therefore for natural hazards is to identify and manage the risks and threats to human occupation.

Recommended Key Actions

- (1) For natural hazards, where practicable, urban residential and rural residential development should be excluded from these areas. Where it is not practicable, development should be minimised and designed to reduce the impacts and be responsive to the constraint.

Rationale

The key action itself advances the ecological sustainability principles of *ES5 Economic Activity* and *ES12 Public Safety*. Ensuring that development does not occur in high impact areas (whether it be for flooding, landslip or bushfire hazard areas) ensures that threats to personal safety are minimised. Minimising the risks to people also helps to minimise the risks to property and assets.

3.2(h) Environmental Health and Safety

Conclusions from the Review of Issues

From the review of the environmental health provisions (Volume 1 Section 17) the following conclusions have been made.

- (1) There are a number of land uses that have the capacity to impact on the health and amenity of the local environment.
- (2) Hallmark events can have an impact on environmental health and amenity.
- (3) Some animal control provisions can be adequately addressed by Council's local law.
- (4) Some residential buildings that abut collector, sub-arterial and arterial roads and railway lines can be subject to unreasonable noise levels that affect the health and amenity of the residents.
- (5) Animal, plant and insect pests are adequately managed through State Government legislation and Council's Local Law.
- (6) The colour scheme and design of certain buildings can have an impact on health and amenity.
- (7) There are, potentially, significant health and amenity issues for overhead powerlines and telecommunications cables.

Analysis and Implications

Most issues raised under the heading of environmental health and amenity are addressed adequately through Local Laws and Policies and some State Government legislation. Some issues (such as home occupations, overhead power lines and road noise) may require further consideration as they have the potential to create adverse impacts on the health and amenity of the environment in certain circumstances. Consequently some environmental health and amenity issues may be better managed by codes or other tools in the planning scheme. Other issues have also been raised where certain changes in the scheme may require some Local Law Policies to be reviewed.

In any event, it is important that health and safety issues are taken into account when assessing the effects of development.

Recommended Key Actions

- (1) Incorporate measures that reduce the impacts of development with respect to health, amenity and safety issues.

Rationale

The key action will advance the ecological sustainability principles *ES12 Public Safety*, *ES15 Amenity* and *ES16 Community Harmony*. If appropriate measures are in place in the planning scheme, then *ES1 Air Quality* and *ES4 Water Quality* will also be advanced. The effects of development are an important consideration and reinforce the balance that needs to be found between advancing economic systems but not to the extent that the natural and community wellbeing systems are compromised.

3.3 Infrastructure

3.3(a) Transport

Conclusions from the Review of Issues

From the review of the infrastructure (transport) issues (Volume 1 Section 10) the following conclusions have been made.

- (1) Land use and transport planning need to be integrated.
- (2) There is a need to develop an efficient road network system for the Shire while recognising that the demand for all forms of transport will increase.
- (3) Transport issues impact upon the environment eg. high dependence upon the car poses a serious threat to the air quality of a region.
- (4) Alternative forms of transport to the private motor vehicle such as public transport, pedestrian and cycle ways need to be promoted and accommodated.

Analysis and Implications

Land use and transport planning are linked, with both areas needing to have strategies in place which complement and support the other one. The core elements of transport planning that impact upon land use planning are road network planning, public transport, and cycle and pedestrian movements. The *Caboolture Transport Model* and the *Bikeway and Pedestrian Network Strategy* are a major step towards the establishment of a transport system and hierarchy which responds to the land use patterns within the Shire. Through addressing and undertaking many of the priority actions and projects outlined in higher order documents such as the RFGM, IRTP and *Transport 2007*, Council will be contributing to and achieving many of the ecological sustainability principles advanced by these strategies.

The encouragement of transit oriented development is a major focus of future planning for the Shire. The consolidation approach outlined for the residential, commercial and industrial land uses will support this strategy in a major way.

Increasing residential densities can contribute to improving the efficiencies of the transport system where having higher density areas located around major public transport interchanges and railways stations will make public transport more attractive. The other benefit it provides is that urban sprawl will be minimised and the number of trips by traditional transport modes, such as the private motor vehicle, can be reduced over time. Better land use decisions help to promote outcomes that enhance accessibility, minimise environmental degradation, and maximise social opportunities.

Higher densities around the Caboolture, Bellara, Burpengary and Deception Bay centres is to be a major priority for the Shire. These types of densities should also be encouraged around railway stations such as Burpengary and Narangba.

Locating business and employment areas close to the right location of the transport system can also provide benefits. Businesses which require car and truck access should be located near major roads and interchanges while businesses which enable people to use public transport should be situated near a major public transport facility. The location of a future district industry area near the Buchanans Road interchange is a proposal that supports this concept.

Encouraging public transport also provides environmental benefits. Traffic and transport can create adverse impacts on air quality, noise pollution, social and visual amenity. Any strategy that reduces potential impacts such as developing better land use decisions, and improved and more appropriately located transport systems, is to be supported.

To encourage alternatives forms of transport such as walking and cycling, measures need to be in place to improve the security, safety and convenience of these areas.

Recommended Key Actions

- (1) Promote the development of new residential, commercial and industrial areas in locations and at densities that support public transport provisions and use.
- (2) Develop a road hierarchy for existing and proposed roads to ensure that it meets preferred land use patterns and community needs.
- (3) Encourage transit oriented development through promoting higher population densities in close proximity to major centres of employment, recreation, education, and cultural activities within the Shire in order to reduce the dependency on transport networks and to provide environmental benefits.
- (4) Encourage land uses within locations that facilitate the development of a transport system that incorporates alternative modes of transport to the private motor vehicle.
- (5) Ensure that residential areas have pedestrian and cycle networks.
- (6) Prevent large-scale business development in areas not capable of being serviced efficiently by public transport.
- (7) Prevent development of land uses which are not consistent with the efficient functioning of the roads.
- (8) Ensure development meet disability guidelines for access and ensure that all transport corridors are wide enough to accommodate safe and comfortable walking facilities.

Rationale

The key actions are based on the need for an efficient transport network to be in place. This network provides for vehicle, cycle and pedestrian mobility options. Consolidation of the land use patterns bring with it a corresponding consolidation in the transport network which must derive economic efficiencies and environmental benefits.

The components of the network are also important such as ensuring safe and secure facilities for pedestrians. The advantages of reducing motor vehicle dependency will mean that there are benefits provided to the environment by way of reduced emissions.

The key actions advance the ecological sustainability principles *ES1 Air Quality*, *ES7 Energy Efficiency*, *ES10 Community Needs*, *ES11 Infrastructure Efficiency*, and *ES15 Amenity*.

3.3(b) Other Infrastructure Items and Special Uses

Conclusions from the Review of Issues

From the review of the infrastructure (other items) issues (Volume 1 Section 10) and the special uses (Volume 1 Section 15) the following conclusions have been made.

- (1) There is sufficient capacity within the current water supply and sewerage network systems to provide for the projected population growth in the Shire.
- (2) To remain viable in the long-term, all infrastructure items (such as water supply and sewage treatment plants, and waste management facilities) require protection from encroachment by incompatible land uses.
- (3) The provision of private infrastructure facilities is an important consideration in the future planning for the Shire.
- (4) The potential impacts of land use on stormwater runoff need to be appropriately managed.
- (5) Many existing special uses can be accommodated within a zone other than the traditional Special Purpose or Special Facilities zones.
- (6) There is a wide range of activities that are commonly referred to as special uses for planning purposes.
- (7) It is no longer suitable for planning schemes to separate special use provisions based on ownership.

Analysis and Implications

It has been identified that infrastructure items such as the water supply and sewerage network, electricity, gas and telecommunications can adequately provide for and accommodate the anticipated population growth expected within the Shire for the life of the planning scheme. Additional work is needed to address stormwater quality issues with regard to existing and future development. All of these items are major components in the pattern of development. Any future growth is usually contingent upon Council's (or other agency) ability to provide the required infrastructure.

The reverse also needs to be considered, where development should be occurring in the most economical and efficient way. Requiring infill and redevelopment (consolidation) to occur in the first instance as opposed to urban sprawl is a far better option in terms of providing infrastructure efficiencies. Council is to advocate expansion on a progressive basis providing for an orderly extension of public utility services.

There is a vast range of land uses included within the Special Purposes and Special Facilities zonings throughout the Shire under the 1988 town planning scheme. The majority of these uses are owned or controlled by Council and the State Government and may involve significant land areas eg State Forest. Other non-government owned special purposes, generally involving single land parcels, include uses such as churches, childcare, war veterans home, senior citizens centre and schools.

Due to their nature, Special Purposes are generally situated in areas dominated by alternative land uses (eg schools located within residential areas) and therefore require careful planning and protection to ensure that they are compatible with the surrounding amenity. This protection may be achieved through a number of planning approaches. Firstly, the scheme needs to recognise and provide for both existing and future planned special uses. By the same token, some of the uses are part of the urban fabric and while needing to be identified to some extent, their function as another component of our economic system means that they can, in some circumstances, be included within the zone that is predominant within an area.

High impacting uses such as public utility infrastructure will require suitable buffers to ensure that sensitive uses are not adversely affected. Other uses, which are required to be directly accessible by the catchment they serve, need to ensure that they adopt suitable design and operational standards so as to integrate with the amenity of the surrounding area.

The IPA recognises the importance of particular special uses by inclusion of a section for Community Infrastructure that allows selected uses to be designated for such purposes. This recognises that some uses have an overriding community benefit and that they must be protected for the long term.

Recommended Key Actions

- (1) Provide infrastructure for development within the Shire in an efficient and timely manner.
- (2) Council is to encourage development to occur on a progressive basis for an orderly expansion of infrastructure. Any development that impedes the efficient provision of infrastructure is to be discouraged.
- (3) Identify and protect areas for existing and future community infrastructure throughout the Shire.
- (4) Recognise that both public and private sector ownership can occur for infrastructure.
- (5) Recognise the effects that the provision of infrastructure can have on the economic, natural and community wellbeing systems.

Rationale

The strategy is based on the need to provide an efficient infrastructure network for the expected growth which advances *ES10 Community Needs*. Only development that advances *ES11 Infrastructure Efficiency* should be encouraged in the Shire. The strategy also recognises the growing trend for traditional infrastructure items to be provided and owned by the private sector. The impacts of the provision for infrastructure needs to be considered in the same way that all development is assessed. This ensures that the principles *ES15 Amenity* is also advanced.

3.4 Valuable Features

3.4(a) Extractive Resources

Conclusions from the Review of Issues

From the review of the extractive resources issues (Volume 1 Section 9) the following conclusions have been made.

- (1) There are extractive resources within the Shire that are of State and regional significance which need to be identified and protected. Potential resource investigation areas need to be the subject of further research and investigation in order to determine the suitability of the extractive resource for the long term.
- (2) The provision of buffers and the location of haul routes form an integral component of extractive industries, hence they also need to be identified and protected.
- (3) The day to day operational components of extractive industries have the potential to impact upon our communities and natural resources, so they must therefore be addressed.

Analysis and Implications

Under the provisions of the RFGM it is imperative that extractive resources are identified particularly those that have regional and state significance. These areas need to be protected against those uses that have the potential to prevent the resources being utilised. Extractive resources are geologically based and so therefore when they are identified, measures need to be undertaken to ensure that the resource is protected. Their external impacts also need to be minimised.

The extent of extractive resources within the Shire has been identified within the *Caboolture Shire Extractive Resources Study*. Existing approvals will be identified in the planning scheme along with the haulage routes that are currently used to access these sites.

Other considerations in the planning for extractive industries are the impacts upon the environment both during the establishment stage and ongoing operations. Extractive industry activities greatly impact upon the Shire's biodiversity and natural assets and should therefore be subject to high levels of scrutiny with regards to the impacts they create. There are also social and community impacts upon the that extractives that must be taken into account.

Recommended Key Actions

- (1) Identify and protect viable and competitive extractive industries from incompatible development.
- (2) Identify and protect areas for uses directly associated with extractive industries such as haulage routes and buffers and operational components.
- (3) Ensure that the full extent of social, economic and ecological impacts are identified and assessed when determining the location for extractive industries.
- (4) Identify investigation areas for future extractive industries followed by a comprehensive investigation of the range of potential impacts in order to determine the long-term suitability of the individual areas for extractive industry.

Rationale

The need to identify and protect extractive resources in addition to minimising their impacts demonstrates that there is a need to ensure that a suitable balance is provided in allowing these uses to operate. The key actions address extractive resources and industries from two aspects. On the one hand, the resource needs to be identified and protected therefore advancing ecological sustainability principles *ES5 Economic Activity* and *ES6 Resources Availability*. At the other end of the spectrum, the impacts of these activities need to ensure that other ecological sustainability principles are also advanced *ES1 Air Quality*, *ES3 Land Maintenance*, *ES4 Water Quality*, *ES8 Resource Usage*, *ES11 Infrastructure Efficiency*, and *ES15 Amenity*.

3.4(b) Cultural Heritage

Conclusions from the Review of Issues

From the review of the cultural heritage issues (Volume 1 Section 11) the following conclusions have been made.

(1) The key issues for cultural heritage are:

- identification of places of significance;
- conservation of places of significance;
- incorporation of appropriate measures within the planning scheme to identify and protect the places of significance.

(2) A heritage register list promotes the identification of places of cultural heritage significance through the application of criteria based on the Burra charter.

(3) It is important to provide a sense of identity both to long-term residents and to those who have settled more recently.

(4) Cultural heritage assists in providing a sense of belonging to the community and is an important element in providing links with the past and shaping the Shire's future character and identity.

(5) The planning scheme should address relevant cultural heritage provisions and the priority actions of the RFGM in order to protect cultural heritage values.

Analysis and Implications

The importance of identifying, managing, and protecting sites of cultural heritage significance within the Shire has increased substantially in recent years. The State legislative provisions in combination with regional strategies such as the RFGM have placed a greater responsibility on Council to consider cultural heritage elements as an integral part of the community.

The cultural heritage studies commissioned by Council have addressed both Indigenous and European heritage elements within the Shire. These studies represent the commencement of a longer process that is to address cultural heritage issues within the Shire. Council is intending to develop a long-term program that addresses consultation, identification, management, and understanding of the values within the Shire and region. Many parts of the program are beyond the scope of the planning scheme.

The *Caboottle Shire Cultural Heritage Survey* undertaken focuses on sites established since European settlement and has provided Council with an extensive list of sites worthy of inclusion on a register of cultural heritage sites within the planning scheme. Determining how the impacts of development upon these sites are to be addressed has also been provided within the study.

All surveys and studies undertaken so far represent the first stage of an on-going process involving the identification and management of cultural heritage sites and places within the Shire. The purpose for including such measures within the planning scheme is that places are a part of the Shire's special identity and can help to foster a sense of belonging and community, as well as bringing economic and other benefits to an area. Cultural heritage has as much to do with the present and future generations as it does with the past.

Recommended Key Actions

(1) Conserve, protect and enhance places of cultural heritage significance within the Shire. Removal, demolition or other irreversible damage to a place is to be prevented.

(2) New buildings, works and alterations to existing places are to be consistent and respectful to the setting and character of the places on the heritage register list.

(3) The productive use and adaptive reuse of places is to be encouraged.

(4) The use of incentives is to be investigated to encourage the appropriate use of places of significance.

Rationale

The identification and protection of cultural heritage sites within the Shire is a fundamental component of the community wellbeing system. Protection also provides benefits to the economic and natural systems. On the whole, the key actions advance the ecological sustainability principles *ES13 Heritage Conservation*, *ES14 Public Spaces*, *ES15 Amenity*, and *ES16 Community Harmony*.

3.4(c) Natural Resources

Conclusions from the Review of Issues

From the review of the natural resources issues (Volume 1 Section 13) the following conclusions have been made.

- (1) Commonwealth and State legislation require the Shire's natural resources to be identified, conserved and protected.
- (2) The extent of the Shire's natural assets covers broad themes of biodiversity, land, water, and coasts and seas and so consequently impacts upon all land uses within the Shire.
- (3) The protection of the Shire's natural assets is a fundamental cornerstone of maintaining the Shire's attractive image. The outcomes from the Caboolture Shire Scenic Amenity Study underline the features of the scenic quality in the Shire as well as the high values people place on these features for the community wellbeing.
- (4) The studies undertaken within the Shire have identified new and additional areas which contain natural features that are of State, regional and local conservation significance.
- (5) Where these features are located within areas previously considered to be suitable for urban residential or rural residential development, the appropriateness of such a designation will need to be reconsidered.
- (6) Council has a responsibility to ensure that water quality objectives are addressed within the planning scheme.
- (7) Protection and enhancement of the Shire's natural features can be addressed through a range of codes that either restrict or minimise the impacts of development.

Analysis and Implications

The review of issues relating to the management and protection of the Shire's natural resources has revealed that there are a number of legislative provisions that must be addressed by Council when preparing a planning scheme. The starting point is collection of accurate up-to-date data about an extensive range of elements. When this is known and identified then the planning for the management and protection of the resources can be undertaken.

The legislative requirements have introduced a number of measures not previously addressed by a planning scheme. For example, the *Vegetation Management Act* now regulates the clearing of native vegetation, with the clearing on freehold land now regulated by the *Integrated Planning Act*. Clearing of native vegetation under Schedule 8 of the IPA will be assessable development and Council will need to decide how it is to address the clearing of non-native vegetation in the planning scheme.

Other components of the natural system that development must have regard to now under legislation relate to air and water quality. While air quality is also a regional matter to be addressed, water quality is especially important due to the impacts that urban development, commercial and industrial uses, and rural activities can create. Increased population growth threaten to accelerate problems of air and water quality. The consolidation theme for the commercial and residential areas of the Shire will help to lessen the impacts on air and water quality.

Many of the legislative and regional requirements encompass actions that are not the sole responsibility of the planning scheme. The *Regional Nature Conservation Strategy* provides a series of recommendations with regards to how nature conservation issues are to be addressed by local governments. The planning scheme is one component of a suite of measures that Council can use to manage and protect nature conservation features within the Shire.

The projects that Council has undertaken in recent years to address natural resource issues is extensive. The outcomes from individual studies have a number of implications for the planning scheme. The elements such as nature conservation areas, wildlife corridors, marine parks, and fish habitat areas all need to be mapped and included either within a zone, code or overlay provision of the planning scheme. They will then be used to assess development applications

The *Caboolture Shire Environmental Planning Study* provides Council with the most extensive collection of information within the Shire with respect to the identification of nature conservation areas of State, regional and local significance. The Study has identified some areas currently set aside for urban or rural residential purposes as having a high rating, in some cases being of State significance. As a result, it will be difficult for development to proceed within these areas.

Other outcomes from the *Environmental Planning Study* are the identification of areas that should separate urban and rural residential settlements within the Shire. To a large extent, these areas are self-evident and have been set-aside for such purposes in the past.

The *Caboolture Shire Scenic Amenity Study* has identified the areas within the Shire of high scenic value. The impacts of development need to be considered having regard to the outcomes of this study. The study has provided some recommendations for how this is to be done. Addressing scenic amenity is a new initiative for the Shire and is an important value alongside other features of our natural assets.

Energy conservation is also an important initiative to be pursued. Strategies such as reducing car dependency, improving site planning and building design are just some of the ways to encourage reductions in energy consumption.

The biggest change to the planning scheme from what has occurred in the past will be provisions contained within the codes. General development codes addressing the impacts of development will now need to include provisions that seek to minimise impacts upon the environment and so therefore do not detract from ecological sustainability principles. For example, the inclusion of stormwater management provisions will be included within many codes.

Recommended Key Actions

- (1) Areas of nature conservation value are to be protected. Conservation areas include the wide range of biodiversity values such as habitats, ecosystem values and sizes, remnant sizes, and community diversity. Land that these values can be found within include wetlands, bushland, wildlife corridors, riparian areas and the like.
- (2) Ensure that the Shire's growth protects and improves the air and water quality so as to enable the protection of health and community wellbeing.
- (3) Encourage development that provides a reduction in the consumption of non-renewable energy resources.
- (4) Maintain and enhance the scenic amenity of the Shire for the benefit of existing and future residents and visitors.
- (5) Minimise land use conflicts between natural and developed areas by appropriate separation.

Rationale

The key actions recognise that the protection of natural assets is an important initiative of the Shire as well as being a matter of regional and State interest. There are often competing interests for areas of nature conservation that need to be resolved. The major nature conservation areas need to be recognised and protected.

The key actions are widespread and therefore seek to advance the ecological sustainability principles of *ES1 Air Quality*, *ES2 Nature Conservation*, *ES3 Land Maintenance*, *ES4 Water Quality*, *ES6 Resource Availability*, *ES7 Energy Efficiency*, *ES8 Resource Usage*, *ES13 Heritage Conservation*, *ES15 Amenity* and *ES16 Community Harmony*.

3.4(d) Open Space

Conclusions from the Review of Issues

From the review of the open space issues (Volume 1 Section 14) the following conclusions have been made.

- (1) A well planned network of open space can make a large contribution to the wellbeing of a community.
- (2) The extent of land and activities included within open space is broad. All of the recreational, ecological, and social elements to open space are major contributors to maintaining and enhancing the Shire's liveability.
- (3) There is an increasing awareness within the community of the importance of open space within the Shire. Consequently, there is a need to ensure the provision of timely, adequate, and suitable open space to meet the needs of the current and future communities within the Shire.
- (4) The various outcomes and recommendations of the draft *Caboolture Shire Open Space Strategy* will serve as the basis for the open space provisions to be included within the planning scheme.

Analysis and Implications

Open space is one of the major land uses within the Shire. It contains a range of elements such as areas of ecological significance, landscape features, and recreation areas for both passive and active users. The provision of parkland in conjunction with development continues to attract over time the greatest amount of interest from the community.

It is expected that Council will continue to set aside open space areas:

- for active and passive recreation needs;
- for waterway protection, buffers and wildlife corridors;
- to protect ecological, environmental, cultural, scientific, scenic sites;
- to provide local and regional sports facilities;
- to provide areas for play, recreational, and visual amenity;
- to secure land for flood mitigation purposes;
- to develop a bikeways network; and
- to retain and promote the Pumicestone Passage and Deception Bay as areas of aquatic recreation and environmental resource.

The RFGM seeks to protect the regionally significant open spaces of South East Queensland. While its meaning of open space is broad, it highlights the need to ensure that the various components of open space, such as those listed above, are protected for present and future generations. The many purposes of open space means that it also has a direct link with our economic and community wellbeing systems.

Recommended Key Actions

- (1) Maintain the network of open space and recreation areas based on the settings described in the draft *Caboolture Shire Open Space Strategy*.
- (2) The open space network is to incorporate a range of nature based areas used for passive and active recreation purposes.
- (3) Open space requirements will be needed for residential development in the Shire with opportunities for commercial and industrial uses also to be considered.
- (4) Open space will continue to be one of the ways that separation distances are provided between townships and localities.

Rationale

The rationale for the key actions is that the providing a network of open space will ensure that the social and economic health of the community is improved for the existing and future residents of the Shire. The provision of open space also complements key actions for other core matters such as residential development, community wellbeing and natural resources.

The key actions assist with advancing ecological principles *ES2 Nature Conservation, ES6 Resource Availability, ES10 Community Needs, ES14 Public Spaces, and ES16 Community Harmony.*

KEY POINT

Based on the conclusions from the review of the core matters, Key Actions are developed that will be the basis of the provisions of the ES Framework. They assist with the formation of policy on the range of matters to be addressed.

The Key Actions are informed by the ecological sustainability principles, the IPA, and regional planning documents such as the RFGM.

Section 4 - A Conceptual Framework for a Planning Scheme

Introduction

**Ecological Sustainability Framework
Layers 1 and 2**

**Ecological Sustainability Framework
Layer 3**

**Ecological Sustainability Framework
Layer 4 and 5**

4.1 Introduction

The purpose of this section is to introduce a conceptual framework for the strategies that generate the outcomes for the planning scheme. In section 2.5(c), the concept of a strategic framework was introduced, where it was shown that the process for analysing the core matters and determining the strategies is best undertaken within a framework.

The components of the conceptual framework are presented in this section. Since the most critical aspect for a planning scheme is to advance the purpose of the IPA, its provisions provide an excellent basis for which a framework can be developed. One way for this to be achieved is by incorporating key sections of the Act into the framework. Binding the language and structure of the framework to that of the Act will improve compatibility between both instruments while also reducing the need to invent new ways of describing features or concepts that are common to both.

The conceptual framework consists of five layers that are described within the following. It is to be called the Ecological Sustainability Framework (ESF) as it represents a strategic framework but is done so in the context of the ecological sustainability provisions of the IPA.

4.2 Ecological Sustainability Framework Layers 1 and 2

1st Layer

The concepts of ecological sustainability and “balance” are central to advancing the overall purpose of the Act. For compatibility, the framework should seek to prominently incorporate the concepts.

“Vision” statements provide a useful means to incorporate both concepts. A Vision can represent the basis from which all other statements in an ecological sustainability framework are ultimately derived. Located at the top level of a framework, the Vision sets out the end-purpose of the entire ESF. An example of a Vision which incorporates the Act’s ecological sustainability and balance concepts would be :

- **Vision** – *The Shire’s **natural, economic, and social** systems are sustainably balanced.*

2nd Layer

The three systems referenced in this Vision statement are also referred to in the Act.

Achieving the Vision, requires more specific directions of planning policy to be identified. Based on the Vision example above, three key policy directions would be needed, relating to the natural, economic and social systems. Statements provided in the Act can be used as a convenient basis for defining the next layer of a conceptual Ecological Sustainability Framework. For each system, statements in the Act provide a description of the overall aims in relation to each system, these can be summarised as follows.

- **Key Direction 1 – Natural System**

Conserving, enhancing or restoring the life supporting capacities of air, ecosystems, soil and water for present and future generations.

- **Key Direction 2 – Economic System**

Guiding all forms of development to achieve a prosperous economy enabling communities to meet their needs while not compromising the ability of future generations to meet theirs.

Key Direction 3 – Social/Well-Being System

Maintaining the well-being of people and communities.

In this case, the term “Key Direction” has been adopted to describe a direction of policy for the three constituent elements of the Vision. The purpose statements associated with the Key Directions describe the overall aim of the Key Directions.

Achieving the purpose statement for each Key Direction in turn achieves the sustainable balance sought in the Vision.

The Vision and 3 Key Directions, whilst presented in conceptual terms here, are directly transposed into the preferred ecological sustainability framework. This is because these statements are considered to be the most appropriate ways of framing the aims of the framework at the topmost layers.

KEY POINT

The conceptual Ecological Sustainability Framework is based on a Vision which references a balance of the Shire’s natural, economic and social systems. Each system has associated with it a “Key Direction” which will advance that system towards the sustainable balance referred to in the Vision.

The Vision and 3 Key Directions will occupy the top two layers of the draft ESF and due to their integration with the Act are considered to be directly advancing the purpose of the Act.

4.3 Ecological Sustainability Framework Layer 3

3rd Layer

If each Key Direction represents a system within the overall land use planning system, the natural, economic or social systems, the task of achieving the purpose statement for each Key Direction can be broken down into a series of steps. The preferred way, under the IPA, is to describe the steps as outcomes required for key elements of each system. Outcomes are end-states which will be achieved through the actions of a Planning Scheme.

System characteristics

In order to begin defining the outcomes sought in relation to each Key Direction, some consideration has been given to the role of the land use planning profession in relation to each of the three systems referred to in the Key Directions. In broad terms, the land use planner can be said to have a role in relation to the following characteristics of each system:

KD1 - Natural System	KD2 - Economic System	KD3 - Social System	A keyword which describes this:
<i>Natural Accessibility/Mobility - ensuring the movement of natural elements</i>	<i>Land Use Accessibility - ensuring positive relationships between land uses</i>	<i>Social Accessibility - ensuring human access to required elements of all three systems</i>	Accessibility
<i>Natural Amenities - ensuring the ability of natural elements to exist in their own right</i>	<i>Economic Amenities - ensuring the ability of land uses to operate</i>	<i>Human Amenities - the ability of people to thrive</i>	Amenity
<i>Natural Diversity - ensuring the variety of natural elements, including biodiversity</i>	<i>Economic Diversity - the variety of land uses and development forms within the Shire</i>	<i>Human Diversity - describing the demographic variety of the Shire</i>	Diversity

KD1 - Natural System	KD2 - Economic System	KD3 - Social System	<i>A keyword which describes this:</i>
<i>Describing the best use of the Shires natural, economic and social assets</i>			Efficiency
<i>Ensuring development locations maximise the benefits and minimise the impacts in relation to each system</i>			Location
<i>Natural Qualities - describing the quality of the Shire's natural assets</i>	<i>Economic Qualities - describing the quality of economic assets, including ensuring high design standards</i>	<i>Social Qualities - describing the planners role in ensuring the quality of people's lives</i>	Quality
<i>Natural Quantities - describing the planner's role in ensuring viable quantities of natural assets</i>	<i>Economic Quantities - describing the planner's role in providing for the development needs of the Shire</i>	<i>Social Quantities - describing the planner's role in ensuring people have enough of what they need</i>	Quantity
<i>Natural Safety - referring to safety risks to and emanating from the natural environment</i>	<i>Economic Safety - referring to the risks to and from property and other economic assets in the Shire</i>	<i>Human Safety - referring to the risks to and from humans</i>	Safety
<i>The ability of the elements of the Shire's natural, economic and social systems to continue to function, to grow and to develop</i>			Viability

The nine keywords described in the above table provide a useful prompt for understanding the main characteristics of the three systems, from the land use planner's perspective. Furthermore, the keywords provide a basis for understanding the planner's role in ensuring the overall integrity of each system. This is discussed further below.

Seeking to achieve "balance" under IPA

The stated purpose of IPA is to seek to achieve a sustainable balance of the natural, economic and social systems. Using the above characteristics as a guide, it is possible to understand how the balance of an individual system may be affected by development which impacts on a particular key characteristic of the system. Going further, an impact on a key characteristic of one system could be said to have an impact on the overall balance of all three systems. This leads to an important facet of the draft structure.

KEY POINT	<p>The third layer of the Ecological Sustainability Framework is based on the identification of key, characteristic features of the 3 systems.</p> <p>Safeguarding these characteristics is an essential part of maintaining "balance" within the system and across all three systems.</p>
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Principal Outcomes

Principal Outcomes are a provision of the Ecological Sustainability Framework that represent the characteristic features of each system. These outcomes are not the same as desired environmental outcomes (DEOs) which have a particular meaning under the IPA.

The IPA provides that a development assessment decision *must not compromise the achievement of the desired environmental outcomes* in the planning scheme. DEOs therefore represent a potentially powerful planning provision. In a sense, they are the scheme's last line of defence against undesirable development proposals. DEOs are a legislative means to protect those aspects of the land use planning which are desirable to retain.

KEY POINT	<p>For the purposes of this framework, a single Principal Outcome should address only one aspect of the land use planning system.</p>
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The approach taken in the Ecological Sustainability Framework is to base each Principal Outcome on one of the key characteristics of each system described above.

In total, 25 key characteristics are described in the draft framework, 8 for the Natural system, 9 for the Economic system and 8 for the Social/Well-Being system.

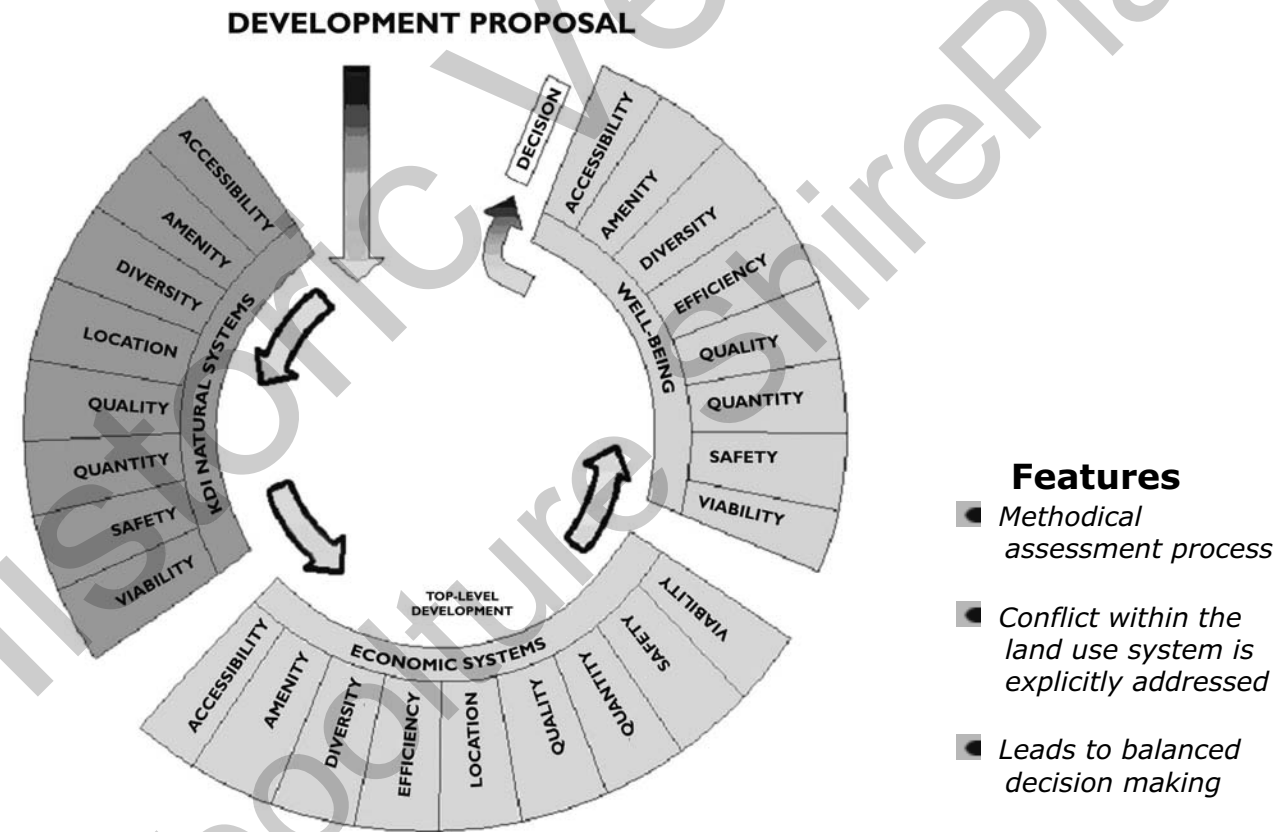
Development Assessment

This arrangement of 25 divisions in the Ecological Sustainability Framework, provides a basis for a methodical approach to measuring the impact of a development proposal on the three systems individually or as a whole. Assessing the impacts and benefits of any given proposal on a system is a matter of considering whether it achieves the Principal Outcomes for that system.

If a given development achieves all the Principal Outcomes for a system, it can be said that it is unlikely to threaten the viability of that particular system. If it achieves all the Principal Outcomes for all systems, it can be said to be a fully compliant and highly sustainable form of development (assuming that the Principal Outcome itself is considered to be advancing ES).

If, as is likely to be more commonly the case, a development proposal has a number of benefits and impacts in relation to one or more systems, this decision-making framework provides the opportunity to identify and subsequently balance the merits and consequences involved. The following diagram outlines the 25 divisions.

FIGURE 4.1 USING THE PRINCIPAL OUTCOMES TO ASSESS DEVELOPMENT



■ **Principal Outcomes** – the third layer of the conceptual Ecological Sustainability Framework can be represented by Principal Outcomes which safeguard key characteristics of the 3 Key Directions.

4.4 Ecological Sustainability Framework Layers 4 and 5

4th Layer

Strategies

The top three layers of the framework (Vision, 3 Key Directions, Principal Outcomes) are broad in their focus and application. To support and give further meaning to these statements, additional and more specific statements are required within the framework. Due to the number of statements likely to be required, it is necessary to arrange subordinate levels of the Ecological Sustainability Framework according to logical topics, or “themes”. Themes are effectively land use topics, but they can also include important ideas or concepts. For example, relevant themes for the natural system, would include Land, Air and Water, which are logical themes based on key elements in the system. Key land uses such as Housing, Employment, etc could form the basis for themes in Key Direction 2 – Economic System. Cultural Heritage is an example of a logical theme under Key Direction 3 – Social/Well-Being System, which to some extent represents a concept rather than a land use as such.

The Ecological Sustainability Framework can associate a strategy with each theme it identifies. The strategy represents the overall purpose of each theme, or the objective sought in relation to that theme. The intention for the strategy is that it provides a guide for the overall purpose of statements at the next level of the framework, which are **Supporting Outcomes**.

■ **Strategies** – the fourth layer of the Ecological Sustainability Framework is represented by Strategies based on themes.

5th Layer

Supporting Outcomes

Supporting Outcomes are so-named because they support a Principal Outcome as it applies to a particular strategy. The framework proposed in the next section identifies 8 to 9 Principal Outcomes for each of the three systems. These Principal Outcomes apply to the whole of that system. However, the framework may identify more specific outcomes that are sought in relation to any one of the themes in each system. Their purpose is to add to the Principal Outcomes in the context of that theme.

It should be noted that Supporting Outcomes, like Principal Outcomes, are not Desired Environmental Outcomes. DEOs are specifically defined in the Act and have the meanings and functions set out in the Act.

The purpose of a Supporting Outcome in the Ecological Sustainability Framework is to define a more detailed environmental outcome or end state that is desired or sought. In a regulatory sense, a failure for a particular development proposal to comply with a Supporting Outcome does not necessarily require a rejection of the proposal. However, if a proposal fails to observe a Supporting Outcome for a given Principal Outcome, there is the risk that the achievement of the provisions of the planning scheme itself, notable the desired environmental outcomes, might be compromised.

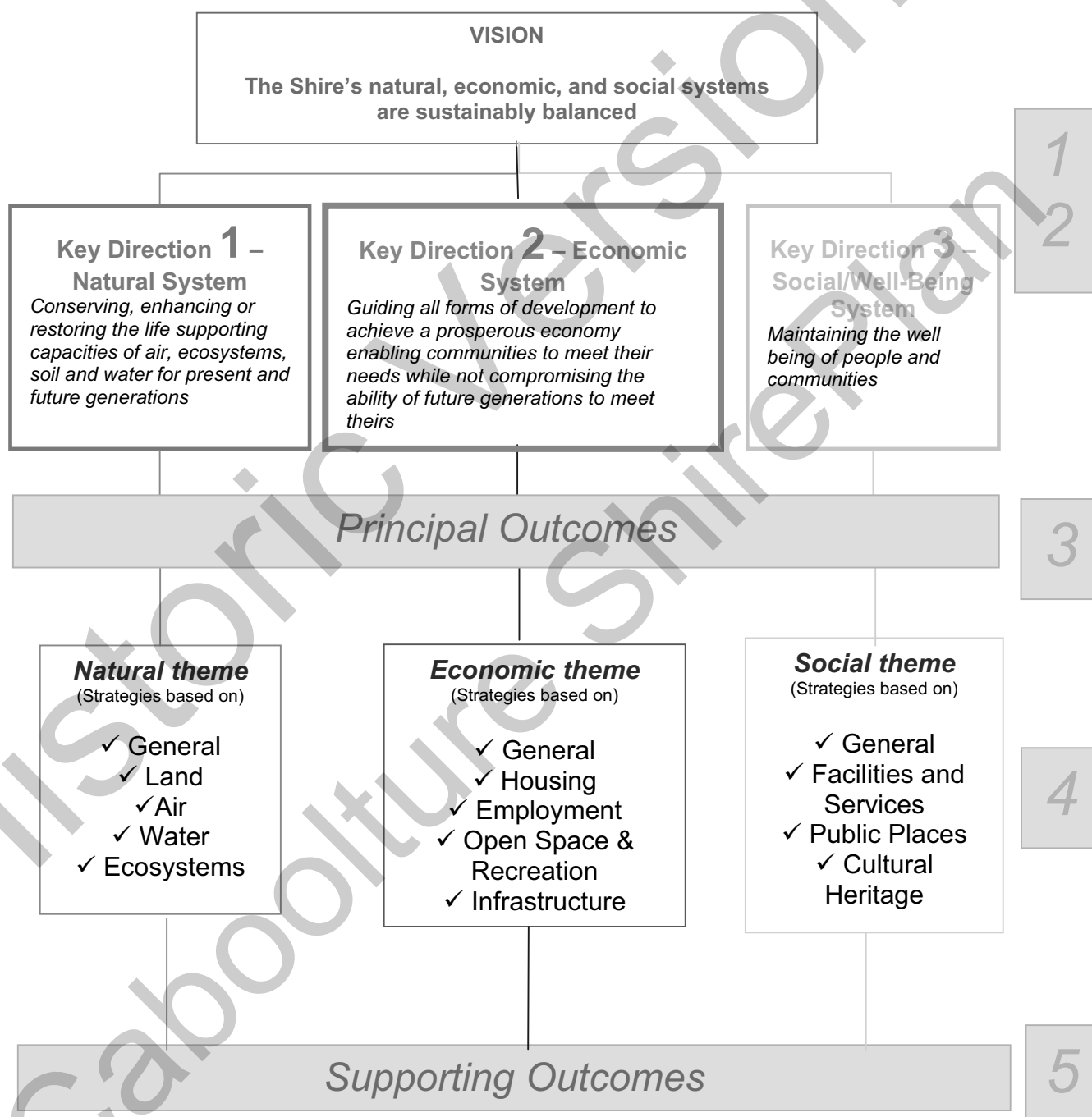
Under this Framework model, a Principal Outcome may be supported by a number of Supporting Outcomes, the achievement of some of which may conflict with the achievement of others. Because a Supporting Outcome is more flexible in a regulatory sense than a Principal Outcome, conflicts between Supporting Outcomes can either be mitigated or balanced against each other, leaving separate the question of whether the Principal Outcome as a whole is advanced by the proposal.

■ **Supporting Outcomes** – the fifth layer of the Ecological Sustainability Framework is represented by Supporting Outcomes.

A conceptual ecological sustainability framework has been developed. It sets out the range of strategies that are used to generate the outcomes contained within the planning scheme.

The ESF reinforces the ecological sustainability principles set out in the IPA. Figure 4.2 provides an outline of the conceptual model that consists of five layers.

FIGURE 4.2 THE CONCEPTUAL ECOLOGICAL SUSTAINABILITY FRAMEWORK



Historic Version
Caboolture ShirePlan

Section 5 -

The Framework for Seeking to Achieve Ecological Sustainability in Caboolture Shire

Introduction

The Ecological Sustainability Framework

Interpretation of the Natural System – Principal Outcomes, Strategies and Supporting Outcomes

Interpretation of the Economic System – Principal Outcomes, Strategies and Supporting Outcomes

Interpretation of the Social/Wellbeing System – Principal Outcomes, Strategies and Supporting Outcomes

5.1 Introduction

The purpose of this section is to present the ecological sustainability framework (ESF) for the planning scheme. It has been prepared having regard to the provisions contained within Section 3 i.e. the key actions to deal with the core matters and is provided in the format of the conceptual ecological sustainability framework outlined in Section 4.

Some of the components will be different from the version that appears in Section 4 eg. accessibility as a Principal Outcome in the Natural System is now called mobility. The modifications have been made to more accurately reflect the characteristic of each system and was the result of the substantial amount of work undertaken after the conceptual model was first developed. Other changes have come about as a result of the community consultation that took place in March and April 2002. An overview of the consultation is provided within Section 6.3 of this Volume 2.

The framework is therefore comprehensively based and is provided in a meaningful format for easy application which can be included into the planning scheme where appropriate. In other words, both the structure and content meet the requirements for preparation of a planning scheme as required by the IPA and its associated scheme making guidelines

Sections 5.3 to 5.5 provide additional interpretation text for each of the components so that a clear understanding is made of the provisions of the Ecological Sustainability Framework in the context of Caboolture Shire and the planning scheme. Appendix 1 contains the provisions of the ESF in tabular format for each system.

5.2 The Ecological Sustainability Framework

The Ecological Sustainability Framework for Caboolture Shire is comprised of five layers. The top layers of the Framework are occupied by a Vision statement supported by three Key Directions.

The **Vision and Key Directions** are:

1

Vision

The Shire's natural, economic, and social systems are sustainably balanced.

2

Key Direction 1 – Natural System

Conserving, enhancing or restoring the life supporting capacities of air, ecosystems, soil and water for present and future generations.

Key Direction 2 – Economic System

Guiding all forms of development to achieve a prosperous economy enabling communities to meet their needs while not compromising the ability of future generations to meet theirs.

Key Direction 3 – Social/Well-Being System

Maintaining the well being of people and communities.

The following section is a detailed account of each of the three Key Directions and their constituent elements. These elements are:

Principal Outcomes

The third layer in the Framework is occupied by 25 Principal Outcomes:

		Principal Outcomes
3	Key Direction 1 – Natural System:	8
	Key Direction 2 – Economic System:	9
	Key Direction 3 – Social/Well-Being System:	8

Strategies

The fourth layer in the Framework consists of Strategies based on fourteen themes:

		Strategies
4	Key Direction 1 – Natural System:	5
	Key Direction 2 – Economic System:	9
	Key Direction 3 – Social/Well-Being System:	4

Supporting Outcomes

5	The fifth layer in the Framework consists of a number of Supporting Outcomes, which are set out later in this section.
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5.3 Interpretation of the Natural System – Principal Outcomes, Strategies and Supporting Outcomes

Key Direction 1 – The Natural System will contain those scheme provisions which deal with or affect those areas of the Shire which are non-urban in their appearance, character or function. The term “natural” refers to a diversity of non-urban places within the Shire. These places may range from wilderness areas to landscapes which, though modified by man, retain a green character, appearance or function. An example of the latter are farmland areas under crops, golf courses or open space areas. Natural areas include open spaces within urban areas, such as riparian corridors or pocket parks, which have a non-urban appearance.

Key Direction 1 is composed of eight Principal Outcomes, Strategies based on five themes, and 41 Supporting Outcomes described as follows.

5.3(a) Principal Outcomes

Principal Outcomes represent key characteristics of the Key Direction which the Ecological Sustainability Framework seeks to protect. The following eight Principal Outcomes have been identified for Key Direction 1.

Principal Outcome	Interpretation
Principal Outcome 1 Amenity The character of natural, rural and coastal areas is protected.	<p>In the context of the natural system “amenity” refers to the ability to enjoy the low-key and quiet nature of areas within or surrounding the urban areas of the Shire for their intrinsic scenic amenity, low ambient noise and activity levels, their wildlife or natural resource qualities.</p> <p>The purpose of this Principal Outcome is to ensure that development in and affecting such areas does not affect these qualities. This includes all non-urban areas such as natural, rural countryside and coastal areas, including such pockets within urban areas. The Scheme defines urban and non-urban areas of the Shire through its land use zones.</p>
Principal Outcome 2 Diversity The diversity of the natural system is protected, maintained or improved.	<p>The purpose of this Principal Outcome is to ensure that the Shire’s diversity of natural elements is not compromised by development.</p> <p>This encapsulates the number and diversity of ecosystems and the species within or reliant on them. This includes “biodiversity” which relates to the variety of plant and animal species in an environment. It also relates to maintaining the diversity of other natural resources, such as land and water in all its forms in the Shire.</p>
Principal Outcome 3 Location Development does not occur in environmentally sensitive areas.	<p>This Principal Outcome will seek to ensure that development does not detrimentally affect areas which are considered to be environmentally sensitive.</p> <p>Environmentally sensitive areas will be defined in the scheme. Other areas will be determined by legislation at the State and Federal levels.</p>
Principal Outcome 4 Mobility The mobility of natural elements throughout the natural system is protected, maintained or improved.	<p>In the context of the natural system, accessibility/mobility refers to the ability of flora and fauna to occupy or travel through ecosystems relatively unimpacted by the actions of humans. Maintaining and enhancing corridors between natural areas will be an important means to achieving this outcome.</p> <p>It should be noted that this characteristic is distinct from ensuring human accessibility to the natural system, which is dealt with separately under Key Direction 3 – Social/Well-Being Systems. It is apparent that there will be circumstances where limiting human accessibility to the natural environment may be required in order to achieve this Principal Outcome.</p>
Principal Outcome 5 Quality The quality of natural resources is protected, maintained or improved.	<p>This Principal Outcome seeks to safeguard the qualitative characteristics of the Shire’s vital, and fragile, natural resources. These are principally land (including mineral deposits), flora and fauna, air and water – in all their forms.</p>
Principal Outcome 6 Quantity Consumption of natural resources does not exceed sustainable levels.	<p>This Principal Outcome seeks to ensure that key elements of the natural system are not used, or consumed, at a rate which is unsustainable both at the Shire level and beyond. It recognises, for example, that most forms of development require land in order to operate and that the amount of land available is finite. Whilst land is the most common instance, the consumption of other elements including but not limited to extractive resources, water, flora and fauna are the subject of this Principal Outcome.</p>

Principal Outcome	Interpretation
	The definition of “sustainable” incorporates the principle of intergenerational equity. Specific measures are to be developed for each element.
Principal Outcome 7 Safety Risks to and from the natural system are minimised.	The purpose of this Principal Outcome is to ensure that the risks of and actual incidences of destruction, arising from natural or man-made sources, are minimised. The natural system is potentially the source of hazards that represent a devastating risk, both to the natural system and beyond. At the same time, it is a fragile system and highly vulnerable to hazards arising from outside the natural system.
Principal Outcome 8 Viability The viability of natural communities and processes is protected, maintained or improved.	This Principal Outcome recognises that development should permit natural elements, communities and important ecological processes to continue to function, to develop and to grow. Natural elements, include flora and fauna, but may also include any of the Shire’s natural resources that are affected by threats to their viability.

5.3(b) Strategies

Key Direction 1 contains five strategies, based on the themes presented in Section 4. These provide a direction for how the supporting outcomes at the next level are to be achieved. The five Strategies for Key Direction 1 are:

Strategy	Interpretation
Strategy 1.1 Generally – Managing impacts on and from the natural environment.	This broad strategy recognises that the effects of development represent one of the biggest threats to the natural environment so therefore need to be controlled. It also recognises that the natural environment can impact upon the economic and community wellbeing systems.
Strategy 1.2 Land – Recognising the Shire’s land as a finite and fragile resource.	Land is one of the principal components of our natural system. This strategy seeks to recognise that its resources are finite and they need to be available for future generations.
Strategy 1.3 Air – Maintaining and improving air quality.	Air is increasingly being affected by the impacts of development and so for the good of our wellbeing and the natural environment, adverse impacts are to be avoided.
Strategy 1.4 Water – Maintaining and improving water quality.	The impacts of pollution on water bodies, both as a habitat and for human consumption need to be minimised.
Strategy 1.5 Ecosystems – Protecting, maintaining and enhancing the Shire’s ecosystems and the species within them.	This strategy recognises the values of the life supporting capacities of ecosystems and that the effects of development on these areas should be minimised.

5.3(c) Supporting Outcomes

Principal Outcomes are broad statements that apply to each of the themes in the Key Direction. Under some themes, the Ecologically Sustainable Framework identifies specific Supporting Outcomes which provide additional meaning for the Principal Outcome in relation to that

theme. A Supporting Outcome is a statement of a particular end-state, or outcome, that the Ecological Sustainability Framework aims to achieve for a theme. An absence of a supporting outcome for a particular strategy means that the Principal Outcome by itself is considered to satisfactorily address that characteristic of the theme.

Strategy 1.1 General	
Supporting Outcome	Interpretation
(a) Amenity	
(i) Disturbance, whether by noise, activity or other form of nuisance, to natural, rural and coastal places is minimised to acceptable levels.	<p>This outcome recognises that development often has the potential to disrupt essential natural attributes and processes through activity, noise, general disturbance as well as disturbance caused by physical alterations to an environment.</p> <p>The purpose of this outcome, therefore, is to recognise a lack of disturbance as a key aspect of preserving the natural amenities of non-urban places within the Shire.</p>
(ii) Effective buffers between human and natural areas and elements are encouraged.	<p>A key element of preserving the natural amenities of places is to ensure that adequate separation is provided between natural and unspoiled places and nearby human-altered places.</p> <p>Physical separation is often the only way that minimal disturbance to sensitive areas can be guaranteed. Planning scheme codes define the location and extent of the key buffers required within the Shire.</p>
(iii) Characteristic features, or areas of landscape or scenic amenity, are recognised, protected, maintained or improved.	<p>Caboorture Shire is home to a wide range of exceptional land, sea and waterscapes which are important to the Shire for visual, amenity and economic reasons.</p> <p>The Planning Scheme describes and defines particular areas of high landscape or scenic amenity, the purpose of this outcome is to ensure that they are protected and enhanced in development decisions.</p>
(b) Location	
(i) Environmentally sensitive or significant areas, are protected, maintained or improved.	<p>Environmentally sensitive areas include areas designated for nature conservation purposes under IPA or any other relevant legislation or regulations. Other examples of environmentally sensitive areas are:</p> <ul style="list-style-type: none"> - areas subject to erodible and dispersive soils - areas subject to Acid Sulfate Soils - waterways and wetlands - riparian areas - areas of salinity expression and recharge areas.
(ii) Connections and buffers between environmentally sensitive areas are recognised, protected, maintained or improved.	<p>The need to ensure that wildlife areas are maintained as intact and viable communities is recognised in this outcome.</p> <p>To facilitate this, it is important to ensure that areas which link wildlife communities are valued and safeguarded. Such linkages may be fragmentary and fragile, or they may be more substantial. They may exist as land, water, subterranean or even airspace connections on occasions.</p>
(c) Mobility	
(i) The mobility needs of those elements of the natural system which require movement across the Shire and beyond are recognised, protected, maintained or improved.	<p>The purpose of this outcome is to recognise that each element of the Shire's wildlife has its own mobility patterns and requirements and that maintaining these is an important step towards maintaining the overall viability of such communities.</p> <p>By recognising that flora and fauna communities are not always static, the planning scheme recognises that it needs to guard against barriers to desirable wildlife movements in whatever form they occur.</p>
(ii) Corridors and connections which facilitate movement of flora and fauna by land, air or water are recognised, protected, maintained or improved.	<p>One of the principal means by which adequate wildlife movements can be facilitated and protected is by means of corridors and connections between designated sensitive areas. The aim of this outcome is therefore to recognise that connections across the Shire are valued for their contribution to the movement of wildlife, as well as for their inherent scenic, amenity or natural values.</p> <p>The Planning Scheme defines the key connections and buffers in the Shire.</p>

<p>(d) Quality</p> <p>(i) The following are minimised:</p> <ul style="list-style-type: none"> - the effects of pollution or other degradation on the quality of the natural environment; and - the impacts of waste disposal on the quality of the natural environment. 	<p>All elements of the natural system are vulnerable to the effects of human activity within the Shire including pollution, environmental degradation and disturbance.</p> <p>The purpose of this outcome is to ensure that the qualitative aspects of the natural environment are recognised in development decisions, and that the impacts that certain potentially harmful human activities, such as the way that human waste is managed for example, do not impact on the quality of the Shire's natural resources.</p>
<p>(ii) Regeneration or revegetation of areas as a means to improving the quality of the natural environment is encouraged.</p>	<p>The planning scheme supports regeneration and revegetation of areas for a number of reasons, one of which is the beneficial effects it brings for the quality of the Shire's natural resources. For example, revegetated areas benefit land stability and quality, water and air quality and provide better quality environments for our flora and fauna communities.</p>
<p>(iii) Edge effects on sensitive or natural areas are minimised.</p>	<p>The planning scheme recognises that development impacts are not limited to the sites on which they occur and that, unless controlled, areas neighbouring development may be the subject of a wide range of undesirable effects.</p> <p>This outcome recognises that buffers between human activities and areas on which development has or will occur are necessary, but it also recognises that areas within the buffers themselves need to be protected from harmful development impacts.</p>
<p>(e) Quantity</p>	
<p>(i) Non-renewable natural resources, including biological resources, energy, extractive, land and water, are consumed at the minimum rate necessary to support the Shire's growth needs.</p>	<p>Carefully controlling the way that the Shire's finite resources are used is a cornerstone of ensuring that viable stocks remain for future generations.</p> <p>Each of the land use themes in this Key Direction has associated with it a finite supply of essential natural resources, whether its land, air, water, flora or fauna.</p> <p>This outcome recognises that the Shire's population is growing and that demands are therefore likely to continue to be placed on these resources. However, more efficient ways to utilise our finite resources, and more effective ways to substitute renewable for non-renewable resources wherever possible and desirable are encouraged in order to achieve this outcome.</p>
<p>(ii) Renewable natural resources are prudently used.</p>	<p>This outcome recognises that the Shire must shift its reliance from non-renewable to renewable sources of natural resources, but that even renewable resources should be prudently managed to reduce any land use impacts associated with them.</p> <p>The fact that a proposal represents a desirable renewable resource alternative should not in itself be sufficient justification to relax the need to ensure that the winning of that resource is carefully managed and that demand for the resource is minimised to the greatest extent possible.</p>
<p>(iii) The following are encouraged:</p> <ul style="list-style-type: none"> - development which demonstrates efficient use of energy and required natural resources; - development which favours renewable options, including energy production, extraction and primary production; - development which favours recycling options; 	<p>The planning scheme can facilitate, though its varying provisions, measure that reduce the demand for resources. This outcome seeks to highlight and encourage certain aspects of development in the interests of conserving our natural environment.</p>

- development that has the potential to protect, enhance or restore natural resources.	
(f) Safety	
(i) The following are minimised: - any risk involving, or having potential, negative impacts on the natural system; - the risk and incidence of damage from pollution; - risks arising from the natural system; - risks associated with bush fires; - nuisance and hazards arising from pests.	<p>The natural environment generates significant risks to human safety which need to be minimised to acceptable levels wherever possible. It is not always possible to manage risks, due to the unpredictability and force of nature, but possible threats to human safety which arise from the natural environment need to be controlled to the extent possible through careful land use management.</p> <p>This outcome also recognises that the natural environment is subjected to the risk of damage by human activities and that these also need to be controlled.</p>
(g) Viability	
(i) The harmful effects of threatening process, including but not limited to clearing, weeds and pests are minimised or mitigated against.	The planning scheme contains a number of provisions which aim to limit the effects of damaging processes on natural resources, however the purpose of this outcome is to ensure that any human process that has the potential to harm the viability of a natural resource, which includes wildlife communities, is carefully controlled.
(ii) Ecosystems processes are recognised, protected, maintained or improved.	<p>Most elements of the natural system are likely to be the subject of many processes interacting with each other. The purpose of this outcome is to ensure that development decisions respect the key ecological and other processes on which many elements of the natural system depend for their future viability.</p> <p>The planning scheme recognises, therefore, that development impacts need to be considered not only in terms of their spatial dimensions, for example the area covered or the resources required, but also in terms of their impacts on essential natural cycles and processes. If a conflict exists which could harm the viability of part of our natural environment, the need for the development should be carefully balanced with the need to ensure the future availability of the Shire's finite resources.</p>
(iii) Ecosystem resilience is recognised, protected, maintained or improved.	<p>Resilience refers to the natural system's ability to recover and regenerate after damage, and to its ability to withstand damage.</p> <p>This outcome seeks to support measures which would be likely to lead to a more resilient natural environment, and thereby improve its prospects of long term viability.</p>

Strategy 1.2 Land	
Supporting Outcome	Interpretation
(a) Diversity	
(i) The diversity of the Shire's soil and land is recognised, protected and maintained.	<p>The Shire's diverse soil and land includes, but is not limited to:</p> <ul style="list-style-type: none"> - acid sulfate soils - salinity-prone soils - erodible soils - good quality agricultural land.
(b) Quality	
(i) The quality of characteristic soil types in the Shire is recognised, protected, maintained or improved.	<p>The Shire's diverse soil and land includes, but is not limited to:</p> <ul style="list-style-type: none"> - acid sulfate soils - salinity-prone soils - erodible soils - good quality agricultural land.

(c) Safety	
(i) Development on steep or unstable land is carefully controlled.	<p>This outcome seeks to control development on land which is either too steep in its own right to support development that is desirable and safe, or too steep by reason of the condition of the soil, or other contributing factors, such as hydrology or aspect for safe or desirable development.</p> <p>The planning scheme sets out controls for development on such land, the purpose of this outcome is to support the detailed levels of the scheme.</p>

Strategy 1.3 Air	
Supporting Outcome	Interpretation
(a) Location	
(i) Key airsheds are recognised, protected, maintained or improved.	Land use planning has a role to play in ensuring that air quality across the Shire is maintained and improved. Air sheds are commonly recognised, though capricious, routes for air and supported particulates to travel across the Shire. It is appropriate to recognise that development which may have an impact on air quality should firstly have their impacts mitigated and secondly be sited in such a way that impacts "down-wind" are minimised. Impacts on human amenities are referenced in part in Key Direction 3 (Amenity), however, it is appropriate in this Key Direction to regard a high quality of air as essential to many natural processes (including human activities) and that those locations that have particular sensitivity to air quality pollution be carefully managed.
(b) Quality	
(i) Air quality within the Shire conforms to an acceptable standard.	Air quality across the Shire needs to be managed in association with key State and National targets. It is not a topic that can be fully addressed solely within the planning scheme. The purpose of this outcome is to state that high standards of air quality are an essential part of achieving a more sustainable Shire, and that development under this scheme should not compromise the achievement of air quality that is acceptable and consistent with state and national air quality objectives.
(ii) Greenhouse gas emissions from within the Shire are reduced from those existing at the commencement of this scheme.	<p>The planning scheme is only one approach to ensuring that greenhouse gas emissions are managed in the Shire.</p> <p>The planning scheme will support the achievement of the milestones under the Cities for Climate Protection Program (CCP) which sets key targets for the reduction of harmful atmospheric pollution.</p>
(iii) Greenhouse or carbon sinks are identified, protected, maintained or improved.	This outcome recognises that some greenhouse gasses and atmospheric Carbon Dioxide can be reduced by sympathetic land uses, including forestation. Subject to the need to support the achievement of the other outcomes in this Scheme, these measures are supported.

Strategy 1.4 Water	
Supporting Outcome	Interpretation
(a) Amenity	
(i) The amenities of freshwater, estuarine and marine areas are recognised, protected, maintained or improved.	In keeping with the Principal Outcome, this outcome recognises that the Shire is composed of many areas where water is an intrinsic or characteristic feature. These areas have a need to have their amenity values protected, for their own sake.
(b) Diversity	
(i) The Shire's stream order capacities are recognised, maintained and protected.	This outcome seeks to ensure minimal disruption to the Shire's natural rivers, streams and waterway hierarchy. Development has in the past interfered with the capacities of many of the Shire's waterways, occasionally to the detriment of the waterway and any dependent processes and life forms. Future development decisions should seek to ensure that such effects are limited in the future.

<p>(c) Location</p> <p>(i) Sensitive catchment areas are recognised, protected, maintained or improved.</p>	<p>The impact of development in certain catchment locations can be considerable, in terms of water quality and quantity. Sensitive areas may in some circumstances occur in areas which are not defined spatially in the planning scheme. Development in and affecting defined and undefined sensitive areas will be carefully controlled to achieve the other outcomes of the scheme under this theme.</p>
<p>(d) Mobility</p> <p>(i) The following are minimised:</p> <ul style="list-style-type: none"> - obstructions to natural water flows; - obstructions to the movement of important water-borne elements of the natural system. 	<p>This outcome seeks to ensure that development impacts on water flows and the movement of flora and fauna dependent on water are minimised wherever possible. This outcome links to other outcomes which seek to ensure that mobility of all natural resources, living or non-living, remains as close to the natural pattern as possible.</p>
<p>(e) Quality</p> <p>(i) The following are minimised:</p> <ul style="list-style-type: none"> - adverse impacts of development on the integrity of catchment areas and receiving waters; - waste, sedimentation, urban runoff or contaminated run off effects in waterways; - nutrient contributions to waterways; - stormwater impacts on water quality. <p>(ii) The following are protected, maintained or improved:</p> <ul style="list-style-type: none"> - the quality of the Shire's water, in all its forms, at a standard which provides adequate drinking water and the ability to support life; - riparian buffer areas, wetlands and foreshores are protected, maintained, and /or enhanced; - water storage catchments and waterways; - natural drainage patterns. 	<p>The quality of the Shire's waters is a key concern of the planning scheme. This outcome supports any measures that improve the quality of the Shire's waters, in whatever form they occur.</p> <p>Many waterways of the Shire are subject to the impacts of development, which unless carefully controlled, can have a detrimental effect on water quality. The result is water which may become unsuitable for consumption, or even incapable of supporting life.</p> <p>Consistent with other water quality protection and enhancement outcomes in this scheme, this outcome seeks to maintain natural water quality enhancement features within the Shire which contribute to good water quality, including but not necessarily limited to riparian zones, storage and drainage areas.</p>
<p>(f) Quantity</p> <p>(i) Water extraction activities are managed so as to maintain environmental flows and natural processes.</p> <p>(ii) Natural flows are maintained.</p>	<p>Water is a key natural resource which, on occasions, is in limited supply. In order to ensure that adequate quantities of water are maintained, it is necessary to control the extraction of water from the Shire's catchments. Development which makes excessive demands on the Shire's water supply in general, or a waterway in particular, will need to be carefully balanced with the need for that development.</p> <p>Wherever possible, flows though waterways should be maintained as close to the desired level as possible. This helps maintain both the viability of the waterway, and the processes and life that are dependent on it. Mechanical interference with flows, including realignment of waterways, is to be avoided wherever possible in order to facilitate this outcome.</p>

(g) Safety (i) Development in flood risk areas is carefully controlled.	Flooding poses a major risk to development in the Shire, and wherever possible, no new development should be approved which will be subjected to a preventable risk of flooding.
(ii) Development does not increase risks associated with flooding and stormwater run off.	The planning scheme defines the extent and level of risk of flooding within the Shire. The purpose of this outcome is to support measures that prevent development from locating in areas at risk.
(iii) The safe flood carrying capacity of waterways is not exceeded.	Development should never contribute directly, or indirectly, to the overloading of any of the Shire's waterways.

Strategy 1.5 Ecosystems	
Supporting Outcome	Interpretation
(a) Diversity	
(i) The following are recognised, protected, maintained or improved: - the diversity of the Shire's ecosystems and habitats - the diversity of life within and reliant on the Shire's ecosystems, including genetic and species diversity	The Shire hosts an amazing variety of fauna, flora and their habitats. The planning scheme has within it a number of elements which identify and protect this diversity. Genetic and species diversity is a cornerstone of sustainable land use policy, where the aim is to maintain viable amounts of all the current species, habitats and ecosystems that contribute to the diversity of the natural environment.
(b) Location	
(i) Areas containing significant ecosystems are recognised, protected, maintained or improved.	Significant ecosystems and habitats are identified in the planning scheme. The purpose of this outcome is to ensure that these areas are protected from inappropriate development and that the ecosystems and associated flora and fauna are preserved.
(c) Quality	
(i) The following are recognised, protected, maintained or improved: - the health of the Shire's ecosystems and biodiversity - the natural state of ecosystems.	Maintaining the quality of the Shire's ecosystems is an important means to ensure that the flora and fauna within are given the conditions they need to survive. Healthy ecosystems mean that the essential services on which the Shire's residents depend, such as clean drinking and bathing water, or food production are maintained. Retaining ecosystems in a natural state is the preferred way to achieve high quality ecosystems.
(d) Quantity	
(i) There is no significant reduction in nett quantities of the Shire's ecosystems.	This outcome seeks to protect the quantity of the Shire's valuable ecosystems from significant erosion. It is important to note that even small losses can, over time, amount to considerable losses, and that when deciding on whether or not ecosystems will be lost to development, it will be appropriate to consider the long term quantitative impacts.
(ii) There is an increase in the nett quantity of ecosystems in the Shire.	Consistent with the planning scheme's aim to minimise the loss of ecosystems, is the aim that, through regeneration and revegetation, the Shire's area occupied by ecosystems may be increased during the lifetime of the scheme. This outcome recognises that there may be some unavoidable reductions in the quantity and extent of the Shire's ecosystems, but that where these occur, they should desirably be offset by gains elsewhere.

(e) Viability	
(i) Further extinctions of flora and fauna are prevented.	The planning scheme contains a number of controls that aim to ensure that flora and fauna is protected in the Shire. The outcome sought in relation to all life in the Shire is that further extinctions are prevented. Where a proposal threatens the viability of a species of life, the decision should balance the need for the development with the loss of a finite and irreplaceable resource, which should be protected for its own sake.

5.4 Interpretation of the Economic System – Principal Outcomes, Strategies and Supporting Outcomes

Key Direction 2 – Economic System considers the economic needs of the Shire. In spatial terms, it may be applicable in any part of the Shire where development is proposed. In terms of scope, Key Direction 2 covers the full range of strategic land use and development matters likely to affect the Shire.

Key Direction 2 is composed of nine Principal Outcomes, Strategies based on nine themes, and 89 Supporting Outcomes described as follows.

5.4(a) Principal Outcomes

Principal Outcomes represent key characteristics of the Key Direction which the Ecological Sustainability Framework seeks to protect. The following nine Principal Outcomes have been identified for Key Direction 2.

Principal Outcome	Interpretation
Principal Outcome 1 Accessibility All land uses have access to other land uses that complement and support their activities.	<p>Accessibility in the context of the economic system refers to the desirability of ensuring that development decisions maximise the opportunities for land uses to benefit from positive interactions (synergy) with each other. Whilst to some extent, this is partly addressed by the locational characteristic (ensuring development occurs in locations identified in the scheme), this Principal Outcome recognises that ensuring complementary land uses are easily accessible to each other extends into seeking to group certain land uses, seeking to identify and value land uses which may be a catalyst for desirable development, and adopting development density standards which facilitate appropriate concentrations of co-beneficial land uses.</p> <p>Proposals which include measures to facilitate better inter-land use accessibility, such as superior telecommunications, or physical measures such as better transport options, or layouts will be viewed as advancing this Principal Outcome.</p> <p>It should be noted that this characteristic is distinct from ensuring human accessibility to elements of the economic system. Human needs for access to elements of all three systems are dealt with under Key Direction 3 – Social/Well-Being Systems. This Principal Outcome addresses the importance of seeking to explore what the Scheme can do to ensure that land uses can easily access the other land uses they require.</p>
Principal Outcome 2 Amenity Development does not adversely impact on other land uses.	<p>In the context of the economic system “amenity” refers to the ability to operate as a land use without being adversely affected by other land uses.</p> <p>The purpose of this Principal Outcome, therefore, is to ensure that development is compatible with other land uses. This principle will apply in relation to new development proposals, or to existing land uses which have demonstrably adverse impacts on other land uses. Whilst one of the aims of the Accessibility Principal Outcome is to</p>

Principal Outcome	Interpretation
	bring beneficial uses into close proximity to maximise synergies, the opposite is also important: ensuring that incompatible land uses do not affect each other.
Principal Outcome 3 Diversity The Shire has a diversity of land uses and development forms.	<p>Diversity in the land uses and forms they take is a key component of ensuring that the Shire does not become overly dependent on any given sector of the economic system. In the employment sector, for example, a diversity of employment types spreads the risk of threats to future employment levels in the shire caused by the depression of one sector of the economy. In the housing sector, a diversity in the type of houses available ensures that choice exists for those who wish to live in the Shire and that all the Shire's residential needs are addressed.</p> <p>Specific measures are to be developed for each land use theme (including employment, housing, infrastructure) to achieve the overall aim of diversity</p>
Principal Outcome 4 Efficiency Development represents the optimum use of the land.	<p>Ensuring the efficient use of land in the Shire is a key planning function and may be expressed in both spatial and temporal terms. "Spatial efficiency" refers to the need to ensure that the use of the land for a given purpose represents the best possible use for the land in the context of other possible uses. "Temporal efficiency" seeks to ensure that development occurs in a logical and orderly manner.</p> <p>This Principal Outcome relates closely to the Location Principal Outcome because that Principal Outcome seeks to ensure that development occurs in the locations specified in the scheme. These locations have been chosen because they represent efficient locations for development.</p> <p>However, efficient use of land also implies that best use is made of the potential offered by each site. The amount of land available for each type of land use required within the Shire is finite. The particular form that the development takes on the land should, therefore, fully recognise the potential offered by the site, subject to all relevant development constraints and controls outlined in the scheme.</p>
Principal Outcome 5 Location Development occurs in the appropriately areas.	<p>This Principal Outcome will seek to ensure that development occurs in the locations identified in the Scheme as suitable for that land use.</p> <p>Proposals to locate development outside these areas will be considered on their merit, but will need to be justified.</p> <p>Decisions in the Scheme about the appropriate locations for land uses will have regard to the Efficiency Principal Outcome which seeks to ensure an efficient spatial organisation of land uses and an orderly development sequence. One of the purposes of this Principal Outcome will be to ensure development decisions accord with the Scheme.</p>
Principal Outcome 6 Quality A high quality of development is achieved.	<p>This Principal Outcome considers the qualitative aspects of development. These include, but are not limited to, matters of design, siting, layout, landscaping, and climatic responsiveness. Attention to the reduction of the risk and fear of crime, to energy efficiency, landscape integration are also qualitative aspects which will be captured under this Principal Outcome. This necessarily broad statement is given particular meaning by Supporting Outcomes in the framework, however the concept of development "quality" underpins each.</p>
Principal Outcome 7 Quantity Sufficient land is provided for the development needs of the Shire.	<p>This Principal Outcome seeks to ensure that sufficient land is available for the key land uses dealt with by the plan. "Sufficiency" encapsulates two concepts: neither too much, nor too little. The scheme has examined the demand for key land uses within the Shire and allocated land appropriately.</p> <p>Development forms which represent an oversupply of a given form of development may have a detrimental impact on the ability of other</p>

Principal Outcome	Interpretation
	<p>development to occur and will be resisted in the interests of maintaining the economy as a whole.</p> <p>Specific land allocations under each key land use theme are set out in the scheme.</p>
Principal Outcome 8 Safety Development does not result in increased risks to elements of the economic system.	<p>The purpose of this Principal Outcome is to ensure that the risks and actual incidences of destruction to property as a result of development are minimised. This includes, but is not limited to, reducing risk to other land uses, activities, physical assets and infrastructure.</p> <p>The consequences of inappropriately designed buildings, or the inappropriate siting of potentially hazardous land uses on other physical assets can be catastrophic – and costly.</p> <p>This is distinct from the need to ensure the safety of people, which is addressed separately under Key Direction 3 – Social/Well-Being System. Natural hazards are dealt with under Key Direction 1 – Natural System.</p>
Principal Outcome 9 Viability Economic viability is protected, maintained or enhanced	<p>This Principal Outcome recognises that development should not impede the processes which operate within the economic system that enable land uses to continue to function, to develop and to grow. There are two aspects which this Principal Outcome mainly considers.</p> <p>“Viability”, which means the ability to maintain profitability. “Vitality” which relates to activity levels, such as pedestrian/customer flows, upon which the overall viability of land uses are often dependent. These concepts are distinct but complementarily encapsulated by this Principal Outcome.</p> <p>In the context of town centres, for example, this Principal Outcome will seek to ensure optimum levels of shopper activity by seeking to encourage those land uses which generate pedestrian flows in such areas. High pedestrian activity leads to increased expenditure and therefore profitability.</p> <p>This Principal Outcome will apply to any development proposal with a capacity to threaten the economic viability of any of the economic uses in this system.</p>

5.4(b) Strategies

Key Direction 2 contains nine strategies, based on the themes presented in Section 4. These provide a direction for how the supporting outcomes at the next level are to be achieved. The nine strategies for Key Direction 2 are:

Strategy	Interpretation
Strategy 2.1 Generally – Responsibly managing development within and affecting the Shire.	<p>This broad strategy recognises that controlling the effects of development, especially on the other two systems, is fundamental if economic initiatives are to be advanced.</p>
Strategy 2.2 Housing – Ensuring residents have access to good quality housing which is appropriate to their needs.	<p>An important component of any planning instrument, this strategy recognises the need to consider the affordability, accessibility, and locational aspects of housing provisions in the Shire.</p>

Strategy	Interpretation
Strategy 2.3 Employment – Promoting a strong and diversified economy.	The encouragement of employment opportunities across all land uses and economic systems will assist in providing one of the most basic needs of the Shire's residents.
Strategy 2.4 Commercial Centres – Promoting a network of centres with a diversity of activities.	This strategy recognises the need to provide centres that have recreational, social, cultural, and entertainment opportunities in addition to the traditional components of retailing and business across the Shire.
Strategy 2.5 Industry – Providing a range of industry locations for a diversified economy.	Providing industries with a choice of suitable locations to support the Shire's population is an initiative that also advances the employment strategy.
Strategy 2.6 Tourism – Encouraging a diversity of land uses that provide tourism opportunities.	The strategy recognises that tourist opportunities can be created across all land uses within the Shire.
Strategy 2.7 Rural – Ensuring rural areas are protected for the most appropriate use.	This strategy demonstrates the need to continue supporting the rural areas of the Shire as places containing viable and diversified rural activities, in addition to provide employment opportunities.
Strategy 2.8 Open Space & Recreation – Providing suitable recreation and leisure opportunities in the Shire.	The provision of open space and recreation facilities complements our economic strategies, can benefit the natural system by way of protecting sensitive and important areas, and supports the initiatives of the community wellbeing system through providing public places for the community.
Strategy 2.9 Infrastructure – Providing a range of suitable infrastructure to meet the Shire's needs.	This recognises that the provisions of infrastructure is a basic and essential component for advancing economic and community wellbeing strategies for the Shire.

5.4(c) Supporting Outcomes

Principal Outcomes are broad statements that apply to each of the themes in the Key Direction. Under some themes, the Ecologically Sustainable Framework identifies specific Supporting Outcomes which provide additional meaning for the Principal Outcome in relation to that theme. A Supporting Outcome is a statement of a particular end-state, or outcome, that the Ecological Sustainability Framework aims to achieve for a theme. An absence of a supporting outcome for a particular strategy means that the Principal Outcome by itself is considered to satisfactorily address that characteristic of the theme.

Strategy 2.1 General	
Supporting Outcome	Interpretation
(a) Accessibility	
(i) Development decisions maximise the opportunities for land uses to benefit from positive interactions with each other.	Economic accessibility is a key tenet of the sustainability of the Shire's economy. Businesses and other key land uses in the economy should be given the best possible opportunities to interact, with positive consequences. In many cases, this is facilitated by locating compatible land uses in close proximity however it can also be facilitated by a range of other land-use measures that aim to increase activity between and awareness of compatible land uses within the

	Shire. An example is the provision of communications infrastructure that increases linkages between land uses within and beyond the Shire.
(ii) Complementary land uses are located in close proximity, and/or linked by an efficient transport system.	Physical proximity is one means by which land uses can more easily access other land uses that benefit them. This includes proximity to the infrastructure that facilitates or improves land use accessibility, such as transport infrastructure. Co-locating compatible land uses is an important component of sustainability because it allows more efficient delivery of required infrastructure and reduces energy demands as a whole.
(iii) Opportunities for economic co-operation and synergy are maximised, where possible.	Maximising the opportunities for different land uses to interact positively is a step towards a more sustainable economy. The waste materials from one production process may form the necessary inputs for another production or waste management land use, for example. By encouraging innovative mixed use development, the Shire may increase the efficiency of the economy as a whole, reduce energy demands, and diversify its economy.
(iv) Development densities are optimised to provide for maximum inter-land use accessibility, consistent with the preservation of amenity.	<p>To reduce pressure on areas of land currently zoned for non-urban purposes, it is important to make the best use of land already earmarked for development. In some cases, this means increasing the density of development to ensure that the full potential of a site is exploited.</p> <p>It is important to note that maximising the productivity of a development site in order to increase land use efficiency must be balanced against the need to ensure other outcomes in the scheme are also achieved, such as the preservation of human and visual amenities, the need to provide required infrastructure and services, or the need to respect key site constraints such as natural waterways, vegetation or slope.</p>
(b) Amenity	
(i) The economic amenity of economic land uses, meaning the ability for land uses to operate without being adversely affected by other land uses, is recognised, protected, maintained or improved.	<p>The term "economic amenity" refers to the need to protect, where possible, the intrinsic needs of land uses. That is, many land uses have certain conditions that must exist for them to function effectively, such as a need for clean air or water, for separation from incompatible land uses.</p> <p>If new development is likely to detract from the effective economic operation of an existing land use or land uses, the need for the new development should be carefully balanced against the potential impacts.</p>
(ii) Land uses which are complementary to each other are co-located.	Consistent with other outcomes in this Key Direction, land uses which are complementary to each other should be co-located to maximise the opportunities for interaction and efficiency. Careful consideration should be given as to whether the most efficient land use mix has been proposed for development sites which have good accessibility to key services, infrastructure and population centres.
(iii) Incompatible land uses are separated.	<p>The planning scheme contains measures that seek to ensure that incompatible land uses are not approved where they are likely to interact negatively with each other.</p> <p>Development that is likely to affect the natural, economic or human amenities of adjoining areas should be carefully balanced with the need for the development.</p>
(iv) New development does not erode the economic amenity of existing or future known land uses by encroachment, sterilisation, alienation or limitation.	Where possible, existing land uses should be protected from encroachment from new development that may impinge on their operations and viability. For example, some rural land uses have associated with them noisy or odorous activities that are inconsistent with human amenities. It is generally undesirable to approve residential development in areas where satisfactory amenities would be incapable of being provided, having regard to the existing or future approved use of the nearby land.

<p>(c) Diversity</p> <p>(i) The Shire possesses a diverse range of sustainable land uses, development forms and development densities, ensuring a wide choice for consumers, residents, visitors and others.</p>	<p>Diversity in the forms of development to be found in the Shire is an important means towards ensuring that the diverse needs of users such as businesses, homebuyers, tourists are catered for.</p> <p>Visually, the built up areas of the Shire should not appear to be homogenous, indistinct from other parts of the Shire, or from other parts of the State. However, the need to foster diversity in the built form and the use of land is not in itself a sufficient reason to set aside other relevant outcomes in this scheme, such as the need to ensure visual and human amenities, or to protect the character of areas where necessary.</p>
<p>(d) Efficiency</p> <p>(i) The Shire achieves maximum spatial efficiency, ensuring that the use of land for a given purpose represents the best possible use of the land in the context of other competing uses.</p>	<p>Land is a finite and valuable resource and should be used efficiently. Land which has the benefit of urban zoning in particular should be carefully developed. By making the best use of such sites, pressures to release areas which are currently non-urban can be reduced. Reducing conflicts in the use of land is one of the key aims of the planning scheme.</p> <p>To achieve this outcome, favourable consideration will be given to proposals which demonstrate that the development represents the maximum benefits that can be achieved for the site, having regard to the site's position and constraints. This outcome encourages site densities and development footprints which optimise the potential of a site, however it does not in itself justify the relaxation of development standards and other relevant outcomes in the scheme.</p> <p>In the consideration of the best use of a site, this outcome may form the basis for rejecting land use proposals for development sites where another, more efficient use of the land may be envisaged.</p>
<p>(ii) The Shire achieves maximum temporal efficiency, ensuring that all development occurs in a logical and orderly manner.</p>	<p>It is a key requirement of this scheme that development should occur in an orderly and efficient manner. Through its land use zones, the scheme identifies the extent and broad character of development that is envisaged during the lifetime of the scheme. Development which falls outside the areas in which it was envisaged, is generally unsupported by the scheme.</p> <p>This is to ensure that the Shire develops at a rate and extent that is consistent with, among other factors, people's expectations for the growth of the Shire, the provision of key infrastructure and services in an efficient and cost effective manner, and the need to minimise urban sprawl.</p> <p>Within zones, however, it is usually desirable to allow development to occur in a logical and sequential manner. "Temporal efficiency" is about ensuring that land is developed in a sequential, efficient manner over time. It seeks to avoid the creation of "islands" of development, for example, encouraging the infilling of gaps between development sites, rather than the creation of new gaps. Where this occurs, there may be frontage breaks in essential footpaths, lighting, drainage, landscaping and so on, all of which have an impact, including those relating to economic efficiency and amenities.</p>
<p>(iii) The Shire has an efficient land use pattern which is orderly and sustainable.</p>	<p>At the broad level, the aim is to ensure that the Shire's land uses are ordered for maximum efficiency. For example, much of the residential densification in the Shire occurs in an area west of the Bruce Highway, rather than on the periphery of the Shire. This desirable situation ensures that maximum benefits can be obtained from the transport and other infrastructure which is located in these areas and that less resources are consumed by the need to ensure similar services are available at less accessible locations of the Shire.</p> <p>Efficient land use in the Shire recognises that peripheral areas are often subject to significant environmental constraints, the development of which is inefficient where adequate land for the purpose may exist in areas closer to the existing centres.</p>
<p>(iv) The Shire's energy consumption is efficient and opportunities to utilise</p>	<p>The planning scheme supports and encourages measures to improve energy efficiency in the Shire, at the broad and the local scale. At the broad level, the planning scheme zone maps show a land use allocation which is intended to promote a reasonably efficient energy</p>

alternative energy sources are maximised.	<p>consumption pattern for the Shire by limiting new development fronts, promoting development around existing centres and maximising the use of strategic land and infrastructure.</p> <p>At the more detailed level, the scheme contains a number of measures which aim to improve the energy efficiency performance of development and land use. Proposals which maximise the use of energy sources which are clean and sustainable are encouraged. In some circumstances, positive energy efficiency outcomes may form the justification for favourable consideration, having regard to the need to achieve other relevant outcomes in the scheme.</p>
(v) Development densities are the optimum possible, having regard to the need to achieve other outcomes in this scheme.	<p>Ensuring that development densities on strategic sites are at the optimum desirable level is a central tenet of sustainable land use management. Strategic sites are those which benefit from easy access to services and infrastructure (such as reticulated water, electricity, drainage, or road and rail connections) or to complementary land uses. "Optimum" is not defined in this context, and varies dependent on the circumstances. It involves a balance of the constraints of the site, the character of the development, the strategic nature of the site and other factors.</p> <p>This outcome will encourage the best use of all development sites in the Shire, and strategically located sites in particular, however it does not in itself justify the relaxation of the development standards in the scheme. These will need to be balanced on a case by case basis.</p>
(vi) Development makes full use of the development and productivity potential of the site, having regard to the need to achieve other outcomes in this scheme.	<p>This outcome recognises that land once developed, whilst not necessarily "lost", does become unavailable for redevelopment or reclamation for a number of years. It is important, therefore, to carefully consider whether development proposed for a site represents the most desirable form of development that could reasonably be expected to be achieved on the site. This outcome, in effect, requires that the development should extract the greatest amount possible from a development site once the limits imposed by other outcomes in this scheme have been established.</p> <p>For clarification, this outcome does not imply that environmental, visual amenity and other standards are always relaxable in order to maximise the development potential of a site. It simply encourages development that fully utilises the potential of a site, where that potential has already taken into account any relevant constraints.</p>
(vii) The Shire integrates with relevant State and Regional policies.	<p>The Shire's land uses, including its infrastructure, do not always terminate neatly at the administrative boundaries of the Shire. The provisions of the planning scheme exist within a regional context and partnership and cooperation with adjoining shires is an important component of ensuring the efficient use of land within and adjoin the shire.</p> <p>The scheme promotes a land use pattern that is consistent with the efficient development of the South East Queensland region and the purpose of this outcome is to support that. Development proposals which have an impact on regional land use and infrastructure matters, therefore, should be consistent with relevant State and regional policies. It should be noted that, as part of its approval process, the planning scheme has been assessed for compliance with relevant State and regional policies.</p>
(e) Location	
(i) Development locations are favoured which support the Desired Environmental Outcomes in this scheme.	<p>Ensuring that development occurs in favourable locations is a key element of the planning scheme. The scheme achieves this by specifying a preferred land use pattern through the zone maps each of which has a preferred character and range of preferred land uses.</p> <p>The Integrated Planning Act does not permit the prohibition of undesirable land uses in areas outside where the scheme envisages them. Such proposals must be assessed on their merits.</p> <p>The purpose of this outcome, however, to support those provisions of the scheme that seek to exclude development from areas where it is considered inappropriate for the location. This could include development in a sensitive catchment, in an ecologically sensitive area, in an area where amenities are affected or other situations. In effect, the scheme has identified suitable and unsuitable areas for development, and this outcome seeks to support those measures.</p>

(ii) Development that does not achieve the Desired Environmental Outcomes in this scheme is resisted.	The Integrated Planning Act requires that development proposals that conflict with the achievement of a Desired Environmental Outcome should not be approved. This supporting outcome is therefore not required to be included in the planning scheme, however, it is included to make it clear that development that does not support the achievement of one or more of the DEOs will be resisted.
(iii) Development occurs in locations that are easily serviced with infrastructure.	For the purposes of efficiency, development proposals that create an unreasonable demand for the provision of infrastructure should be resisted. The planning scheme allocates sufficient land for a wide range of purposes which is capable of being reasonably easily serviced by required infrastructure. There are unlikely to be many circumstances where it will be necessary to permit new development to occur outside these areas, and create an unreasonable or unforeseen burden on ratepayers and service providers.
(f) Quality	
(i) Development: - is energy efficient; - is sensitively and appropriately sited having regard to topography, landscape, landform, vegetation and any other constraints of the site; - respects the character of the locality, whether built or natural; - respects and fully utilises the sub-tropical climatic conditions of South East Queensland.	<p>This is a wide ranging overall outcome that stresses the contribution that good design can make to a more sustainable Caboolture Shire.</p> <p>Provisions in the planning scheme indicate what constitutes good design in the context of particular development. The purpose of this outcome is to ensure that such provisions are recognised as important to the achievement of an attractive and liveable Shire.</p> <p>All development should, as a minimum, demonstrate through its design a sensitivity to the need for energy efficiency, the characteristics of the site and its environs, the general locality and the region. Development forms which respect the sub-tropical climate of the Shire, utilising opportunities for outdoor living, shade, solar and breeze orientation, tropical landscaping, and vernacular architecture are to be encouraged.</p>
(ii) The Shire's built up areas are attractive and: - visual pollution is avoided; - architectural statements are strong, memorable, distinctive and appropriate; - distinctive streetscapes are created; - a predominantly green, landscaped character is protected, maintained and developed in the Shire's urban areas.	<p>It is important to the overall appearance of the Shire that development should, wherever possible, make a positive contribution to the visible spaces and vistas in the Shire. A positive visual image for the Shire has a significant economic value, as well as aesthetic value, which it is important to recognise.</p> <p>Under this outcome, proposals which are regarded as damaging to visual amenities will be resisted. This outcome may also be relevant in other circumstances, for example, where improvements in the appearance of development are considered desirable and practicable.</p>
(g) Quantity	
(i) An adequate supply of land exists for each desired land use in the Shire, and shortfalls are avoided.	The planning scheme allocates, by means of the zoning maps, an adequate supply of land for development over the period of the plan. In doing so, the scheme recognises that maintaining a supply of easily serviced and unconstrained land for development purposes is important to the efficient and managed growth of the Shire. By allocating land that can be efficiently and easily developed, the scheme can facilitate a diversity of land uses that adequately responds to the demands of the region's growth pattern.
(ii) Oversupplies of land are avoided.	Consistent with the need to allocate sufficient land for development purposes in the Shire is the need to guard against an oversupply of land. In some circumstances it will be appropriate to consider the effects on other land uses of decisions to approve development for purposes for which an adequate supply of land has already been provided. If, after due consideration, a proposal is considered to result in an oversupply of land, it may be resisted on these grounds and others in the scheme that promote development diversity and the

	<p>reduction of pressures on required infrastructure and services.</p> <p>Decisions in relation to this outcome should also consider how the oversupply of land may affect the viability of the local or wider economy. An oversupply of land for a given purpose may detrimentally affect the ability of other land uses to operate. This outcome recognises that the circumstances in which this outcome are relevant will vary and that in each case, it will be necessary to demonstrate reasonably how this outcome is either advanced or prejudiced.</p>
(iii) The consumption of land, and other primary resources associated with land use and development, does not exceed sustainable levels.	<p>This outcome seeks to ensure that development occurs in a sustainable manner. In order to occur, development may require significant quantities of finite resources, such as land or primary resources. The aim, therefore, is to ensure that consideration is given at the assessment stage as to whether or not the demands placed on these resources by the development is sustainable in the long term. If it is not, then consideration should be given to reducing the demands of the development, or if necessary, resisting the development. The Shire's land and primary resources have an economic value which should be retained for future generations. This is in addition to the wider, inter and intra-generational equity issues which make the irresponsible use of finite resources undesirable under this scheme.</p>
(iv) Development which represents an oversupply of a given form of development, will be resisted in the interests of maintaining the economy as a whole.	<p>Consistent with the need to allocate sufficient development opportunities in the Shire is the need to guard against an oversupply of certain forms of development that might constitute an undesirable quantity of that development form. If, after due consideration, a proposal is considered to result in an oversupply of a form of development, it may be resisted on these grounds and others in the scheme that promote development diversity and the reduction of pressures on required infrastructure and services.</p> <p>Decisions in relation to this outcome should also consider how the oversupply of land may affect the viability of the local or wider economy. An oversupply of a given form of development may detrimentally affect the ability of other land uses to operate. This outcome recognises that the circumstances in which this outcome are relevant will vary and that in each case, it will be necessary to demonstrate reasonably how this outcome is either advanced or prejudiced.</p>
(v) Development decisions are in accordance with the specific land use allocations in the scheme, which in turn are based on realistic estimates of demand for key land uses in the Shire balanced with the need to achieve other outcomes in this scheme.	<p>Development which does not fall within an area in which that form of development was envisaged in the scheme, should be resisted. Sufficient land for development over the plan period has been identified in the number and extent of the Scheme's land use zones, based on the Shire's anticipated growth.</p> <p>The significant use of land within a zone for a not envisaged purpose may have an impact on the scheme's ability to provide for the normal range of land uses envisaged in that zone.</p>
(h) Safety	
(i) The risks and actual incidences of destruction to property as a result of development are minimised. This includes, but is not limited to, reducing risk to other land uses, activities, physical assets and infrastructure.	<p>New development must not result in the foreseeable damage of existing property. This outcome recognises the economic inefficiency of allowing development to occur which might result in the need to repair or rebuild other existing economic assets.</p>
(ii) The consequences of inappropriately designed buildings, or	<p>The need to reduce the risks to human safety are addressed in Key Direction 3, the purpose of this outcome is to recognise that the destruction of property can have a significant economic cost that</p>

the inappropriate siting of potentially hazardous land uses on other physical assets, which can be catastrophic – and costly – are avoided.	should be avoided. The scope of this outcome relates to reducing the exposure of any economic asset to an unacceptable level of risk through a development proposal. Consideration of the total risk involved should include an analysis of the likelihood of a risk event occurring, the likely damage and possible mitigation measures.
(iii) Measures to assist crime reduction and measures to enhance safety associated are clearly demonstrated in all development.	Crime risks in relation to economic activity should be carefully managed wherever possible. Development that results in inadequate crime prevention or unacceptable risks of crime should be resisted. This outcome works in association with others in Key Direction 3 which aim to reduce the risks of crime in general. Detailed provisions in the scheme set out how the risks of crime can be prevented in development proposals.
(iv) Development which improves the Shire's ability to respond to disasters is supported.	The Shire's exposure to risks associated with natural and other disasters should not be increased as a result of the provisions of the planning scheme. Where a proposal which requires assessment under the scheme, can be clearly and reasonably demonstrated as necessary in order to facilitate a better disaster or emergency response, the proposal will normally be approved, except under exceptional circumstances which will need to be carefully justified.
(i) Viability	
(i) Development does not impede the processes which operate within the economic system that enable land uses to continue to function, to develop and to grow.	In order to grow or remain viable, many land uses are dependent on favourable economic conditions, some of which may be influenced by land use planning decisions. The purpose of this outcome is to ensure that new development is assessed not only in terms of its land use characteristics, but also in terms of its contribution or otherwise to the economic processes of the Shire. For example, insensitively located, noisy or visually offensive development in a popular tourist destination may be unacceptable not only in land use terms, but also because of the potential impacts on the long term growth and ongoing viability of the local tourism industry. In this case, the need to ensure the viability of the tourism industry as a whole should outweigh the need for the development.
(ii) The viability of existing or known future economic land uses, meaning the ability to maintain profitability, is recognised, protected, maintained or improved in development decisions.	The purpose of this outcome is to ensure that the ongoing viability of existing significant land uses is a material consideration in the assessment of new development. This outcome is most likely to be relevant in cases where a number of land uses are affected by a development proposal, such as a centre, or where a single use is deemed to have a significant economic value for an area. The economic contribution that the land use offers to the locality, and not the profitability impacts on the land use operator, are the key considerations under this outcome.
(iii) The vitality of existing or known future economic land uses, meaning the activity levels such as pedestrian/customer flows upon which these land uses may depend is recognised, protected, maintained or improved in development decisions.	Economic viability in many cases is a function of the level of consumer activity in and around particular land uses. For example, in centres, retailer viability is closely associated with the number of pedestrians that are attracted to the centre. Land use proposals that significantly reduce the attractiveness of the centre to shoppers can therefore have an impact on the viability of the centre itself, and should therefore be avoided. The aim should be the strengthening and consolidation of desirable key land uses, rather than their erosion or diminution as a result of insensitive land use management.

Strategy 2.2 Housing	
Supporting Outcome	Interpretation
(a) Diversity	
(i) The Shire possesses a diverse and sustainable range of residential land	The Shire's housing needs are diverse, reflecting a wide variety of choice of lifestyles and locations to be found in the Shire. To ensure that future residential development caters to the needs of all the Shire's residents, it is important to ensure that development is not

uses, development types and densities, ensuring an adequate choice of housing is available.	homogeneous and that a full range of development types exists within the Shire. The Shire should contain an interesting and diverse mix of housing types, rather than demonstrate an over dependence on a particular form. Therefore a balanced mix of low density and higher density development will be found in the Shire, subject to the need to achieve other outcomes in the scheme, such as the need to achieve high quality design.
(b) Location	
(i) Residential locations promote a centralised and consolidated, rather than dispersed, land use pattern.	<p>The existing pattern of development in the Shire necessitates some distribution of residential growth across most areas of the Shire. However, in order to facilitate the most efficient development pattern, the majority of urban growth will be in existing areas that serve to consolidate rather than expand the Shire's urban form. This approach will serve to maximise the efficiencies and benefits of locating residential development in areas where much of the necessary infrastructure and services are already, or may easily be, provided.</p> <p>The scheme's zoning maps identify the desired residential areas of the Shire. In broad terms, areas west of the Bruce Highway, on unconstrained land and with good accessibility to communications, water and drainage infrastructure have been identified as most suitable for future residential development, at a range of densities.</p>

Strategy 2.3 Employment	
Supporting Outcome	Interpretation
(a) Accessibility	
Employment uses have maximum accessibility to markets, services and labour.	It is desirable to favour development for employment purposes in locations that promote maximum accessibility to essential resources, including markets, key services and labour supplies. Conversely, it is desirable to restrict employment development in locations where these resources are not capable of being adequately provided. This is to ensure that employment land uses are given the best possible opportunities to grow and remain viable in the longer term. It also ensures that the best use is made of finite land, and that land which might be better used for other purposes is not lost to marginally viable employment purposes.
(b) Diversity	
(i) The Shire possesses a diverse and sustainable range of employment land uses, development types and densities, ensuring adequate choice is available.	<p>Employment diversification is a means towards ensuring a more robust overall economy. Where a high proportion of the work force are reliant on a single employer or employment sector, a downturn in that part of the economy can have a significant impact on the economic well-being of the Shire.</p> <p>Proposals that increase reliance on a particular employment sector, to the point that a downturn would be detrimental to the local economy, are therefore not favoured in this scheme. Proposals that represent a wider range of land uses and services are preferred, subject to the need to achieve other outcomes in the scheme.</p>
(ii) Rural areas have a wide range of sustainable land uses.	<p>The Shire is, in terms of land use, dominated by its rural sector. Agriculture and forestry are the mainstay of the economy in the rural areas. The scheme recognises the contribution that these land uses make to the rural economy and favours proposals that demonstrably improve the viability of these and other employment providers in rural areas. Favourable consideration will be given to proposals that demonstrate a sustainable diversification of employment in rural areas. These may include, for example, low-scale value adding activities on farms where rural amenities are not significantly prejudiced.</p> <p>The lack of key services and infrastructure may, in some cases, constrain opportunities for diversification. However, in those cases where it is considered appropriate, a more diverse rural economy is an important contribution to providing employment and services in areas closer to where people live.</p>
(iii) Development which integrates employment and other compatible land uses is supported, having	Where practicable, mixed use development (where employment and other land uses are either co-located on a site or within the same building) is a desirable means to reducing the overall travel demands of the Shire. This could, for example, lead to residential uses above commercial ground floor uses, research facilities adjoining education

regard to the need to achieve other outcomes in this scheme.	sites, service retail units in employment areas and other similar proposals. In each case, the need to preserve human amenities and the need to achieve other outcomes in this scheme will be relevant, however, the scheme recognises and encourages creativity in the way that employment opportunities are provided in the Shire.
(c) Location	
(i) Employment locations promote a centralised and consolidated, rather than dispersed, land use pattern, having regard to the need to achieve other outcomes in this scheme.	<p>In order to facilitate the most efficient development pattern, the majority of employment growth will be in existing areas that serve to consolidate rather than expand the Shire's urban form. This approach will serve to maximise the efficiencies and benefits of locating employment development in areas where much of the necessary infrastructure and services are already, or may easily be, provided.</p> <p>The scheme's zoning maps identify the desired employment areas of the Shire. In broad terms, the scheme allocates land for larger employment sites in close proximity to the infrastructure they require, foremost among which is the Bruce Highway. Smaller scale employment opportunities are provided for in more outlying areas, subject to the need to achieve a sustainable employment sector.</p>
(d) Quality	
(i) Sustainable and innovative employment proposals are supported, having regard to the need to achieve other outcomes in this scheme.	The scheme supports innovative proposals for the creation of employment, or its servicing. Energy and waste efficiency are encouraged. Proposals which can demonstrate a commitment to the highest standards of innovation and quality will be given favourable consideration under the scheme.
(ii) Clean employment forms, representing less of a threat to general amenities and the natural environment, are preferred to traditional employment types.	The scheme will seek to reduce its reliance on unsustainable employment sectors. For example, the Shire has a number of heavier industry and manufacturing uses. The economic gains from land uses such as these are sometimes offset by environmental, amenity and other impacts. Whilst adequate land is set aside in the scheme for the sustainable expansion of uses such as these, employment opportunism that represent a cleaner, more efficient use of land are encouraged. This may involve giving favourable consideration to employment proposals that are innovative, that demand or create higher environmental standards, or that efficiently create or process waste and energy.
Strategy 2.4 Commercial Centres	
Supporting Outcome	Interpretation
(a) Accessibility	
(i) Centres co-locate a wide variety of complementary land uses, including, but not limited to retail, commercial, administrative, entertainment, community and cultural facilities, into a compact area.	<p>Centres are traditionally the focus for a range of retail-related land uses, often to the exclusion of other complementary land uses. The scheme seeks to encourage a wide range of land uses into centres, in order to increase the efficiency of trips to centres for the majority of shoppers. It is important, however, that increasing the diversity of land uses and services on offer does not threaten the viability of the centre as a whole.</p> <p>To achieve this outcome, it will be necessary to consider innovations that do not restrict or diminish the available retail space in centres. The upper floors of centres, for example, are often under utilised and capable of use for a range of commercial, residential or community uses.</p>
(ii) Centres are easily accessible by a range of public transport modes.	The need to ensure easy access by a range of transport options to centres is a key factor in helping to maintain the attractiveness of centres and consequently their long term viability. Maximum use should be made of rail and public transport terminals wherever possible, thereby reducing the need for private vehicle trips to centres. Consideration should be given to the concentration of residential densities in areas that support or promote the viable provision of public transport to centres.
(iii) Pedestrian movements are given high priority in the design and layout of Centres.	Centres should encourage pedestrian activity by a range of measures. Elements of the scheme define solutions to facilitate pedestrian-friendly environments in centres, including traffic calming measures, the creation of shade, the provision of public art, adequate crime prevention, and cycle facilities.

	Centres are to a great extent dependent on the volume of pedestrian traffic that can be attracted to them, the creation of a comfortable and convenient environment that encourages this is favoured.
(b) Diversity	
(i) Centres provide the focus for a diverse range of activities.	To be sustainable, a strong retail function must be retained in commercial centres. However, centres have an important role for the provision of a range of other complementary land uses including for service and community purposes, and civic spaces. Ancillary or complementary centre land uses should not serve to weaken the retail function of centres, but enhance it. This may mean the co-location of compatible land uses in centres, providing complementary land uses in areas which do not have a prime retailer appeal. This outcome should not be regarded as providing sufficient justification for allowing non-retail uses in centres that are inconsistent with their retail function. In disputed instances, it will be necessary to demonstrate how the centre's vitality and viability will be enhanced by the proposal.
(ii) The diversity of land uses in Centres maximises the potential for multi-purpose trips.	Commercial centres play a key role in the aim of reducing the number of vehicle trip hours generated in the Shire. "Vehicle trip hours" are the total amount of time spent travelling between destinations by public or private vehicles. One means to achieve this is to ensure that centres host the widest range of land uses possible, whilst still retaining the essential retail function of centres. This allows for the combining of several distinct trips in to a single journey to the centre, wherever possible. Under this outcome, proposals which demonstrate benefits in terms of a reduction in overall trip hours, will be favourably considered, consistent with achieving other outcomes in this scheme.
(c) Efficiency	
(i) Opportunities for multiple use and sharing of facilities between land uses in centres is maximised.	Centre development should promote the more efficient provision and sharing of required services and facilities, wherever practicable. In some cases, the scheme may set out how the costs of providing certain facilities is to be borne between operators, in other cases it will be a matter for individual consideration. However, the principle that centres should provide a wide range of facilities and services, and that these should be efficiently provided, underpins this outcome.
(d) Location	
(i) Commercial development locations support and strengthen the commercial hierarchy of the Shire.	The Shire's commercial hierarchy is fully described in other extrinsic documentation accompanying this scheme. The aim of this outcome is to ensure that development that is inconsistent with the hierarchy is carefully controlled, in the interests of the overall viability and vitality of the Shire's centres.
(e) Quality	
(i) The architectural design of Centres promotes a positive image of the Shire.	Commercial centres are often important landmark features in the built environment. Poorly designed centres would be likely to present an image that is inconsistent with a vision of a modern, progressive shire offering a wide range of quality shopping environments. It is an important aim, therefore, that centres should project the highest possible visual standards, both for aesthetic amenity, and to promote economic investment and vitality in the shire.

Strategy 2.5 Industry	
Supporting Outcome	Interpretation
(a) Location	
(i) Industrial development occurs in locations unlikely to be sterilised by other uses.	Industrial areas need to operate in places that have as few constraints as possible. While industries must not adversely impact upon other areas, the converse is also important in that other land uses must not prevent industries from establishing in locations designated for such purposes.
(ii) Industrial development locations support and	The aim of this outcome is to ensure that development is consistent with the hierarchy and network established for the Shire. Out of centre development impacts upon the economic viability of existing

strengthen the industrial hierarchy of the Shire.	industrial areas thereby undermining long standing commitments of infrastructure and resources to the areas.
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Strategy 2.6 Tourism	
Supporting Outcome	Interpretation
(a) Diversity	
(i) The unique characteristics of the rural, urban and coastal areas for specialised and sustainable tourism opportunities are recognised.	<p>The Shire varies considerably in the range of tourism opportunities it presents. Some areas are more sensitive than others to development, whether for scenic amenity, cultural heritage, infrastructure provision or other reasons. The purpose of this outcome is to note that encouraging a diversity of tourism facilities is important in terms of maximising the positive benefits of tourism for the Shire, however this should not be at the expense of the important qualities of the Shire that attract tourists here in the first place.</p> <p>It should be assumed that tourist development that may be considered appropriate for the built up areas of the Shire will not necessarily be suitable in the rural or coastal areas. It should further be noted that sustainable tourism developments, particularly in sensitive locations, often display an awareness of, and close relationship to, their environment. This interaction, and sensitivity to the environment, often termed eco-tourism, forms a key part of the appeal to visitors and is to be encouraged in the Shire.</p>
(b) Quality	
(ii) Tourism development respects and promotes the qualities which attract visitors to the Shire in the first place.	The Shire's high visual appeal and other attractions represent a substantial economic asset which must be carefully and sustainably managed. Tourism development should respect the qualities that attract tourists to the Shire, and employ design standards that are consistent with maintaining the future viability of the resource. This requirement is in addition to the need to achieve other outcomes in the scheme including nature conservation and scenic amenity conservation.
(ii) Eco-tourism opportunities are encouraged, having regard to the need to achieve other outcomes in this scheme.	<p>Eco-tourism refers to the careful integration of development and the environment. In assessing development on sensitive sites, favourable consideration will be given to those proposals that are demonstrably innovative and sensitive to the attractions and features of the sites on which the development occurs, and the surroundings.</p> <p>It should be noted that the need to achieve other outcomes in the scheme, such as nature and scenic amenity conservation, may mean that tourism development in the most sensitive locations will rarely be acceptable, regardless of the design sensitivity employed.</p>
(c) Quantity	
(i) The number of tourism bed spaces offered within the Shire is increased.	<p>The tourism industry represents a key economic resource for the Shire, which should be developed. The Shire possesses a wide range of exceptional natural, cultural, scenic and recreational environments that will continue to attract visitors to the Shire, and it is important that this demand is both recognised and carefully managed.</p> <p>While some areas of the Shire should be protected from inappropriate development, there are many areas that can be sensitively developed. It is envisaged that the bulk of new tourist accommodation will be located in existing urban areas, particularly in the areas zoned for denser residential development. However, some appropriate growth is envisaged outside these areas, in a diversity of locations across the Shire.</p>
(ii) The development of major tourist facilities and attractions is encouraged, having regard to the need to achieve other outcomes in this scheme.	Major tourist facilities often involve a range of significant land use impacts and requirements. They frequently require large areas of land, involve significant levels of noise and activity, and may often constitute a significant visual impact on their surroundings. In addition, major tourists facilities often require significant infrastructure investment, including accessibility to excellent communications, energy, water and disposal facilities in order to be viable. In many areas, this combination would be incompatible with the predominantly rural character of the Shire. However, where these issues are not considered to be prejudiced by development, the positive contribution that such facilities represent for the Shire's tourism economy should be recognised and encouraged.

	It is considered that areas with good accessibility to the Bruce Highway are most likely to be beneficially regarded in relation to this outcome, although each case will be considered on its individual merits.
(d) Viability	
(i) The economic value to tourism of scenic and environmental areas is recognised, protected, maintained or improved.	The Shire's exceptional scenic values constitute one of its most significant economic assets. This asset is essential to the ongoing sustainability of tourism in the Shire, and should be protected for its own sake. Development which has the potential to involve a significant negative impact on scenic amenity should be assessed against the need to ensure the availability of the resource to both existing tourism operators in the Shire, and to future generations. The economic benefits arising from a single development are unlikely to be sufficient to offset the economic benefits of the local tourism economy as a whole.
(ii) The viability of existing tourist attractions in the Shire is protected, maintained or improved, having regard to the need to achieve other outcomes in this scheme.	The Shire's exceptional scenic values constitute one of its most significant economic assets. This asset is essential to the ongoing sustainability of tourism in the Shire, and should be protected for its own sake. Development which has the potential to involve a significant negative impact on scenic amenity should be assessed against the need to ensure the availability of the resource to both existing tourism operators in the Shire, and to future generations. The economic benefits arising from a single development are unlikely to be sufficient to offset the economic benefits of the local tourism economy as a whole.

Strategy 2.7 Rural	
Supporting Outcome	Interpretation
(a) Accessibility	
(i) Existing and known future haulage routes are recognised, protected, maintained or improved.	<p>Haulage routes are an important means towards ensuring the viability of the primary resources sector of the Shire, extractive resources in particular. Development which physically encroaches upon haulage routes should be resisted on the grounds that this may affect the ability of the resource to be transported off-site, or cause the use of other, less suitable routes to do so.</p> <p>To achieve this outcome, consideration should also be given to ensuring that new development which does not physically encroach on the route, but which might affect it, is carefully managed. For example, residential amenities are often significantly affected by haulage routes, unless mitigative measures are possible. In those cases where a new residential development is proposed in an area likely to be affected by an existing or known future haulage route, the need for the new residential development should be carefully balanced against the likely economic impacts on the land uses reliant on the haulage route.</p>
(b) Amenity	
(i) The potential impacts of primary industries, including but not limited to resource extraction, treatment, transport and disposal, on the amenities of other land uses are recognised and all development incorporates adequate acoustic, environmental and visual mitigation solutions.	The uses nominated in this outcome each have the potential to significantly impact on amenities. It is essential that, where such development is to occur, that it does so employing any such measures that are required to ameliorate amenity impacts to an acceptable and reasonable standard. In each circumstance, the standard will vary. It will therefore need to be carefully demonstrated in each case, how this is to be achieved.
(ii) Urban, or other incompatible uses do not restrict the operation of existing	The aim of this outcome is to ensure that new urban, particularly residential, development does not occur in locations where the efficient operation of existing or future known primary sector land uses, such as extractives, is affected.

or known future primary industries.	This may occur directly, where new development physically interferes with the normal operations of the land use, or indirectly. An example of the latter case would include an increase in the number of complaints received concerning an established primary industrial activity on land adjoining a recently developed residential area.
(c) Location	
(i) Locations representing Good Quality Agricultural Land (GQAL) are protected to preserve their economic value.	The need to ensure that the Shire's agriculturally productive lands are retained for this purpose is described in detail in other extrinsic material for the scheme. Development which either involves the loss of GQAL, or would amount to the destruction of GQAL quality to the extent that it would no longer be viable, will require careful management if this outcome is to be achieved.
(ii) Locations with existing or known economic value for primary production are protected, having regard to the need to achieve other outcomes in this scheme.	The scheme identifies and protects certain areas with a known value for primary production purposes. These resources are finite and for this reason, it is important to ensure that they remain available to current and future generations. Development which results in the diminution of such resources will need to be carefully considered and balanced against any benefits, if it is to proceed.
(d) Quality	
(i) Environmental impacts of primary industries are adequately managed, having regard to the need to achieve outcomes under Key Direction 1 of this scheme.	Primary industries are capable of inflicting significant damage on environmental values, unless carefully controlled and monitored. This outcome seeks to ensure that these uses do not affect the Shire's important natural resources. Key Direction 1 of the Sustainability Framework defines the outcomes and strategies for the natural environment, however, more detailed protection for the natural environment is set out in the planning scheme.
(ii) Land, the subject of previous primary extraction or production is adequately rehabilitated.	The working of land for primary industry is capable of leaving significant visual and environmental damage, the effects of which may be evident many years after operations have ceased. This outcome seeks to ensure that post-operational rehabilitation occurs in a way that minimises future impacts from the previous working of the land.
(e) Quantity	
(i) The use of appropriate land for sustainable tree plantations is encouraged, having regard to the need to achieve other outcomes in this scheme, including: - nature conservation; - preservation of urban amenities or visual amenities; and - the preservation of Good Quality Agricultural Land.	Favourable consideration will be given to proposals that result in a significant net increase in the area of the Shire under sustainable forestry use. In particular, proposals that are demonstrated to have a beneficial effect on the reduction of atmospheric Carbon Dioxide or soil salinity. The need to achieve this outcome will be balanced against the need to achieve other scheme outcomes.

Strategy 2.8 Open Space Recreation	
Supporting Outcome	Interpretation
(a) Accessibility	
(i) There is a linked system of multi-purpose trails throughout the Shire.	The purpose of this outcome is to seek to build, through the development approvals process, an integrated and comprehensive network of recreational and leisure trails throughout the Shire. Development proposals which conflict with a strategy for the provision of such trails, routes or other thoroughfares adopted by Council will be resisted on the grounds that the proposal is unlikely to achieve

	this outcome.
(b) Amenity	
<p>(i) The amenities of open space areas are protected and maximised by, wherever possible:</p> <ul style="list-style-type: none"> - locating new open space areas away from existing or known future conflicting land uses; - locating new development which would conflict with open space amenities away from existing or known future open space; - maximising the opportunity to integrate and co-locate open space and other compatible land uses, for example recreational and community resources. 	<p>The purpose of this outcome is to seek to ensure that open space areas are places where high standards of amenity exist and are protected. This is achieved by carefully locating new open space areas in places that are not subject to poor amenity conditions, or by protecting existing areas from insensitive development.</p> <p>Public open space is an important community resource, with many associated personal, social, community and health benefits. The protection of open space assets should be carefully considered in the assessment of development proposals.</p>
(c) Diversity	
<p>(i) The provision of public open space maintains, as a minimum, the existing diversity of open space settings and park hierarchy.</p>	<p>There is a wide diversity of public open space in the shire, whether measured quantitatively or qualitatively. This diversity serves the needs of the Shire well, and a hierarchy of open space, ranging from the regional-level to local pocket park level exists.</p> <p>The purpose of this outcome is to ensure that development decisions promote the continued diversity of open space in the shire. This diversity may be expressed in the adoption, by Council, of a strategy for open space. This will provide greater certainty in the interpretation of this outcome of the particular outcomes sought. However, in the absence of any such strategy, the aim is to ensure that the current open space hierarchy and diversity is maintained.</p>
(d) Efficiency	
<p>(i) Public open space maximises opportunities:</p> <ul style="list-style-type: none"> - to be multi-functional; - to protect cultural, recreational, ecological and aesthetic values. 	<p>This outcome seeks to ensure that new and existing open space is designed to be flexible, useful, easy to maintain and suitable for use by the widest possible range of persons normally expected to benefit from it.</p> <p>Open space should continue to be sensitive to any characteristic features or values associated with the land or its setting, including any identified cultural, ecological or aesthetic values. Land, or other areas, which exhibit such characteristics that are considered worthy of protection may be regarded as potentially suitable for designation as public open space.</p>
(e) Quantity	
<p>(i) The provision of public open space maintains, as a minimum, the existing quantity of open space.</p>	<p>The purpose of this outcome is to maintain or increase the quantity of public open space per person provided in the shire. Council may define a standard which shall apply. In the meantime, the existing standard, or a reasonable estimation of it (which shall be required to be supported by appropriate information) shall apply.</p>
<p>(ii) Private open space and recreation facilities are encouraged, having regard to the need to achieve other outcomes in this scheme.</p>	<p>Private open space, such as golf courses, leisure, recreation and other facilities, are a valuable resource both economically and in terms of individual and social well-being. Improved facilities in the Shire are desirable. However, where a private open space proposal is under consideration, the benefits of additional private open space will need to be balanced against any impacts, economic, social, environmental or otherwise.</p>

Strategy 2.9 Infrastructure	
Supporting Outcome	Interpretation
(a) Accessibility	
(i) Land uses have easy access to the infrastructure they require.	<p>This outcome seeks to favour development in locations where required infrastructure is or can be made easily accessible. Conversely, if a land use proposal results in the need for the provision of infrastructure by agents outside the developer's control, and the costs or practicalities of doing so are prohibitive or unreasonable, then the sustainability of the proposed development is to be questioned.</p> <p>In reaching a decision on the development, regard will be made to the desirability on economic, social and environmental grounds of the development.</p>
(b) Amenity	
(i) The provision of infrastructure enhances the economic amenities of land uses.	<p>Where possible, decisions on infrastructure should increase the economic amenity of as wide a range of land uses as possible. As a minimum, development consisting of or including infrastructure provision that impinges or reduces the ability of land uses to operate efficiently should be carefully assessed in terms of its overall desirability.</p> <p>In other cases, consideration should be given in all cases where significant investment in infrastructure is to occur, to whether the maximum benefits are being achieved in terms of improved economic efficiency for all land uses that are affected by the infrastructure provision.</p>
(ii) Development decisions do not compromise the provision of essential infrastructure, having regard to the need to achieve other outcomes in this scheme.	<p>The purpose of this outcome is to ensure that significant existing or future known infrastructure items are protected from insensitive development that might impede their viability.</p> <p>Where a significant infrastructure item (or items) has been approved or is otherwise envisaged under this scheme, the assumption may be made that the item is regarded as satisfying the environmental, social and economic outcomes balance sought in the scheme. Such infrastructure, therefore, is a necessary part of the Shire's development pattern. The benefits arising from new development that would be likely to prejudice the availability or operation of such infrastructure would need to be carefully balanced against the wider benefits that accrue to the Shire's land uses and population through the infrastructure item or items affected.</p> <p>What constitutes "significant" infrastructure must be assessed on an individual basis.</p>
(c) Diversity	
(i) The infrastructure needs of the Shire are met in a wide variety of ecologically sustainable ways.	<p>Sustainability implies recognition that the infrastructure solutions appropriate on one site or location may be inappropriate for others. The scheme should encourage diversity in the solutions, subject to the need to ensure that all infrastructure is provided in a manner that satisfies the environmental, social and economic outcome requirements of the scheme.</p> <p>This outcome recognises, for example, that the satisfactory treatment and disposal of a range of waste products, or the production of energy and distribution of energy, is often possible by a range of acceptable means. Infrastructure diversity, reducing the Shire's reliance on any one means of achieving these and other ends, is welcomed.</p> <p>This outcome favours and encourages "alternative" energy production, including solar, wind or hydro-generated energy, where it is appropriate having regard to the other outcomes in the scheme.</p>
(d) Efficiency	
(i) New Infrastructure is designed and operated for maximum efficiency.	<p>Development should be carefully assessed to ensure that new infrastructure items are efficiently designed and operated, due to the need to limit the need for infrastructure items in the Shire overall. Infrastructure items are often expensive and land-intensive, involving significant community concerns, and careful planning within the overall land use system. By ensuring the prudent design and operation of new infrastructure, the need for additional infrastructure items elsewhere may be lessened.</p>

(ii) Existing Infrastructure is operated at maximum efficiency.	Development relating to the operation of existing infrastructure should be carefully assessed to ensure that the infrastructure item continues to be efficiently designed and operated, due to the need to limit the need for infrastructure items in the Shire overall. Infrastructure items are often expensive and land-intensive, involving significant community concerns, and careful planning within the overall land use system. By ensuring the prudent design and operation of existing infrastructure, so that the best use and longevity of the facility is maintained, the need for additional infrastructure items elsewhere may be lessened.
(iii) All infrastructure is shared wherever possible.	The costs and impacts of new infrastructure are frequently significant. Telecommunications masts, for example, which are a current necessity for communication may frequently involve high amenity, environmental and social impacts. The sharing of such facilities should be seen as sensible in general, and a way in which to limit the impacts associated with several, separate facilities. This approach need not be limited to telecommunications facilities, but is applicable in any scenario where facility sharing is a reasonable condition of approval.
(iv) The costs of providing infrastructure are shared equitably.	<p>New development should not be approved in locations or situations where the cost of providing required infrastructure is inequitably apportioned, or an unreasonable burden is placed on a third party as a result. This may occur, for example, where development on a parcel of land will be likely to result in the need for an adjoining land owner to upgrade or improve their land as a result of the adjoining development.</p> <p>For the avoidance of doubt, this outcome is intended as a guiding principle for matters that are not addressed in an infrastructure charges schedule or other "user pays" policy associated with the scheme and is generally reserved for instances where the costs or burdens involved are significant.</p>
(v) Required infrastructure is provided in an orderly, sequenced, logical and timely manner.	Development decisions should, as a means towards efficient and cost effective infrastructure provision, favour infrastructure proposals which occur in a sequential and timely manner. Proposals that do not meet an agreed need, or which generate a need for other infrastructure or land uses to be provided prematurely, are not favoured.
(e) Location	
(i) The location of new infrastructure consolidates land use patterns and does not increase pressures for development in unsustainable locations.	<p>The location of key infrastructure plays an important role in shaping the land uses of surrounding and affected areas. Locating a new road, for example, may increase the demand for residential or other development that benefits from a road, in close proximity to it. Insensitively siting useful infrastructure items can therefore result in significant land use conflicts that could otherwise be avoided.</p> <p>The zoning maps in the scheme are the best indication of the preferred, sustainable development pattern for the Shire, and gives an indication of the types of infrastructure envisaged for each area. The scheme's residential zones, for example, indicate not only the extent of an area considered suitable for residential development, but also for any of the infrastructure required to support residential and associated, envisaged, land uses. The zone maps have been designed with the aim of achieving a sustainable land use pattern in the Shire. Infrastructure decisions which would be likely to significantly depart from these designations should be generally resisted.</p>
(f) Quality	
(i) All infrastructure is designed to have the minimum impact on important aesthetic, natural and social values and associated outcomes in this scheme.	<p>Other outcomes in this scheme aim to ensure that development is ecologically sustainable. That is, on balance, the development is necessary and reasonable having regard to the need to ensure the achievement of key environmental, social or economic outcomes for the Shire. Infrastructure proposals in particular may involve significant impacts.</p> <p>The purpose of this outcome is to ensure a qualitative assessment of infrastructure proposals to ensure that where a proposal involves an impact on an acknowledged value, that the impact is the minimum reasonably possible or practicably capable of being achieved.</p> <p>In other words, the approval of an infrastructure item in principle</p>

	does not obviate the need to take into account the need to ensure that the detailed implementation of the project represents the minimum possible impacts, in ecological sustainability terms.
(ii) All infrastructure is designed to be effective and adequate for its intended purpose, having regard to the need to achieve other outcomes in this scheme.	<p>Notwithstanding the need to reduce and ameliorate the impacts of infrastructure items, all infrastructure proposals should be assessed on the grounds that they are designed for maximum capability, and that if approved, maximum output and efficiency is desirable if the total number of infrastructure items in the Shire is to be minimised.</p> <p>Whilst each case will be different, the overall advantages of approving an infrastructure item at a reduced capacity in order to ameliorate the environmental, social or economic constraints of a location need to be carefully considered. Such a decision could, for example, result in demand for additional infrastructure which could have been avoided by the provision of a single infrastructure item in the correct location, operating at maximum capacity and efficiency.</p>
(g) Quantity	
(i) Shortfalls in the provision of required infrastructure are avoided.	The approval process for new infrastructure, or the enhancement of existing infrastructure, should take into account the need to avoid shortfalls in the provision of required infrastructure in the Shire. For example, if a development has economic, social or economic impacts associated with it, this outcome may be considered as a beneficial factor that should be balanced against these impacts. It is not, however, sufficient justification to dismiss these impacts, particularly where reasonable alternatives may exist.
(h) Safety	
(i) All infrastructure is safe and convenient.	<p>Many infrastructure items such as roads, telecommunication facilities and other structures are designed at a large scale. The safety of elements of the natural, social and economic systems is therefore a primary consideration in decisions to approve infrastructure projects, as it is with all forms of development.</p> <p>Associated with the need to ensure high safety standards, is the need to ensure that infrastructure items designed for public usage, for example railway stations and interchanges, are designed for high levels of convenience and usability. This includes ensuring that crime prevention is adequately addressed.</p>
(i) Viability	
(i) Development decisions do not threaten the economic viability of providing essential infrastructure.	<p>Development proposals which would or could make the provision of future required infrastructure economically unviable should be discouraged, unless sufficient justification exists.</p> <p>For example, some large scale infrastructure items involve significant noise and activity levels that would be detrimental to residential amenities. A decision to allow new residential development within an exclusion area for an envisaged infrastructure item, for example a rail terminal, could inflate the cost of providing the terminal significantly. The additional sound attenuation measures, for example, required as a result of the decision to allow nearby residential development, might render the terminal too expensive to proceed.</p> <p>Where infrastructure items are important and provide benefits to the Shire, care should be taken to ensure that the costs of providing such infrastructure are not increased by careless or insensitive development decisions.</p>
(ii) Development decisions do not prejudice the provision of essential infrastructure.	<p>Development which by reason of its siting or operation makes the future provision of required infrastructure projects unviable, should be resisted, unless sufficient justification exists. Development that intrudes upon an area required in association with key infrastructure should be discouraged if this will result in the viability of the infrastructure being compromised.</p> <p>For example, the approval of development that would result in the need to divert the proposed communications, power or drainage lines should be carefully considered against the likely impacts on these essential services.</p>

5.5 Interpretation of the Social/Wellbeing System – Principal Outcomes, Strategies and Supporting Outcomes

Key Direction 3 – Social/Well-Being System considers those aspects of development which contribute towards people's feeling of well-being. Because development proposals often have a social dimension, Key Direction 3 does not occupy a particular spatial area. Its provisions will be relevant wherever a development proposal is considered to have a positive or negative impact on the well-being of people.

Elements which contribute to people's well-being are described within this Key Direction. However, this Key Direction recognises the strong links that exist with the other Key Directions which describe other elements that are essential to ensuring the well-being of Shire residents.

Key Direction 3 is comprised of 8 Principal Outcomes, Strategies based on four themes and 43 Supporting Outcomes described as follows.

5.5(a) Principal Outcomes

Principal Outcomes represent key characteristics of the Key Direction which the Ecological Sustainability Framework seeks to protect. The following 8 Principal Outcomes have been identified for Key Direction 3.

Principal Outcome	Interpretation
Principal Outcome 1 Accessibility Human accessibility to community resources is maximised.	<p>Accessibility in the context of the Social/Well-Being system refers to ensuring that people can access what they need. People have a need for access to elements of each of the 3 systems described in the framework, eg.</p> <p>a) Natural System – ensuring people have opportunities to enjoy natural areas without damaging them. For example, visiting areas of high scenic value, to enjoy a walk in the countryside, to visit clean beaches, or to observe wildlife.</p> <p>b) Economic System – ensuring that land uses are located in proximity to residential areas, easily accessible by a range of transport modes.</p> <p>c) Social/Well-Being System – incorporating everything from ensuring that required services and facilities are located in areas appropriate to need, to ensuring that matters such as mobility are taken into account in matters of building design.</p> <p>Development forms which are regarded as likely to be inaccessible whether in locational, design or other ways would be unlikely to advance this Principal Outcome. In some circumstances, however, preventing maximum human accessibility could be reasonably justified and therefore supported. For example in relation to the need to conserve areas of environmental sensitivity. However it is likely that such justification would be demonstrated by the strong advancement of, in this example, the qualitative or diversity Principal Outcomes under Key Direction 1 – Natural System.</p>
Principal Outcome 2 Amenity Human amenities are protected, maintained or improved.	<p>In the context of people's well-being, "amenity" refers to the people's ability to enjoy a quality of life unaffected by the impacts associated with some forms of development, for example, noise, activity disturbance, obnoxious smells and the like.</p> <p>It also encapsulates to a degree the amenity characteristic of the natural system (described in KD1), in the sense that one aspect of people's well-being is the availability of high scenic amenity. In this sense, this relationship illustrates a feature of the workings of the scheme. Proposals which are damaging to the amenity of one system may be noted as likely to be similarly damaging to a characteristic of another system for the same reason.</p>

Principal Outcome	Interpretation
Principal Outcome 3 Diversity The Shire's diverse community is recognised and fostered.	<p>Recognition of the cultural diversity of Shire residents will play an important part in achieving this Principal Outcome. Whilst the scheme will remain only one part of a broader strategy to ensure that the individual needs of people and communities are met, the scheme will seek to ensure that development decisions do not threaten key cultural resources that people value as part of their cultural identity.</p> <p>These include important buildings or places, or key values such as the sense of identity of a place. An example of the latter would be ensuring that adequate scenic buffers are maintained around towns to ensure their perception of individuality is maintained.</p>
Principal Outcome 4 Efficiency Land use decisions maximise people's opportunities for a higher standard of living.	<p>This characteristic is similar to the characteristic of "efficiency" under the other systems. It recognises that development should, on the whole, represent or not compromise what might be considered the gradual advancement in the standard of living in the Shire.</p> <p>The scheme defines this concept in terms of ensuring that development proposals do not impede people's opportunities to enjoy better standards of employment, health, education, leisure and the like. This could mean that competing development proposals for a particular site may be assessed as to their likely potential positive impact on the quality of people's lives.</p> <p>As an example, in an area of low educational achievement, a proposal to establish a new learning facility might be considered to represent an opportunity to improve people's opportunity to access better employment, improved wages, and improved housing. These benefits might outweigh the competing (and possibly short-term) benefits of utilising the same site for a retail showroom.</p>
Principal Outcome 5 Quality Community resources are appropriate to people's needs.	<p>People require access to a wide range of resources to promote their well-being. "Resources" include, but are not limited to, community facilities, services, places or work, recreation, relaxation and community activity. Required resources can be drawn from any of the Natural, Economic or Social/Well-Being systems.</p> <p>This Principal Outcome seeks to ensure that the quality of resources that people have available to them is as high as can be achieved. Proposals which provide a poor quality of a required resource would be resisted. Development proposals should be of a standard that adequately, or appropriately meets the needs of the community they serve. This includes ensuring that a wide range of people's needs are recognised in the design and planning phases, ensuring that buildings or facilities are appropriately designed for use by all.</p>
Principal Outcome 6 Quantity Community resources are sufficient to meet people's needs.	<p>This Principal Outcome seeks to ensure that sufficient resources are provided to meet people's needs. Other Principal Outcomes seek to ensure they are of a high quality and accessibility. "Resources" include, but are not limited to, community facilities, services, places or work, recreation, relaxation and community activity. Required resources can be drawn from any of the Natural, Economic or Social/Well-Being systems.</p> <p>Development applications will in some circumstances, be required to contribute towards the cost of providing key facilities and services, where the development creates the need for them.</p>
Principal Outcome 7 Safety Risks to human health and safety are minimised.	<p>The purpose of this Principal Outcome is to ensure that the risks and actual incidences of threats to the safety of people are minimised. Development which is likely to represent a safety threat will be strongly resisted.</p> <p>Other Principal Outcomes deal with the reduction of risk to the environment and to property. In a sense, these Principal Outcomes have a beneficial effect on the achievement of a safe environment for humans. Complementary Principal Outcomes to achieve this outcome include those which limit hazards from the natural system (including bush fires, flooding, slippage and so on) and those which seek to reduce the risk and fear of crime in development.</p>

Principal Outcome	Interpretation
	This Principal Outcome encapsulates a range of matters including building design, traffic safety, crime prevention and so on, and specific measures will be implemented to advance it.
Principal Outcome 8 Viability Development does not compromise the viability of communities, cultures or of people's way of life.	<p>The ways our lives are different outnumber the ways they are the same. Where we live, what we value, what language we speak can vary considerably across the Shire and are important to us all in different ways. Whilst many aspects of our lifestyles are largely outside the scope of the planning scheme to influence, some aspects of "lifestyle" have a land use dimension. Many residents in the smaller settlements highly cherish their rural way of life, enjoying relatively low traffic flows, traditional building styles, low density development for example. Others may value particular cultural resources or ways of living. Development which meets the needs of indigenous groups may be different, for example, from the mainstream development forms we are used to seeing.</p> <p>The purpose of this Principal Outcome is to recognise that cultural diversity is achieved only by seeking to ensure that the ways of life, values, languages and so on associated with it need to be individually viable. As an example, ensuring the viability of the Shire's indigenous culture means protecting not just the past, but the future.</p> <p>This Principal Outcome could assist in the protection of the low-key rural lifestyle associated with the Shire's small towns by resisting inappropriate road or infrastructure decisions, large scale retail or housing proposals which threaten it. On the other hand, it is conceivable that this Principal Outcome might be utilised to help justify proposals that breathe new life into small towns facing population decline, or a loss of services.</p> <p>Additionally, it is conceivable that some forms of development, for example a cultural heritage interpretation centre might be seen as advancing the purpose of this Principal Outcome because of its positive impact on maintaining the viability of the language, or culture of one sector of the Shire's diverse community.</p> <p>This Principal Outcome is related to, but distinct from, the need to ensure that the Shire's diverse community is recognised and fostered. Assisting each constituent element of the Shire's cultural diversity to continue to function, to grow and develop, where the Scheme has an influence on such matters, is a means towards a truly diverse Shire.</p>

5.5(b) Strategies

Key Direction 3 contains four strategies, based on the themes presented in Section 4. These provide a direction for how the supporting outcomes at the next level are to be achieved. The four strategies for Key Direction 3 are:

Strategy	Interpretation
Strategy 3.1 Generally – Maximising the benefits of development to enhance people's lives.	This broad strategy ensures that development as a whole considers the community wellbeing system as much as it does the economic system.
Strategy 3.2 Facilities and Services – Maintaining, enhancing and developing the wellbeing of people and communities.	Ensuring that people have available, access to a wide range of facilities and services that support their own personal needs.

Strategy 3.3 Public Places – Providing integrated networks of pleasant and safe public areas for aesthetic enjoyment and cultural, recreational or social interaction.	The provision of areas and places that are accessible to the public in a number of different locations and forms is vital for the long term viability of people's wellbeing.
Strategy 3.4 Cultural Heritage – Ensuring areas and places of special aesthetic, architectural, cultural, historic, scientific, social or spiritual significance are conserved or enhanced.	Recognising that our cultural heritage is an important component of our society. Areas of significance fosters community spirit and can complement natural and economic systems initiatives.

5.5(c) Supporting Outcomes

Principal Outcomes are broad statements that apply to each of the themes in the Key Direction. Under some themes, the Ecologically Sustainable Framework identifies specific Supporting Outcomes which provide additional meaning for the Principal Outcome in relation to that theme. A Supporting Outcome is a statement of a particular end-state, or outcome, that the Ecological Sustainability Framework aims to achieve for a theme. An absence of a supporting outcome for a particular strategy means that the Principal Outcome by itself is considered to satisfactorily address that characteristic of the theme.

Strategy 3.1 General	
Supporting Outcome	Interpretation
(a) Accessibility	
(i) People's accessibility, in spatial terms, to elements of all the natural, economic and social/well-being systems is: - maximised, having regard to the need to achieve other outcomes in this scheme; - equitable and fair; - facilitated by a consolidated and transport efficient land use pattern; - achieved by a diversity of transport options.	Individual and social well-being includes being able to access what is needed relatively easily. While the scheme does not, and cannot, regulate people's accessibility to everything they need for the protection of their well-being, it seeks to ensure that those matters over which it may have some influence are acknowledged and appropriately managed. This may be achieved in part by ensuring that development which makes any kind of contribution to individual or social well-being is located in such a way that it is accessible to those who would benefit from it. Alternatively, that development which constitutes a means towards improved accessibility, for example transport, is carefully managed so as to improve accessibility.
(ii) Accessibility, in a general sense, to key community resources, such as housing, commercial and other services, recreation and leisure opportunities is maximised, having regard to the need to achieve other outcomes in this scheme.	Accessibility to required resources has a spatial dimension, referring to the physical ease of travelling to and accessing a resource, but it also refers to the availability of resources in the first instance. The right resources should be available to the Shire's population, when they need them. These include appropriate housing, commercial (including employment), recreation and leisure opportunities, consistent with lifestyle expectations in the Shire.

<p>(iii) Barriers to mobility throughout the Shire are minimised.</p>	<p>This is a broad outcome, capable of wide ranging interpretation. The purpose is to ensure that avoidable barriers to people's easy accessibility to the community resources they require, whether natural, economic or social in nature, are minimised. It recognises that barriers may take a number of physical or non-physical forms.</p> <p>Some areas of the Shire that are envisaged for public use are difficult to access and use. Commonly used facilities and resources may be located in peripheral, rather than central locations, may be poorly designed with mobility in mind, may be difficult to reach by public or other transport means. In part, this is a legacy of previous land use decisions that may not have recognised the link between high mobility, accessibility and sustainability. The purpose of this outcome is to seek to identify the barriers that may reduce the accessibility of public resources or places in the Shire, and to minimise their effects. Examples of physical barriers to mobility are impermeable or user-unfriendly public spaces, streetscapes that lack legibility, urban design that discourages access. Other examples may include insensitive design and specification that discourages use by persons with special access needs.</p>
<p>(b) Amenity</p> <p>(i) Human amenities are recognised, protected, maintained or improved in development decisions.</p>	<p>In this scheme, the need to promote a more dense and integrated land use pattern for the Shire is promoted. It is important to acknowledge that locating a variety of land uses in closer proximity brings with it the potential for land use conflicts, and in particular, the erosion of human amenities. Therefore it is a requirement of this scheme that the preservation and enhancement of amenity is a key consideration and three forms of amenity are referenced: natural amenities (the conditions necessary to promote the well-being of the natural environment), economic amenities (the conditions necessary to maintain and enhance the operation of the Shire's diverse economy) and human amenities. This outcome seeks to ensure the preservation of adequate human amenities, also referred to as "residential amenities".</p> <p>Some land uses and development has the capacity to impact significantly on people's quality of life. A full definition of residential amenity would encompass all aspects of maintaining personal or social well-being, but is most often at issue in land use planning in the consideration of matters relating to noise, activity, general disturbance, visual amenities, privacy, overshadowing and other similar matters.</p> <p>Development which has a significant impact on human amenities, which cannot be adequately mitigated by condition or amendment, would not normally be approved, without justification.</p>
<p>(ii) The following are achieved:</p> <ul style="list-style-type: none"> - noise, odour and activity levels affecting residential areas are minimised and at acceptable levels; - the impacts of existing harmful uses on residential amenities are lessened wherever possible; - residential development does not occur in locations where human amenities are unlikely to be capable of being provided. 	<p>This outcome contains a number of sub elements, each related to the need to minimise impacts on human amenities.</p> <p>The use of the term "minimised" is used to mean that impacts are at the lowest level that can be achieved for this form of development. It will then be necessary to make a judgement as to whether that level of impact is acceptable, having regard to other outcomes in the scheme that seek to ensure adequate amenities.</p>
<p>(iii) Natural values, and a predominantly rural Shire character, are protected, maintained and</p>	<p>A significant contribution to human well-being is provided by maintaining a predominantly natural and rural character in the Shire, in both the natural and built environments.</p> <p>Consistent with outcomes expressed in this scheme concerning the</p>

enhanced.	<p>densification of some of the urban areas of the Shire, is the aim that those areas may still appear as "green" and consistent with Caboolture Shire's semi-rural character. This may be achieved by emphasising the landscaping requirements for development, paying attention to entry statements and important vistas, or by choosing design strategies that foster a less urban appearance for development wherever possible.</p> <p>This outcome is founded on the notion that a predominantly urban landscape, streetscape and built environment consisting of non-organic or non-living material, such as concrete and brick, makes less of a contribution to human amenities than natural, living urban elements such as trees and lawns. The use of these elements is to be fostered wherever practicable and desirable to do so, in order to reduce the visual impacts of the Shire's projected densification.</p>
(iv) Urban design standards are high, promoting an attractive urban form Shire-wide.	<p>A high quality of design in the built environment makes a contribution to individual and social well-being that is acknowledged in this scheme. Whilst some elements of good design may be regarded as subjective, it is important that obviously poor or insensitive design is controlled in the interests of maintaining visual amenities in the Shire.</p> <p>Design that exhibits maximum usability, safety, a reduction in crime, flexibility and so on is also encouraged because of its contribution to general human amenities.</p>
(v) High scenic values Shire-wide are maintained.	<p>The Shire's setting provides a wealth of scenic amenity accessible from most areas of the Shire, within, out of and into, the Shire's built up areas.</p> <p>Whilst many of the scenic values of the Shire are predominantly rural, which includes the coastal elements, there are also many urban scenes that are valued by the Shire's population. Information on many of these may be found in the extrinsic documentation accompanying the scheme.</p>
(c) Diversity	
(i) The diversity of the Shire's community is represented by diversity in: <ul style="list-style-type: none"> - where people live and work; - people's lifestyles; - people's diverse cultural traditions, practices and backgrounds. 	<p>Caboolture Shire should continue to offer a diversity of options for working and living. Homogenous design, where suburbs are virtually indistinguishable from each other by reason of layout or design, for example, are generally to be avoided where possible.</p> <p>The need to maintain and enhance the diversity of living and working environments, however, should not be regarded as sufficient justification in its own right, to outweigh the need to achieve other outcomes in this scheme, including the protection of environmental and scenic values and the promotion of a consolidated land use pattern.</p> <p>The relationship between planning and the lifestyle and cultural traditions of communities is most commonly expressed in the way that land is used. For example, the amount of land allocated in the scheme for rural residential as opposed to urban residential uses, indirectly affects the lifestyle choices available to existing or future Shire residents. Similarly, decisions that concern appropriate residential design can either accept and promote diverse cultural backgrounds, or actively mitigate against them. There is a balance that must be maintained between ensuring a coherent vernacular design for the Shire, and accepting variety and difference in cases where it is merited.</p>
(ii) The Shire possesses a diversity of communities which are identifiable, distinct and cohesive.	<p>Shire residents value the characteristic differences between the various settlements in the Shire. Discrete differences in the physical form, architecture, setting and social make-up contribute to the widely held perception that no two towns or localities are alike in the Shire. This diversity also adds to the appeal of the Shire for new residents, and contributes to the diversity of lifestyle choices that can be found in the Shire's coastal, urban and rural areas.</p>
(d) Liveability	
(i) Development decisions protect, maintain or improve	<p>Development and land use decisions have a role to play in fostering people's sense of being part of a nurturing and supportive community. At the least, it may involve setting aside usable and safe public areas,</p>

people's sense of being part of a community which is attractive and safe.	<p>where community gathering is possible and desirable. However, it also extends into fostering a mix and form of land uses that creates, supports and maintains satisfied communities. Fostering community engagement is a key step towards sustainable individual and social well-being.</p> <p>Attractive and safe communities are those in which there is general satisfaction among residents with the built form and where crime is not considered a concern or problem. One of the ways in which this subjective aspect may be measured and assessed reasonably independently is by means of community surveys.</p>
(ii) Public transport options are available and convenient, consistent with the Infrastructure strategy.	<p>Good public transport, that is effective, convenient and affordable plays a significant role in creating and maintaining a sustainable Shire. The infrastructure strategy ("Providing a range of suitable infrastructure to meet the Shire's needs") sets out a sustainable approach to infrastructure provision in the Shire, including public transport. However, the purpose of this outcome is to emphasise the significant role that public transport, which maximises personal mobility, can make to the Shire's liveability.</p> <p>Where a development is proposed, consideration should be given as to the effect on liveability of any public transport impacts or potential benefits from the development. Negative impacts should be justified, and positive benefits should be regarded favourably in the assessment, subject to the need to achieve other outcomes in the scheme.</p>
(iii) Community resources are designed to be dual or multi functional wherever possible, having regard to the need to achieve other outcomes in this scheme.	<p>Community resources, of whatever description, should be designed for the widest range of community uses, and as a minimum, approved without obvious limitations in their use. The Shire's population is diverse, needs and uses are therefore widely varied, and the cost of providing community resources is often significant. It is important, therefore, to make new community resources capable of being used for the widest range of possible community uses, wherever it is possible and practicable to do so.</p> <p>This outcome would encourage, for example, use of partitions to make larger spaces that are suitable for community performances and meetings easily dividable by partitions or other means to be suitable for small-scale groups, workshops, seminars and so on. Or, open space that is set aside for sporting purposes, should be easily capable of accommodating non-sporting uses as required, and in particular, accommodating the needs of different cultural groups and traditions wherever possible.</p>
(iv) Innovative development is fostered in the Shire, having regard to the need to achieve other outcomes in this scheme.	<p>The Shire's image as an innovative and progressive place to live and work is encouraged by a number of provisions in the scheme. The creativity that leads to new and better development solutions in the Shire should continue to be promoted, where they promote a more sustainable approach to development. The economic benefits that accrue from innovation are often emphasised, however, it is also relevant to acknowledge the role innovation can play in achieving higher standards of living and other general improvements in individual and social well-being.</p> <p>The purpose of this outcome, therefore, is to counter the assumption that an ecologically sustainable Shire is a regressive environment that does not favour new or creative approaches to development. On the contrary, if development proposals satisfy the ecological sustainability tests outlined in the scheme and in other relevant standards, they present an alternative to more traditional solutions that may have contributed to a less sustainable Shire in the past.</p>
(e) Quality	
(i) The quality of community resources provided recognises the needs of the widest possible range of Shire residents.	Community resources should be designed not only for multifunctional purposes but also with the needs of the general community, in all its diversity, in mind.
(ii) The Shire's natural and climatic values	This outcome acknowledges the benefits to individual and social well-being of the exceptional climatic and natural conditions that exist in

underpin the quality of the Shire's lifestyle.	the Shire. Development in the Shire, in the varied forms it will take, should allow the positive aspects of the Shire's climate and environment to be enjoyed by the residing and visiting public. This can include the design component of new buildings and facilities, whereby a vernacular architecture exists that is permeable to, and promotes the enjoyment of, outdoor areas. There may be other ways to achieve this outcome, ensuring that the benefits of the Shire's climatic and natural values are available to residents and visitors.
(f) Quantity	
(i) Despite the growth of the Shire, people are provided with a level of community resource provision which adequately meets their needs.	In high growth areas, such as Caboolture Shire, service and facility provision may lag behind the community's demand for those resources. Other elements of the scheme may provide for a means to fund and deliver community resources of various types, however, where development does not adequately cater for the provision of essential community resources, consideration should be given to the desirability of the development.
(ii) The provision of community resources is coordinated with the provision of resources at all levels of government.	Development decisions should complement, and not conflict with, other levels of government both to the extent necessary by regulation, statute or policy, and where this is not the case, to the extent possible and practicable. Community resources are often significant expenditure items. To gain the best and most appropriate facilities and services, it is important that land use decision-making maximises the benefits of community infrastructure and minimises conflicts, thereby increasing the amount of resources existing within, and available to, the Shire.
(g) Safety	
(i) The following are recognised, protected, maintained or improved: · human health; · the fear and incidence of crime; · human safety.	Health and safety are basic components of individual and social well-being. The need to safeguard the health and safety of individuals and communities is therefore a fundamental requirement in the approval of development proposals. Development that poses a high level of risk that this outcome will not be achieved is unlikely to be justified.
(h) Viability	
(i) Individual communities, cultures and lifestyles within the Shire are recognised, valued and promoted wherever possible.	The Shire's diversity of communities, cultures and lifestyles should be reflected in the land use decision making process. This may mean that a development proposal that celebrates or fosters cultural diversity or awareness, or which involves significant community benefits, might receive favourable consideration as part of achieving this outcome. However, due regard should also be given to the need to achieve other outcomes in this scheme.
(ii) Communities are vibrant and viable.	A vibrant, active and viable community can make a significant contribution towards individual and social well-being. The connection between land use and community building is most commonly expressed by the availability of community resources, and the general requirements communities have for employment, housing, leisure opportunities and other key land uses. Land use decisions, therefore, should acknowledge the potential impacts and benefits that might apply concerning development proposals and community building. Development proposals that may negatively impact on the formation of vibrant, active and viable communities should be carefully evaluated, particularly in relation to any benefits that might apply that outweigh these impacts.
(iii) Development recognises, protects and promotes those aspects of living in South East Queensland, and the Shire in particular, which are unique and special, including its climate, lifestyle,	Residents and visitors to the Shire value its distinctiveness. The Shire is different to its neighbouring Shire's, even if it may be difficult to quickly summarise those differences. The purpose of this outcome is to identify the preservation and enhancement of the ambient qualities of the Shire as an important component of a sustainable approach to its future development. In consultation, Shire residents are reluctant to experience an extension of urban sprawl emanating from Brisbane City, for example. Often characterised by large, homogenous suburban housing estate

architecture; and culture.	<p>developments, sprawl gives people the impression that they could be anywhere. It mitigates against the formation of individual and diverse communities and does little to distinguish the Shire from the northern suburbs of Brisbane City.</p> <p>This outcome recognises that vernacular architecture, a rural or semi-rural lifestyle and character and other characteristics that are identifiably part of Caboolture's character play a part in maintaining people's enjoyment of living and/or working in the Shire, and that these matters should therefore be safeguarded.</p>
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Strategy 3.2 Facilities and Services	
Supporting Outcome	Interpretation
(a) Accessibility	
(i) People's accessibility to required facilities and services is maximised.	<p>Traditionally, land use planning has not emphasised the need for highly accessible community facilities and services in the Shire. Key resources may often be located in inaccessible or inconvenient locations. Resources of this kind are significant trip generators and often the only means of making the trip is by private vehicle. For those that lack private transport, the result may be difficulty in accessing the facilities and services they require. In other cases, the result may be an unwelcome contribution to the number of required private vehicle trips conducted in the Shire.</p> <p>Solutions for more accessible facilities and services are many and varied. They include favouring central rather than peripheral locations, favouring locations that are close to the more densely populated areas, incorporating available space in shopping centres, finding creative mixed use options, exploring under-utilised upper floor space and so on.</p>
(ii) Facilities and services are located and integrated with residential areas wherever possible.	<p>Integrating required facilities and services within residential areas wherever possible and practicable is not only more convenient for residents, but is likely to reduce the number and duration of private vehicle trips required within the Shire.</p> <p>Amenity considerations are a priority in residential areas, the need to protect the living conditions of communities should be respected, however there is often scope to co-locate key facilities and services within these areas, and these should be explored wherever possible.</p>
(iii) Facilities and services are located in commercial centres wherever possible.	<p>Commercial centres are significant trip generators in the Shire. The most convenient place to access facilities and services other than within walking distance of residential centres, is often one of the Shire's commercial centres. Whilst the key land uses in centres must remain commercial, there is often scope to include a wide range of community facilities and services within them. Doing so can also add to the viability of centres by encouraging multi-purpose trips.</p>
(b) Amenity	
(i) Facilities and services are provided in a way that reflects the amenity of each location.	<p>As each locality in the Shire has its own character and features, it follows that the provision of facilities and services should also be provided having regard to the particular circumstance of individual areas. Analysing and understanding the age structure of the population is one useful way to understand what the appropriate services might be.</p>
(c) Liveability	
(i) Facilities and services are identified and provided in a timely manner at a community cost which is equitable and economically viable.	<p>The availability of affordable and useable facilities and services can make an important contribution to the well-being of individuals and communities. Land use decisions should, where possible, facilitate their provision. As a minimum, care should be taken to ensure that the provision of desirable facilities and services is not compromised by land use decisions.</p>
(d) Quantity	
(i) Development which provides facilities and services which address	<p>Development which represents the provision of facilities or services, for which a community need has been identified and demonstrated, should be favourably regarded. This outcome recognises that such</p>

an identified need are supported, having regard to the need to achieve other outcomes in this Scheme.	development may, or may not, satisfy the other outcomes in the scheme. The community well-being benefits of the development will need to be carefully balanced against the potential impacts on the other outcomes.
(ii) Shortfalls in the provision of required facilities & services are avoided.	<p>Adequate facilities and services are an important contribution towards individual and community well-being. Many areas of the Shire have, from public consultation responses, rated a lack of community resources as a significant issue that need to be addressed through the planning scheme. Outlying communities and fast growing communities (those where the provision of services has not kept pace with rapid development) rate this problem as a particular concern.</p> <p>In the worst cases, a lack of community resources can make a negative contribution to crime, health and general community satisfaction. For sustained community well-being, therefore, there is a real benefit from ensuring they are well serviced.</p> <p>The definition of facilities and services is intentionally drawn widely, and is not specifically defined in this scheme. This is to reflect the fact that the diversity of the Shire's communities must be taken into account in planning decisions, and that each communities have a need for a wide range of facilities and services. It may be necessary to demonstrate, therefore, how a facility or service is relevant in the context of this outcome.</p>
(e) Viability	
(i) The viability of existing facilities and services is protected.	<p>Planning decisions can sometimes make a significant contribution to the viability of existing facilities and services. Protecting existing resources is one way to minimise the need for additional resources to be supplied, and is therefore to be encouraged. Examples of facilities and resources that may be protected are existing neighbourhood centres, which may be enhanced by careful densification of nearby residential areas, subject to the achievement of other outcomes in the scheme. Sensitive land use decisions can also, for example, protect public transport routes, which in turn may contribute to the patronage of neighbourhood centres and other community resources.</p> <p>The range of facilities and services that may be subject to this outcome is wide ranging and purposefully undefined. This reflects the diversity of the Shire's community, and their needs.</p>

Strategy 3.3 Public Places	
Supporting Outcome	Interpretation
(a) Accessibility	
(i) People's accessibility to public places, such as town centres, public parks and gathering spaces is maximised.	<p>Public spaces, whether green space or civic spaces such as town centres, streets or outdoors gathering places, are an important community resource and they should be highly accessible to the general community. This outcome acknowledges the positive role that access to public areas with good amenity can play in individual and social well-being. Whilst remote publicly accessible open space is important, often for its nature conservation value, the value of accessible, often centralised, amenity space is also acknowledged in this scheme.</p> <p>Council may, in association with this scheme, produce a strategy for the provision of open space. The need to ensure accessibility is likely to be a facet of that strategy, and decisions consistent with that strategy are therefore often likely to advance this outcome. However, as indicated above, the scope of this outcome extends beyond the provision of accessible green space, but includes public space in a general sense.</p>
(b) Amenity	
(i) Public places are attractive, comfortable and convenient places that: - reflect the distinctiveness and	Public places should promote high amenity standards, and where possible, reflect the distinctive and positive aspects of the Shire.

<p>individuality of the area;</p> <ul style="list-style-type: none"> - promotes a strong sense of place; - demonstrates high standards of architectural and civic design. 	
<p>(ii) Public places provide adequate shade and shelter.</p>	<p>Protection from the elements should be considered for proposals involving or affecting public places. The threats that can arise to human health and safety through the action of natural elements are real, occasionally unpredictable and potentially serious. This outcome is rarely likely to be justifiably set aside.</p>
<p>(iii) Public places contribute to the appearance of the Shire as a predominantly rural place with a low key lifestyle.</p>	<p>The Shire's streetscapes, civic areas and public parks play a key role in presenting a pleasant image of the Shire to residents and visitors alike. Consideration should be given in the assessment of development proposals, as to whether or not a positive image is being presented by any public space associated with, or affected by, the development. Where possible, the maximum benefits are achieved.</p>
<p>(c) Diversity</p>	
<p>(i) The individual character of towns, localities and cultures within the Shire is recognised, protected, maintained or improved.</p>	<p>The character of the Shire's urbanised or built-up places is frequently expressed by the quality of the public spaces within them, including main streets, public open space, and civic areas. This distinction between places is important, and valued by Shire residents and visitors. Implementing this outcome may involve protecting the separation between areas and/or the protection of important character elements. While other outcomes in the scheme may be similarly expressed, and based on amenity or cultural heritage arguments, this outcome recognises the value of place character for individual and social well-being.</p> <p>The aim is to avoid a homogenous Shire, where built areas blend into each other without noticeable transition. The Shire's diversity of settings and places, together with its range of cultures and lifestyles, is fostered through this outcome. For example, the western area of the Shire is characterised by agricultural-based, rural scale towns that contrast with the urbanised character of Caboolture and Morayfield or the coastal belt. The coastal area is itself represented on the one hand by urban coastal development at Sandstone Point or Deception Bay, and on the other hand by small-scale villages like Donnybrook and Toorbul. People's way of life, and in particular their expectations for future development, represent a cultural component that should be taken into account in planning decisions. More detailed preferred character and lifestyle aspirations is, in many cases, included in the locality planning content of the planning scheme.</p>
<p>(d) Quality</p>	
<p>(i) Public spaces are distinctive, legible and well-designed, useable, and safe.</p>	<p>Public spaces, as important community resources, should incorporate high standards of design that promote their usefulness and attractiveness. The term "public space" covers any public domain, including park areas, streetscapes, civic areas.</p> <p>The aim is to promote individual and social well-being by recognising the benefits that accrue from attractive and useable public areas and, by appropriate means, to encourage maximum attention to the design of such areas.</p> <p>There are many examples of existing public domain in the Shire that either lack interest, are unattractive, or even unsafe. Many of these areas could, with an emphasis on better quality design, be of greater benefit to Shire residents and visitors.</p>
<p>(ii) Public spaces promote community interaction.</p>	<p>Community interaction plays a major role in community building, which itself is a contributor to individual and social well-being. Public spaces that can be utilised for this purpose are therefore an important community resource that should be promoted.</p>

<p>(e) Quantity</p> <p>(i) Sufficient public spaces are provided to meet the Shire's diverse needs.</p>	<p>This is a quantitative outcome, designed to ensure that an appropriate level of provision of public space is provided to meet the needs of communities. A desirable quantitative standard of provision is not stated in this outcome. It is therefore a matter for discretionary interpretation how much open space is required. Whilst more detailed provisions in the scheme may set out a standard, it is generally anticipated under this outcome that proposals which are demonstrably inadequate in their provision of public space should be discouraged.</p> <p>For the purposes of this outcome, public space is not limited to public open space, but includes other relevant public domain areas that are relevant and appropriate in the context of the particular development.</p>
<p>(f) Safety</p> <p>(i) The Shire's Public places are safe and crime free, including but not limited to parks, civic spaces, centres, roads, bikeways and footpaths.</p>	<p>The safety of the Shire's public domain is a key outcome that would not normally be compromised, without justification.</p>

Strategy 3.4 Cultural Heritage	
Supporting Outcome	Interpretation
<p>(a) Accessibility</p> <p>(i) Places of cultural significance are accessible, having regard to the need to preserve the values and integrity of those places.</p>	<p>This outcome recognises that accessibility and the protection of cultural assets may, in some cases, be inconsistent with each other. This outcome, therefore, promotes the enjoyment and appreciation of significant cultural assets, to the extent necessary and consistent with their protection and enhancement.</p>
<p>(b) Diversity</p> <p>(i) Development decisions respect the wide spectrum of different cultural values, artefacts and places existing in the Shire.</p>	<p>Cultural heritage items are found within the Shire that reflect its diverse settlement history, including aborigine and post-European items. The Shire is also a multi-cultural place and items of cultural value and significance that are drawn from this diversity are also valued.</p>
<p>(c) Quality</p> <p>(i) The special qualities of places of cultural significance are recognised, protected, maintained or improved.</p>	<p>This outcome seeks to safeguard items of cultural significance within the Shire, for their own sake. Whilst other outcomes in the scheme refer to the desirability of protecting the number of such items, this outcome concerns the maintenance or enhancement of the item's inherent qualities.</p> <p>The desirability of development which is likely to erode or damage an item of significant cultural value, which includes items that are of historic interest, should be carefully considered.</p>
<p>(d) Quantity</p> <p>(i) The number of places of cultural significance are recognised, protected, maintained or improved so that their number is not diminished.</p>	<p>The purpose of this outcome is to ensure that the number of items of cultural interest (which includes items of historic significance) in the Shire is not reduced as a consequence of development decisions. Whilst the loss of some items may on occasion be unavoidable, it is intended that this will occur as a result of an approval under the scheme only in exceptional circumstances, and with justification.</p>

Historic Version
Caboolture ShirePlan

Section 6 - Assessment of the Ecological Sustainability Framework

Introduction

Assessment against the ES Principles

**Community Consultation for the draft
Ecological Sustainability Framework
2002**

6.1 Introduction

The purpose of this section is to undertake an evaluation of the ecological sustainability framework (ESF) that has been developed in Section 5. As with the preparation of any strategy in accordance with legislation, it is appropriate to assess how well the end product accords with, in this case, the provisions of the IPA and the associated scheme making guidelines.

For this, an assessment of the ESF is made against the ecological sustainability principles outlined in section 2. This will give the best indication of how well the ESF has addressed the core matters, integrated local, regional and state dimensions of the core matters, and most importantly responded to the sustainability issues that must thread through the strategy preparation and implementation stages of a planning scheme. It should be noted that the assessments is only against the ESF and not the entire planning scheme.

During March and April 2002, Council embarked on an extensive round of community and State Agency consultation for the planning scheme. The main purpose of the consultation was to test the provisions of a draft ecological sustainability framework. The process undertaken and the outcomes from the consultation are discussed further in Section 6.3. While some changes were made to the draft ESF following the consultation, on the whole, the draft framework was widely endorsed by those who participated in the target groups and public workshops. The consultation results provide an excellent indication of the community's acceptance of the higher order provisions of the planning scheme.

6.2 Assessment against the ES Principles

6.2(a) Protection of ecological processes and natural systems

ES Principles	Advancement through the Ecological Sustainability Framework
ES 1 Air Quality Air quality is minimised, both overall and in terms of the human population affected.	Key Direction 1 <ul style="list-style-type: none"> Principal Outcome 1 Amenity Principal Outcome 5 Quality Strategy 1.3 Supporting Outcome 1.1(d) Quality Supporting Outcomes 1.3(a) Location, 1.3(b) Quality. Key Direction 2 <ul style="list-style-type: none"> Principal Outcome 2 Amenity Principal Outcome 6 Quality Strategy 2.1 Supporting Outcome 2.1 (b) Amenity Supporting Outcome 2.3 (d) Quality Supporting Outcome 2.7 (b) Amenity. Key Direction 3 <ul style="list-style-type: none"> Principal Outcome 2 Amenity Strategy 3.1 Supporting Outcome 3.1 (b) Amenity.
ES 2 Nature Conservation Areas having high value in terms of ecology or biodiversity at local, regional or State levels are conserved, enhanced or restored as much as practicable.	Key Direction 1 <ul style="list-style-type: none"> Principal Outcome 1 Amenity Principal Outcome 2 Diversity Principal Outcome 3 Location Principal Outcome 4 Mobility Principal Outcome 5 Quality Principal Outcome 6 Quantity

ES Principles	Advancement through the Ecological Sustainability Framework
	<ul style="list-style-type: none"> Principal Outcome 7 Safety Principal Outcome 8 Viability Strategy 1.1, 1.5 Supporting Outcomes 1.1 (a) Amenity, (b) Location, (c) Mobility, (d) Quality, (e) Quantity, (f) Safety, (g) Viability Supporting Outcomes 1.5 (a) Diversity, (b) Location, (c) Quality, (d) Quantity, (e) Viability. <p>Key Direction 2</p> <ul style="list-style-type: none"> Supporting Outcome 2.6 (a) Diversity. <p>Key Direction 3</p> <ul style="list-style-type: none"> Principal Outcome 1 Accessibility Principal Outcome 6 Quantity Strategy 3.1 Supporting Outcomes 3.1(a) Accessibility, (b) Amenity.
ES 3 Land Maintenance Land degradation is minimised.	<p>Key Direction 1</p> <ul style="list-style-type: none"> Principal Outcome 2 Diversity Principal Outcome 5 Quality Strategy 1.2 Supporting Outcomes 1.1(d) Quality, (e) Quantity Supporting Outcomes 1.2 (a) Diversity, (b) Quality, (c) Safety.
ES 4 Water Quality Water pollution is minimised, both overall and in terms of the human population affected.	<p>Key Direction 1</p> <ul style="list-style-type: none"> Principal Outcome 2 Diversity Principal Outcome 5 Quality Principal Outcome 6 Quantity Strategy 1.4 Supporting Outcomes 1.4 (a) Amenity, (b) Diversity, (c) Location, (d) Mobility, (e) Quality, (f) Quantity, (g) Safety.

6.2(b) Economic Development

ES Principles	Advancement through the Ecological Sustainability Framework
ES 5 Economic Activity Economic activity within the local area, the region and State, now and in the long term, is encouraged and facilitated.	<p>Key Direction 2</p> <ul style="list-style-type: none"> Principal Outcome 1 Accessibility Principal Outcome 2 Amenity Principal Outcome 3 Diversity Principal Outcome 4 Efficiency Principal Outcome 5 Location Principal Outcome 6 Quality Principal Outcome 7 Quantity Principal Outcome 8 Safety Principal Outcome 9 Viability Strategy 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8, 2.9 Supporting Outcomes 2.1(a) Accessibility, (b) Amenity, (c) Diversity, (d) Efficiency, (e) Location, (f) Quality, (g) Quantity, (h) Safety, (i) Viability Supporting Outcomes 2.3(a) Accessibility, (b) Diversity, (c) Location, (d) Quality Supporting Outcomes 2.4(a) Accessibility, (b) Diversity, (c) Efficiency, (d) Location Supporting Outcome 2.5(a) Location Supporting Outcome 2.6(d) Viability

ES Principles	Advancement through the Ecological Sustainability Framework
	<ul style="list-style-type: none"> • <i>Supporting Outcome 2.7(c) Location</i> • <i>Supporting Outcome 2.8(d) Efficiency</i> • <i>Supporting Outcomes 2.9(a) Accessibility; (d) Efficiency; (e) Location; (f) Quality; (g) Quantity; (i) Viability.</i>
ES 6 Resource Availability Economically useful extractive and mineral resources, good quality agricultural land, forestry resources, fisheries and sources of non-renewable energy are available for ongoing use as far as practicable.	<p>Key Direction 1</p> <ul style="list-style-type: none"> • <i>Principal Outcome 2 Diversity</i> • <i>Principal Outcome 6 Quantity</i> • <i>Strategy 1.1</i> • <i>Supporting Outcome 1.1(e) Quantity.</i> <p>Key Direction 2</p> <ul style="list-style-type: none"> • <i>Supporting Outcome 2.1(g) Quantity</i> • <i>Supporting Outcome 2.3(d) Quality</i> • <i>Supporting Outcomes 2.7(a) Accessibility, (b) Amenity, (c) Location, (d) Quality, (e) Quantity.</i>
ES 7 Energy Efficiency Energy is used as efficiently as practicable and the use of non-renewable energy resources is minimised.	<p>Key Direction 1</p> <ul style="list-style-type: none"> • <i>Principal Outcome 6</i> • <i>Supporting Outcome 1.1(e) Quality.</i> <p>Key Direction 2</p> <ul style="list-style-type: none"> • <i>Principal Outcome 6</i> • <i>Strategy 2.1, 2.3</i> • <i>Supporting Outcomes 2.1(a) Accessibility, (d) Efficiency, (f) Quality,</i> • <i>Supporting Outcome 2.3(d) Quality.</i>
ES 8 Resource Usage The use of local water and biological resources is consistent with sustainable yields, and the use of biological resources and extractive and mineral resources generally, is minimised.	<p>Key Direction 1</p> <ul style="list-style-type: none"> • <i>Principal Outcome 6</i> • <i>Strategy 1.1, 1.4</i> • <i>Supporting Outcome 1.1(e) Quantity</i> • <i>Supporting Outcomes 1.4(c) Location, (e) Quality, (f) Quantity.</i> <p>Key Direction 2</p> <ul style="list-style-type: none"> • <i>Principal Outcome 4</i> • <i>Strategy 2.7</i> • <i>Supporting Outcome 2.1(d) Efficiency, (g) Quantity</i> • <i>Supporting Outcomes 2.7(b) Amenity, (c) Location, (d) Quality, (e) Quantity.</i> <p>Key Direction 3</p> <ul style="list-style-type: none"> • <i>Supporting Outcome 3.4(d) Quantity.</i>
ES 9 Affordability Standards for the built environment are affordable and cost effective.	<p>Key Direction 2</p> <ul style="list-style-type: none"> • <i>Principal Outcome 4</i> • <i>Strategy 2.1, 2.2</i> • <i>Supporting Outcomes 2.1(d) Efficiency, (g) Quantity</i> • <i>Supporting Outcomes 2.2(a) Diversity, (b) Location</i> • <i>Supporting Outcome 2.3(c) Location</i> • <i>Supporting Outcomes 2.4(a) Accessibility, (c) Efficiency</i> • <i>Supporting Outcomes 2.9(a) Accessibility, (d) Efficiency.</i>

6.2(c) Maintenance of Community Wellbeing

ES Principles	Advancement through the Ecological Sustainability Framework
ES 10 Community Needs All members of a community have appropriate access to services that meet their needs.	Key Direction 3 <ul style="list-style-type: none"> Principal Outcome 1 Accessibility Principal Outcome 5 Quality Strategy 3.1, 3.2 Supporting Outcomes 3.1(a) Accessibility, (f) Quantity Supporting Outcomes 3.2(a) Accessibility, (b) Amenity, (c) Liveability, (d) Quantity Supporting Outcomes 3.3(a) Accessibility, (e) Quantity Supporting Outcome 3.4(a) Accessibility.
ES 11 Infrastructure Efficiency The use of existing and committed infrastructure is maximised and future infrastructure is provided efficiently.	Key Direction 2 <ul style="list-style-type: none"> Principal Outcome 4 Efficiency Strategy 2.1, 2.9 Supporting Outcomes 2.9(a) Accessibility, (b) Amenity, (c) Diversity, (d) Efficiency, (e) Location, (f) Quality, (g) Quantity, (h) Safety, (i) Viability. Key Direction 3 <ul style="list-style-type: none"> Principal Outcome 4 Efficiency Strategy 3.2 Supporting Outcomes 3.1(d) Liveability, (f) Quantity Supporting Outcome 3.2(f) Viability.
ES 12 Public Safety Threats to public safety and health associated with the natural and built environments, including climatic, physical, biological, chemical, structural, traffic and fire hazards, are minimised.	Key Direction 1 <ul style="list-style-type: none"> Principal Outcome 7 Safety Strategy 1.1 Supporting Outcome 1.1(f) Safety Supporting Outcome 1.2(c) Safety Supporting Outcome 1.4(g) Safety. Key Direction 2 <ul style="list-style-type: none"> Principal Outcome 8 Safety Strategy 2.1 Supporting Outcome 2.1(h) Safety Supporting Outcome 2.9(h) Safety. Key Direction 3 <ul style="list-style-type: none"> Principal Outcome 7 Safety Supporting Outcomes 3.1(a) Accessibility, (b) Amenity, (d) Liveability, (g) Safety Supporting Outcome 3.2(b) Amenity Supporting Outcomes 3.3(b) Amenity, (d) Quality, (f) Safety.
ES 13 Heritage Conservation Areas and places of special aesthetic, architectural, cultural, historic, scientific, social or spiritual significance are conserved or enhanced as much as practicable.	Key Direction 3 <ul style="list-style-type: none"> Principal Outcome 1 Accessibility Principal Outcome 3 Diversity Principal Outcome 8 Viability Strategy 3.4 Supporting Outcomes 3.4(a) Accessibility, (b) Diversity, (c) Quality, (d) Quantity.
ES 14 Public Spaces Integrated networks of pleasant and safe public	Key Direction 2 <ul style="list-style-type: none"> Principal Outcome 6 Quality

ES Principles	Advancement through the Ecological Sustainability Framework
<p>areas for aesthetic enjoyment and cultural, recreational and social interaction are provided.</p>	<ul style="list-style-type: none"> • <i>Principal Outcome 7 Quantity</i> • <i>Principal Outcome 9 Viability</i> • <i>Strategy 2.8</i> • <i>Supporting Outcome 2.4(e) Quality</i> • <i>Supporting Outcomes 2.8(a) Accessibility, (b) Amenity, (c) Diversity, (d) Efficiency, (e) Quantity.</i> <p>Key Direction 3</p> <ul style="list-style-type: none"> • <i>Principal Outcome 5 Quality</i> • <i>Principal Outcome 6 Quantity</i> • <i>Principal Outcome 8 Viability</i> • <i>Strategy 3.3, 3.4</i> • <i>Supporting Outcome 3.2(f) Viability</i> • <i>Supporting Outcomes 3.3(a) Accessibility, (b) Amenity, (c) Diversity, (d) Quality, (e) Quantity, (f) Safety</i> • <i>Supporting Outcomes 3.4(a) Accessibility, (b) Diversity, (c) Quality, (d) Quantity.</i>
<p>ES 15 Amenity Amenity is maximised.</p>	<p>Key Direction 1</p> <ul style="list-style-type: none"> • <i>Principal Outcome 1 Amenity</i> • <i>Supporting Outcome 1.1(a) Amenity</i> • <i>Supporting Outcome 1.4(a) Amenity.</i> <p>Key Direction 2</p> <ul style="list-style-type: none"> • <i>Principal Outcome 2 Amenity</i> • <i>Strategy 2.1</i> • <i>Supporting Outcomes 2.1(b) Amenity, (f) Quality</i> • <i>Supporting Outcome 2.4(e) Quality</i> • <i>Supporting Outcomes 2.6(b) Quality, (c) Quantity</i> • <i>Supporting Outcome 2.7(b) Amenity</i> • <i>Supporting Outcome 2.8(b) Amenity</i> • <i>Supporting Outcome 2.9(b) Amenity.</i> <p>Key Direction 3</p> <ul style="list-style-type: none"> • <i>Principal Outcome 2 Amenity</i> • <i>Strategy 3.1</i> • <i>Supporting Outcomes 3.1(b) Amenity, (d) Liveability, (e) Quality, (g) Safety, (h) Viability</i> • <i>Supporting Outcomes 3.2(b) Amenity, (c) Liveability</i> • <i>Supporting Outcomes 3.3(b) Amenity, (d) Quality, (f) Safety.</i>
<p>ES 16 Community Harmony Community harmony and the sense of community are maximised.</p>	<p>Key Direction 1</p> <ul style="list-style-type: none"> • <i>Supporting Outcome 1.1(a) Amenity.</i> <p>Key Direction 2</p> <ul style="list-style-type: none"> • <i>Principal Outcome 9 Viability</i> • <i>Strategy 2.1</i> • <i>Supporting Outcomes 2.1(a) Amenity, (f) Quality</i> • <i>Supporting Outcomes 2.2(a) Diversity, (b) Location</i> • <i>Supporting Outcomes 2.4(a) Accessibility, (b) Diversity, (e) Quality</i> • <i>Supporting Outcomes 2.8(b) Amenity, (c) Diversity.</i> <p>Key Direction 3</p> <ul style="list-style-type: none"> • <i>Principal Outcome 2 Amenity</i> • <i>Principal Outcome 3 Diversity</i> • <i>Principal Outcome 4 Efficiency</i> • <i>Principal Outcome 5 Quality</i> • <i>Principal Outcome 8 Viability</i>

ES Principles	Advancement through the Ecological Sustainability Framework
	<ul style="list-style-type: none"> • <i>Strategy 3.1, 3.2, 3.3, 3.4</i> • <i>Supporting Outcomes 3.1(a) Accessibility, (c) Diversity, (d) Liveability, (e) Quality, (g) Safety, (h) Viability</i> • <i>Supporting Outcome 3.2(a) Accessibility</i> • <i>Supporting Outcomes 3.3(a) Accessibility, (b) Amenity, (c) Diversity, (d) Quality, (e) Quantity, (f) Safety</i> • <i>Supporting Outcome 3.4(c) Quality.</i>

6.3 Community Consultation for the draft Ecological Sustainability Framework 2002

During March and April 2002, Council undertook consultation with targeted groups, local communities and State Agencies with the purpose being to explore the draft Ecological Sustainability Framework. In all, eleven community based and stakeholder workshops were conducted across the Shire and more than 200 people were involved. Council engaged *Buckley Vann Town Planning Consultants* and *Mary Maher and Associates* to undertake the consultation program.

The consultation built on workshops held in 1999 and 2000 to accompany the Statement of Proposals stage of the scheme review. The Ecological Sustainability Framework was then prepared based on community input into the Statement of Proposals and the findings from a number of background studies and reports.

As a result of undertaking the consultation, the ESF was amended. The final version appears in Section 5 of this Volume 2. This changes ranged from minor amendments through to the addition of new strategies within the economic system.

The combination of workshops on each of the key directions and workshops in selected localities proved an effective way to engage the community on the most important matters relating to sustainability of the Shire. Workshop processes enabled:

- further information gathering for formulation of several key planning scheme components particularly the Shire's desired environmental outcomes and the supporting statements for these;
- information about the preferred character of the Shire's localities which will assist Council to formulate the local planning components of the planning scheme;
- a basic introduction to planning processes and the working parts of planning schemes for communities where important understandings of planning scheme operations are often difficult to obtain, except Council efforts to educate;
- demonstration of Council's commitment to hearing and reflecting the concerns, and the depth of those concerns, of the Shire's communities;
- a process of information gathering about regional, Shire-wide and local priorities for sustainability and identification of the synergies, tensions and potential trade-offs between these three sets of priorities for sustainability;
- identification of key planning scheme directions for resolving tensions and achieving the Shire's sustainability vision.

The workshops were undertaken in two phases. Phase One involved the seven workshops with targeted groups and agencies. The main issues discussed were:

Key Direction 1 Natural Systems

Discussion placed strong emphasis on:

- protecting the significant rural areas of the Shire and its rural character;
- managing human impacts such as the ones degrading water quality in streams and the Pumicestone Passage;
- better land management practices.

Key Direction 2 Economic System

Issues identified reflected a scenario of significant population growth in an environment where economic development has not kept pace. Discussion centred on:

- employment creation;
- the allocation of land for employment generating land uses;
- improved arrangements for the functioning of businesses;
- access to Shire resources;
- critical mass, co-location and distribution issues for businesses.

Concern was also raised regarding the long-term economic effects of the spread of residential and industrial developments and their impacts on the quality and appeal factors of life in the Shire. Several groups stressed the Shire's tourism potential and the need for economic planning to build a stronger based for its development.

Key Direction 3 Social/Wellbeing System

Discussion highlighted social values as well as social issues to be managed. Social values identified as requiring protection and enhancement were mainly those relating to cultural diversity and cultural significance, rural community and the rural or semi-rural lifestyle, and the health of the population and its socio-economic diversity. Challenges for protecting these values were linked to the shortfall in social services experienced in the Shire and the role played by employment levels and the range of employment opportunities.

Other issues discussed included:

- promoting community harmony through encouraging a diversity of socio-economic groups to locate in the Shire;
- provision of a range of housing choices;
- ensuring that the growth is accompanied by an appropriate number and range of community spaces for interaction and expression.

Phase Two involved undertaking public workshops at five localities across the Shire. It provided the basis for working with local people to identify the priorities specific to each of those different localities namely: urban, coastal, rural, emerging communities and urban fringe, and improving their chances for achieving greater sustainability. The workshop session also provided the opportunity for opportunities and shortfalls in these localities to be highlighted.

Outcomes from the consultation exercise provided an insight into what will be some of the major trade-offs and tensions that Council is confronted with in preparing a planning scheme and satisfying the purpose of the IPA and striving to achieve ecological sustainability. These issues related to:

- urban form/mobility – inherent impacts and inefficiencies in a dispersed settlement pattern and the need for urban and rural residential consolidation;
- lifestyle and character – preservation and enhancement of the identity, character and amenity of communities;
- employment and workplaces – employment strategies and public transport priorities;
- environment/ecology – managing the adverse impacts of development on the natural environment and water quality;
- services and facilities – addressing the constant catch-up of community services and facilities in new as well as emerging communities.

At each workshop, participants emphasised the importance of knowledge and information about the Shire's trends and conditions. They asserted the need to ensure further opportunities for the community to be consulted as an important part of the decision-making processes.

KEY POINT

Community consultation enables the draft ESF to be assessed by a range of stakeholders.

The feedback confirmed that the various components of the ESF contained the range of strategies that provided for ecologically sustainable development within the Shire and therefore, advance the purpose of the Integrated Planning Act.

Section 7 - **Implementation of the Ecologically Sustainable Framework for Sustainability**

Introduction

Operational and Structural Provisions of the Planning Scheme

7.1 Introduction

The purpose of this section is to outline how the provisions of the ecological sustainability framework will be implemented through the planning scheme. As comprehensive as the ESF is, there are only certain provisions of it that need to be included within the scheme itself. This section also provides an outline of the structure of the planning scheme. The delivery of the ESF needs to occur both in technical terms as well as having regard to structural and operational aspects of the scheme.

7.2 Operational and Structural Provisions of the Planning Scheme

7.2(a) Operational Aspects

In preparing and drafting planning schemes, major emphasis is placed on the achievement of outcomes as the best way to seek to achieve ecological sustainability and so therefore, comply with the purpose of the IPA. The *Scheme Making Guidelines* identify four levels of outcomes that are summarised as follows.

Level	Outcome
1	<p>Desired Environmental Outcomes</p> <p>The Vision, Key Strategies and Principal Outcomes from the ESF together underpin and form the DEOs that appear in the planning scheme.</p>
2	<p>Overall Outcomes</p> <p>The scheme making guidelines refer to overall outcomes as statements of desired outcomes that apply to the whole of a locality, zone or overlay, or are the purpose of a code under the IPA.</p> <p><i>Overall outcomes are developed using the principal outcome characteristics, the strategies, and the supporting outcomes from the ESF.</i></p> <p>For the ShirePlan, they are prepared for planning areas, overlays, and development codes. Zones are a subset of the planning area provisions hence they do not need overall outcomes but rather will use the overall outcomes for the particular planning area to guide the assessment of development.</p>
3	<p>Specific Outcomes</p> <p>The scheme making guidelines refer to specific outcomes as statements of desired outcomes that contribute to the achievement of overall outcomes and may relate to the use of land, the provision of infrastructure, or specified effects of use or development on aspects of the environment. Development that achieves the specific outcomes of a code complies with that code.</p> <p><i>Specific outcomes are developed using the principal outcome characteristics, the strategies, and the supporting outcomes from the ESF.</i></p> <p>As the level of detail is specific, these outcomes are a major component of the planning scheme and represent an important aspect for delivery of the ESF provisions.</p>
4	<p>Acceptable and Probable Solutions</p> <p>The scheme making guidelines refer to acceptable solutions as the criteria comprising a code that self-assessable development must comply with. They do not require the exercise of discretion to assess whether proposed development complies. Probable solutions on the other hand, are precise criteria or standards that provide a guide for achieving a specific outcome in whole or in part, but do not necessarily establish compliance with a code.</p>

7.2(b) Structural Aspects

The components of the planning scheme are outlined below. These follow the information provided in the *Scheme Making Guidelines* hence preparation of the scheme in the suggested format will ensure that both the ecological sustainability and operational principles will be achieved.

Strategic Framework

An overview of the ESF will appear in the scheme under the heading of the Strategic Framework. The intention of this section is to provide a summary of the relevant provisions developed in Stages 1 and 2 of the plan making process. This section is for information purposes only and is non-statutory.

Division of the Shire into three planning areas

A major theme of the community consultation during 2002 was the division of the shire into specific localities or communities that had a common interest. Residents from one area generally found that they have similar issues to those from a similar setting eg. an urban area, but situated in another part of the Shire. It emerged from the consultation that the Shire has three distinct areas which the growth management provisions can be based around. This has created three planning areas for the Shire: rural, urban and coastal areas.

Division of the shire into zones

Zones represent the conglomeration of allotments and areas with similar or like characteristics. Zones have been identified as the principal way of describing the major land uses in the Shire and are also the basis for determining the levels of assessment. Some zones are highly complex hence require a greater level of organisation. The zones covering the Caboolture Key Metropolitan Centre and the Narangba Industrial Estate will have precincts to allow for more detailed level of planning to be undertaken.

Provision of Overlays

Overlays operate in a similar manner to zones in that they represent an area that has a particular feature which is common to some or all parts of the Shire. Overlays identify features that must be protected from the impacts of development such as vegetated areas, acid sulfate soils, and waterways.

Purpose and Type Codes

Codes for specific aspects of development are to be devised in order to address the impacts and effects of that particular form of development. The type of development expected to be covered addresses uses, works, and the reconfiguration of a lot.

Interpretation

The planning scheme will comprise development and administrative definitions. These will be based on the use and works matters that are prevalent within the Shire hence it is appropriate to define the nature of these types of development.

Policies

Policies will be included to assist with the identification of specific aspects that an applicant has to address in submitting a development application with the Council. The purpose of providing this information is to be up front with the matters that are to be considered when Council is assessing applications for certain types of development.

KEY POINT

The ESF is prepared in accordance with the guidelines for preparation of a strategic framework. It is substantially robust both in terms of its technical contents and its structure.

The Caboolture ShirePlan will include the necessary provisions from the ESF that will contribute to the outcomes sought for the management of growth in the Shire. These outcomes will appear as DEOs, overlays, zones, definitions, use and works codes, and policies.

References

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APPENDIX 1

Key Directions 1, 2 and 3.

Historic Version
Caboolture ShirePlan



the natural system

The Shire's **natural**, **economic**, and **social** systems are sustainably balanced



KEY DIRECTION 1

Protecting, enhancing or restoring the life supporting capacities of air, ecosystems, soil and water for present and future generations.

AMENITY	DIVERSITY	LOCATION	MOBILITY	QUALITY	QUANTITY	SAFETY	VIABILITY
1 The character of natural, rural and coastal areas is protected	2 The diversity of the natural system is protected, maintained or improved	3 Development does not occur in environmentally sensitive areas	4 The mobility of natural elements throughout the natural system is protected, maintained or improved	5 The quality of natural resources is protected, maintained or improved	6 Consumption of natural resources does not exceed sustainable levels	7 Risks to and from the natural system are minimised	8 The viability of natural communities and processes is protected, maintained or improved



Strategy 1.1

GENERAL NATURE CONSERVATION - Managing our impact on the environment.

Disturbance, whether by noise, activity or other form of nuisance, to natural, rural and coastal places is minimised to acceptable levels.	Environmentally sensitive areas, are protected, maintained or improved.	The mobility needs of those elements of the natural system which require movement across the Shire and beyond are recognised, protected, maintained or improved.	The following are minimised: • the effects of pollution or other degradation on the quality of the natural environment. • the impacts of waste disposal on the quality of the natural environment.	Non-renewable natural resources, including biological, energy, extractive, land and water, are consumed at the minimum rate necessary to support the Shire's growth needs.	The following are minimised: • any risk involving, or having potential, negative impacts on the natural system • the risk and incidence of damage from pollution. • risks arising from the natural system. • risks associated with bush fires. • nuisance and hazards arising from pests.	The harmful effects of threatening process, including but not limited to clearing, weeds and pests are minimised or mitigated against.	Ecosystems processes are recognised, protected, maintained or improved.
Effective buffers between human and natural areas and elements are encouraged.	Connections and buffers between environmentally sensitive areas are recognised, protected, maintained or improved.	Corridors and connections which facilitate movement of flora and fauna by land, air or water are recognised, protected, maintained or improved.	Regeneration or revegetation of areas as a means to improving the quality of the natural environment is encouraged.	Renewable natural resources are prudently used.	To achieve these outcomes, the following are encouraged: • development which demonstrates efficient use of energy and required natural resources. • development which favours renewable options, including energy production, extraction and primary production. • development which favours recycling options. • development that has the potential to protect or restore natural resources.	Ecosystem resilience is recognised, protected, maintained or improved.	
Characteristic features, or areas of landscape or scenic amenity, are recognised, protected, maintained or improved.			"Edge effects" on sensitive or natural areas are minimised.				



Strategy 1.2

LAND - Recognising the Shire's land as a finite and fragile resource.

Strategy 1.1 also applies

The diversity of the Shire's soil and land is recognised, protected and maintained.	The quality of characteristic soil types in the Shire is recognised, protected, maintained or improved.	Development on steep or unstable land is carefully controlled.
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Strategy 1.3

AIR - Maintaining and improving air quality within the Shire.

Strategy 1.1 also applies

Key airsheds are recognised, protected, maintained or improved.	Air quality within the Shire conforms to an acceptable standard.
	Greenhouse gas emissions from within the Shire are reduced from those existing at the commencement of this scheme.
	Greenhouse or carbon sinks are identified, protected, maintained or improved.



Strategy 1.4

WATER - Maintaining and improving water quality within the Shire.

Strategy 1.1 also applies

The amenities of freshwater, estuarine and marine areas are recognised, protected, maintained or improved.	The Shire's stream order capacities are recognised, maintained and protected.	Sensitive catchment areas are recognised, protected, maintained or improved.	The following are minimised: • obstructions to natural water flows; • obstructions to the movement of important water-borne elements of the natural system.	The following are minimised: • adverse impacts of development on the integrity of catchment areas and receiving waters; • waste, sedimentation, urban runoff or contaminated run off effects in waterways; • nutrient contributions to waterways; • stormwater impacts on water quality.	Water extraction activities are managed so as to maintain environmental flows and natural processes. Natural flows are maintained.	Development in flood risk areas is carefully controlled. Development does not increase risks associated with flooding and stormwater run off. The safe flood carrying capacity of waterways is not exceeded.
				The following are protected, maintained or improved: • the quality of the Shire's water, in all its forms, at a standard which provides adequate drinking water and the ability to support life; • riparian buffer areas, wetlands and foreshores are protected, maintained, and /or enhanced; • water storage catchments and waterways; • natural drainage patterns.		



Strategy 1.5

ECOSYSTEMS - Protecting, maintaining and enhancing the Shire's ecosystems and the species within them.

Strategy 1.1 also applies

The following are recognised, protected, maintained or improved: • the diversity of the Shire's ecosystems and habitats; • the diversity of life within and reliant on the Shire's ecosystems, including genetic and species diversity.	Areas containing significant ecosystems, including are recognised, protected, maintained or improved.	The following are recognised, protected, maintained or improved: • the health of the Shire's ecosystems and biodiversity; • the natural state of ecosystems.	There is no significant reduction in net quantities of the Shire's ecosystems. There is an increase in the net quantity of ecosystems in the Shire.	Further extinctions of flora and fauna are prevented.
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the economic system

The Shire's **natural**, **economic**, and **social** systems are sustainably balanced



KEY DIRECTION 2 – Economic System

Guiding all forms of development to achieve a prosperous economy enabling communities to meet their needs while not compromising the ability of future generations to meet theirs.

ACCESSIBILITY	AMENITY	DIVERSITY	EFFICIENCY	LOCATION	QUALITY	QUANTITY	SAFETY	VIABILITY
1 All land uses have access to other land uses that complement and support their activities	2 Development does not adversely impact on other land uses	3 The Shire has a diversity of land uses and development forms	4 Development represents the optimum use of the land	5 Development is located in appropriate areas	6 A high quality of development is achieved	7 Sufficient land is provided for the development needs of the Shire	8 Development does not result in increased risks to elements of the economic system	9 Economic viability is protected, maintained and enhanced



Strategy 2.1

GENERAL DEVELOPMENT - *Responsibly managing development within and affecting the Shire.*

Development decisions maximise the opportunities for land uses to benefit from positive interactions with each other.	The economic amenity of economic land uses, meaning the ability for land uses to operate without being adversely affected by other land uses, is recognised, protected, maintained or improved.	The Shire possesses a diverse range of sustainable land uses, development forms and development densities, ensuring a wide choice for consumers, residents, visitors and others.	The Shire achieves maximum spatial efficiency, ensuring that the use of land for a given purpose represents the best possible use of the land in the context of other competing uses.	Development locations are favoured which support the Desired Environmental Outcomes.	Development: <ul style="list-style-type: none"> - is energy efficient - is sensitively and appropriately sited having regard to topography, landscape, landform, vegetation and any other constraints of the site - respects the character of the locality, whether built or natural - respects and fully utilises the sub-tropical climatic conditions of South East Queensland. 	An adequate supply of land exists for each desired land use in the Shire, and shortfalls are avoided.	The risks and actual incidences of destruction to property as a result of development are minimised. This includes, but is not limited to, reducing risk to other land uses, activities, physical assets and infrastructure.	Development does not impede the processes which operate within the economic system that enable land uses to continue to function, to develop and to grow.
Complementary land uses are located in close proximity, and/or linked by an efficient transport system.	Land uses which are complementary to each other are co-located.		The Shire achieves maximum temporal efficiency, ensuring that all development occurs in a logical and orderly manner.	Development that does not achieve the Desired Environmental Outcomes in this scheme is resisted.		Oversupplies of land are avoided.	The consequences of inappropriately designed buildings, or the inappropriate siting of potentially hazardous land uses on other physical assets, which can be catastrophic – and costly – are avoided.	The viability of existing or known future economic land uses, meaning the ability to maintain profitability, is recognised, protected, maintained or improved in development decisions.
Opportunities for economic co-operation and synergy are maximised, where possible.	Incompatible land uses are separated.		The Shire has an efficient land use pattern which is orderly and sustainable.	Development occurs in locations that are easily serviced with infrastructure.		The consumption of land, and other primary resources associated with land use and development, does not exceed sustainable levels.	The vitality of existing or known future economic land uses, meaning the activity levels such as pedestrian/customer flows, upon which the overall.	
Development densities are optimised to provide for maximum inter-land use accessibility, consistent with the preservation of amenity.	New development does not erode the economic amenity of existing or future known land uses by encroachment, sterilisation, alienation or limitation.		The Shire's energy consumption is efficient and opportunities to utilise alternative energy sources are maximised.		The Shire's built up areas are attractive and: <ul style="list-style-type: none"> - visual pollution is avoided - architectural statements are strong, memorable, distinctive and appropriate - distinctive streetscapes are created - a predominantly green, landscaped character is protected, maintained and developed in the Shire's urban areas. 	Development which represents an oversupply of a given form of development, will be resisted in the interests of maintaining the economy as a whole.	Measures to assist crime reduction and measures to enhance safety associated are clearly demonstrated in all development.	
			Development densities are the optimum possible, having regard to the need to achieve other outcomes in this scheme.			Development decisions are in accordance with the specific land use allocations in the scheme, which in turn are based on realistic estimates of demand for key land uses in the Shire balanced with the need to achieve other outcomes in this scheme.	Development which improves the Shire's ability to respond to disasters is supported.	
			Development makes full use of the development and productivity potential of the site, having regard to the need to achieve other outcomes in this scheme.					
			The Shire integrates with relevant State and Regional policies.					



Strategy 2.2

HOUSING - *Ensuring residents have access to good quality housing which is appropriate to their needs.*

Strategy 2.1
Also applies

The Shire possesses a diverse and sustainable range of residential land uses, development types and densities, ensuring adequate choice of housing is available.	Residential locations promote a centralised and consolidated, rather than dispersed, land use pattern.
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Strategy 2.3

EMPLOYMENT - *Promoting a strong and diversified economy.*

Strategy 2.1
also applies

Employment uses have maximum accessibility to markets, services and labour.	The Shire possesses a diverse and sustainable range of employment land uses, development types and densities, ensuring adequate choice is available.	Employment locations promote a centralised and consolidated, rather than dispersed, land use pattern, having regard to the need to achieve other outcomes in this scheme.	Sustainable and innovative employment proposals are supported, having regard to the need to achieve other outcomes in this scheme.
	Rural areas have a wide range of sustainable land uses.		"Clean" employment forms, representing less of a threat to general amenities and the natural environment, are preferred to traditional employment types.
	Development which integrates employment and other compatible land uses is supported, having regard to the need to achieve other outcomes in this scheme.		



Strategy 2.4

COMMERCIAL CENTRES - *Promoting a network of centres with a diversity of activities.*

Strategy 2.1
also applies

Centres co-locate a wide variety of complementary land uses, including, but not limited to retail, commercial, administrative, entertainment, community and cultural facilities, into a compact area.	Commercial centres provide the focus for a diverse range of activities.	Opportunities for multiple use and sharing of facilities between land uses in centres is maximised.	Commercial development locations support and strengthen the commercial hierarchy of the Shire.	The architectural design of Centres promotes a positive image of the Shire.
Centres are easily accessible by a range of public transport modes.	The diversity of land uses in Centres maximises the potential for multi-purpose trips.			
Pedestrian movements are given high priority in the design and layout of Centres.				



the economic system

The Shire's **natural**, **economic**, and **social** systems are sustainably balanced



KEY DIRECTION 2 – Economic System

Guiding all forms of development to achieve a prosperous economy enabling communities to meet their needs while not compromising the ability of future generations to meet theirs.

ACCESSIBILITY	AMENITY	DIVERSITY	EFFICIENCY	LOCATION	QUALITY	QUANTITY	SAFETY	VIABILITY
1 All land uses have access to other land uses that complement and support their activities	2 Development does not adversely impact on other land uses	3 The Shire has a diversity of land uses and development forms	4 Development represents the optimum use of the land	5 Development occurs in the appropriately designated areas, as described in the Scheme	6 A high quality of development is achieved	7 Sufficient land is provided for the development needs of the Shire	8 Development does not result in increased risks to elements of the economic system	9 Economic viability is protected, maintained and enhanced



Strategy 2.5

INDUSTRY – Providing a range of industry locations for a diversified economy.

Strategy 2.1
also applies

Industrial development occurs in locations unlikely to be sterilised by other uses.

Industrial development locations support and strengthen the industrial hierarchy of the Shire.



Strategy 2.6

TOURISM – Encouraging a diversity of land uses that provide tourism opportunities.

Strategy 2.1
also applies

The unique characteristics of the rural, urban and coastal areas for specialised and sustainable tourism opportunities are recognised.

Tourism development respects and promotes the qualities which attract visitors to the Shire in the first place.

Eco-tourism opportunities are encouraged, having regard to the need to achieve other outcomes in this scheme.

The number of tourism bedspaces offered within the Shire has increased from the number available at the time of gazettal of this scheme.

The development of major tourist facilities and attractions is encouraged, having regard to the need to achieve other outcomes in this scheme.

The economic value to tourism of scenic and environmental areas is recognised, protected, maintained or improved.

The viability of existing tourist attractions in the Shire is protected, maintained or improved, having regard to the need to achieve other outcomes in this scheme.



Strategy 2.7

RURAL – Ensuring rural areas are protected for the most appropriate use.

Strategy 2.1
also applies

Existing and known future haulage routes are recognised, protected, maintained or improved.

The potential impacts of primary industries, including but not limited to resource extraction, treatment, transport and disposal, on the amenities of other land uses are recognised and all development incorporates adequate acoustic, environmental and visual mitigation solutions.

Urban, or other incompatible uses do not restrict the operation of existing or known future primary industries.

Locations representing Good Quality Agricultural Land (GQAL) are protected to preserve their economic value.

Locations with existing or known economic value for primary production are protected, having regard to the need to achieve other outcomes in this scheme.

Environmental impacts of primary industries are adequately managed, having regard to the need to achieve outcomes under Key Direction 1 of this scheme.

Land, the subject of previous primary extraction or production is adequately rehabilitated.

The use of appropriate land for sustainable tree plantations is encouraged, having regard to the need to achieve other outcomes in this scheme, including:

- nature conservation,
- preservation of urban amenities or visual amenities and
- the preservation of Good Quality Agricultural Land.



Strategy 2.8

OPEN SPACE AND RECREATION – Providing suitable recreation and leisure opportunities in the Shire.

Strategy 2.1
also applies

There is a linked system of multi purpose trails throughout the Shire.

The amenities of open space areas are protected and maximised by, wherever possible:

- locating new open space areas away from existing or known future conflicting land uses.
- locating new development which would conflict with open space amenities away from existing or known future open space.
- maximising the opportunity to integrate and co-locate open space and other compatible land uses, for example recreational and community resources.

The provision of public open space maintains, as a minimum the existing diversity of open space settings and park hierarchy.

Public open space maximises opportunities:

- to be multi-functional
- to protect cultural, recreational, ecological and aesthetic values.

The provision of public open space maintains, as a minimum, the existing quantity of open space.

Private open space and recreation facilities are encouraged, having regard to the need to achieve other outcomes in this scheme.



Strategy 2.9

INFRASTRUCTURE – Providing a range of suitable infrastructure to meet the Shire's needs.

Strategy 2.1
also applies

Land uses have easy access to the infrastructure they require.

The provision of infrastructure enhances the economic amenities of land uses.

Development decisions do not compromise the provision of essential infrastructure, having regard to the need to achieve other outcomes in this scheme.

The infrastructure needs of the Shire are met in a wide variety of ecologically sustainable ways.

New Infrastructure is designed and operated for maximum efficiency.

Existing Infrastructure is operated at maximum efficiency.

All infrastructure is shared wherever possible.

The costs of providing infrastructure are shared equitably.

Required infrastructure is provided in an orderly, sequenced, logical and timely manner.

The location of new infrastructure consolidates land use patterns and does not increase pressures for development in unsustainable locations.

All infrastructure is designed to have the minimum impact on important aesthetic, natural and social values and associated outcomes in this scheme.

All infrastructure is designed to be effective and adequate for its intended purpose, having regard to the need to achieve other outcomes in this scheme.

Shortfalls in the provision of required infrastructure are avoided.

All infrastructure is safe and convenient.

Development decisions do not threaten the economic viability of providing essential infrastructure.

Development decisions do not prejudice the provision of essential infrastructure.



social well-being system

The Shire's **natural**, **economic**, and **social** systems are sustainably balanced



KEY DIRECTION 3

Maintaining, enhancing and developing the well-being of people and communities.

ACCESSIBILITY	AMENITY	DIVERSITY	LIVEABILITY	QUALITY	QUANTITY	SAFETY	VIABILITY
1	2	3	4	5	6	7	8
Human accessibility to community resources is maximised	Human amenities are protected, maintained or improved	The Shire's diverse community is recognised and fostered	Land use decisions maximise people's opportunities for a higher standard of living	Resources are appropriate to people's needs	Resources are sufficient to meet people's needs	Risks to human health & safety are minimised	Development does not compromise the viability of communities, cultures or of people's way of life



Strategy 3.1

GENERAL COMMUNITY AND SOCIAL WELL-BEING - Maximising the benefits of development to enhance people's lives.

<p>People's accessibility, in spatial terms, to elements of all the natural, economic and social/well-being systems:</p> <ul style="list-style-type: none"> is maximised, having regard to the need to achieve other outcomes in this scheme; equitable and fair; facilitated by a consolidated and transport efficient land use pattern; achieved by a diversity of transport options. <p>Accessibility, in a general sense, to key community resources, such as housing, commercial and other services, recreation and leisure opportunities is maximised, having regard to the need to achieve other outcomes in this scheme.</p> <p>Barriers to mobility throughout the Shire are minimised.</p>	<p>Human amenities are recognised, protected, maintained or improved in development decisions.</p> <p>The following are achieved:</p> <ul style="list-style-type: none"> noise, odour and activity levels affecting residential areas are minimised and at acceptable levels; the impacts of existing harmful uses on residential amenities are lessened wherever possible; residential development does not occur in locations where human amenities are unlikely to be capable of being provided. <p>Natural values, and a predominantly rural Shire character, are protected, maintained and enhanced.</p> <p>Urban design standards are high, promoting an attractive urban form Shire-wide.</p> <p>High scenic values Shire-wide are maintained.</p>	<p>The diversity of the Shire's community is represented by diversity in:</p> <ul style="list-style-type: none"> where people live and work; people's lifestyles; people's diverse cultural traditions, practices and backgrounds. <p>The Shire possesses a diversity of communities which are identifiable and distinct and cohesive.</p>	<p>Development decisions protect, maintain or improve people's sense of being part of a community which is attractive and safe.</p> <p>Public transport options are available and convenient, consistent with the Infrastructure strategy.</p> <p>Community resources are designed to be dual or multi functional wherever possible, having regard to the need to achieve other outcomes in this scheme.</p> <p>Innovative development is fostered in the Shire, having regard to the need to achieve other outcomes in this scheme.</p>	<p>The quality of community resources provided recognises the needs of the widest possible range of Shire residents.</p> <p>The Shire's natural and climatic values underpin the quality of the Shire's lifestyle.</p>	<p>Despite the growth of the Shire, people are provided with a level of community resource provision which adequately meets their needs.</p> <p>The provision of community resources is coordinated with the provision of resources at all levels of government.</p>	<p>The following are recognised, protected, maintained or improved:</p> <ul style="list-style-type: none"> human health; the fear and incidence of crime; human safety. 	<p>Individual communities, cultures and lifestyles within the Shire are recognised, valued and promoted wherever possible.</p> <p>Communities are vibrant and viable.</p> <p>Development recognises, protects and promotes those aspects of living in South East Queensland, and the Shire in particular, which are unique and special, including:</p> <ul style="list-style-type: none"> its climate; lifestyle; architecture and culture.
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Strategy 3.2 FACILITIES AND SERVICES

Maintaining, enhancing and developing the well-being of people and communities.

Strategy 3.1 also applies

<p>People's accessibility to required facilities and services is maximised.</p> <p>Facilities and services are located and integrated with residential areas wherever possible.</p> <p>Facilities and services are located in commercial centres wherever possible.</p>	<p>Facilities and services are provided in a way that reflects the amenity of each location.</p>	<p>Facilities and services are identified and provided in a timely manner at a community cost which is equitable and economically viable.</p>	<p>Development which provides facilities and services which address an identified need are supported, having regard to the need to achieve other outcomes in this Scheme.</p> <p>Shortfalls in the provision of required facilities & services are avoided.</p>	<p>The viability of existing facilities and services is protected.</p>
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Strategy 3.3 PUBLIC PLACES

Providing integrated networks of pleasant and safe public areas for aesthetic enjoyment and cultural, recreational or social interaction

Strategy 3.1 also applies

<p>People's accessibility to public places, such as town centres, public parks and gathering spaces is maximised.</p>	<p>Public places are attractive, comfortable and convenient places that:</p> <ul style="list-style-type: none"> reflect the distinctiveness and individuality of the area promotes a strong sense of place demonstrates high standards of architectural and civic design. <p>Public places provide adequate shade and shelter.</p> <p>Public places contribute to the appearance of the Shire as a predominantly rural place with a low key lifestyle.</p>	<p>The individual character of towns, localities and cultures within the Shire is recognised, protected, maintained or improved.</p>	<p>Public spaces are</p> <ul style="list-style-type: none"> Distinctive; legible and well-designed; Useable; safe. <p>Public spaces promote community interaction.</p>	<p>Sufficient public spaces are provided to meet the Shire's diverse needs.</p>	<p>The Shire's Public places are safe and crime free, including but not limited to:</p> <ul style="list-style-type: none"> parks; civic spaces; Centres; roads, bikeways and footpaths.
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Strategy 3.4 CULTURAL HERITAGE

Ensuring areas and places of special aesthetic, architectural, cultural, historic, scientific, social or spiritual significance are conserved or enhanced

Strategy 3.1 also applies

<p>Places of cultural significance are accessible, having regard to the need to preserve the values and integrity of those places.</p>	<p>Development decisions respect the wide spectrum of different cultural values, artefacts and places existing in the Shire.</p>	<p>The special qualities of places of cultural significance are recognised, protected, maintained or improved.</p>	<p>The number of places of cultural significance are recognised, protected, maintained or improved so that their number is not diminished.</p>
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