

# **GULF REGIONAL DEVELOPMENT PLAN**

**Gulf Regional Planning  
Advisory Committee**

**November 2000**



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Gulf Regional Development Plan  
Prepared By:  
Gulf Regional Planning Advisory Committee  
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# **Executive Summary**

## **Background**

The Southern Gulf of Carpentaria region (Gulf Region) is located in Queensland's far North-West, extending East from the Northern Territory/Queensland border to include the Local Government and Community Council areas of Burke, Mornington, Doomadgee, Carpentaria, Croydon, Etheridge and Kowanyama.

The Gulf region has a land area of (approx.) 186,000 square kilometres, with a total resident population of (approx.) 7,000 (from 1996 census). Gulf residents experience a unique lifestyle associated with the region's remote and predominantly rural nature. This remoteness and relative isolation has both positive and negative effects in regard to quality of life for the region's residents.

The communities of the Gulf region recognise that they have significant common issues - economic, social, and environmental - that may be addressed at a broad, strategic level. In addition, the Gulf region continues to experience increasing pressures associated with growth in industries such as eco-tourism and mining, as well as seeing restructuring in established industries such as pastoralism and commercial fishing.

The Gulf Regional Development Plan (GRDP) project is a joint Government and community initiative to develop a comprehensive Regional Plan to encourage and guide sustainable growth and development of the Gulf region over the next 20 years. The GRDP aims to provide a broad-level planning framework within which future decisions can be made with greater confidence, certainty and community support. The GRDP also aims to ensure that growth and development can be managed in a manner that is consistent with the economic, environmental and social values of the Gulf region.

The GRDP is a cooperative planning process between the Gulf communities, key regional stakeholders, and all levels of Government. These parties are represented on the Gulf Regional Planning Advisory Committee (Gulf RPAC), which is responsible for developing the GRDP.

## **Strategies**

The Gulf Regional Development Plan provides strategies, recommendations and priority actions to address the key issues confronting the Gulf region. These strategies are intended to provide guidance as to new directions in policy development and implementation, as well as making use of existing organisational and administrative structures.

The following provides an overview of strategies addressing the key regional planning issues confronting the Gulf.

### ***Native Title Strategy***

#### *Aims*

- to integrate the regional planning process with ongoing native title processes;
- to facilitate an agreements-based approach to the reconciliation of native title and community rights and interests on a regional scale; and,
- to facilitate an agreements-based approach for future developments, using compulsory acquisition powers only if all reasonable negotiation processes fail.

#### *Strategies/Actions*

- incorporate appropriate mechanisms for acknowledging native title issues in planning and decision-making processes;
- encourage an agreements-based approach to resolve native title issues in respect of existing and future development; and
- investigate the negotiation of a Regional Framework Agreement which will provide a broad structure for the resolution of key regional issues.

### ***Environment and Natural Resources Strategy***

#### *Aims*

- develop a comprehensive and representative protected area estate.
- ensure that protected areas are sustainably managed to preserve their ecological integrity and cultural and

recreational values in accordance with provisions of the *Nature Conservation Act*.

- ensure that natural resources are utilised and managed in a coordinated, consultative and ecologically sustainable manner.
- protect and manage places and landscapes of cultural heritage significance commensurate with their significance, and the aspirations of the community.
- ensure that all development is ecologically sustainable and that environmental impacts are identified, minimised and contained.

#### *Strategies/Actions*

- Incorporate existing management and planning processes (including Government and non-Government mechanisms) into a coordinated approach to accumulating knowledge and working towards establishing a comprehensive regional reserve system.
- Initiate a program of information gathering on sites and places of cultural significance so that appropriate management and protection strategies can be developed and subsequently incorporated into Local Government Planning Schemes, Community Development Plans, etc., whilst ensuring that cultural sensitivities are observed.
- Initiate a program of information gathering on natural resources in order to establish the requirement for management/remedial action (eg. pest control, water quality).
- Support the ongoing cooperative development of land management strategies (involving Local Governments/Community Councils, and key stakeholder groups such as ICM/Landcare and industry groups) that can be incorporated into Local Government Planning Schemes, Community Development Plans, etc.

#### ***Economic Development Strategy***

##### *Aims*

- promote sustainable economic developments which have a strong competitive advantage.

- establish a regional and coordinated approach to the development of the tourism industry which is ecologically and socially and culturally appropriate whilst supporting the economic development of the region.
- maintain and expand sustainable natural resource based industries consistent with ecological and traditional values.
- sustainable development of small businesses and industries to meet community, tourist and other industry demands.
- establishment of viable and sustainable horticulture and cropping industries for export and to meet local community needs for fresh produce.
- the establishment of viable and sustainable Indigenous-managed industries.

#### *Strategies/Actions*

- Coordinate a regional approach to economic development by regional economic development officers, and the Indigenous development corporations.
- Develop and implement strategies that will improve the competitive advantage of industries and economic activities in the region.
- Develop a regional tourism strategy that is representative of all interests, including Indigenous groups and the wider community. A priority should be given to utilising existing organisational structures such as the Gulf Savannah Tourism Organisation.
- Promote the timely delivery of land, buildings, infrastructure and services for economic development in each of the Gulf towns.
- Encourage representation of all interests in the development of the regional economy.

#### ***Employment, Education and Training Strategy***

##### *Aims*

- maximise opportunities for employment generation.
- provide equitable access to a wider range of appropriate schooling opportunities within the region.

- provide equitable access to regionally coordinated training programmes which are targeted at providing skills levels appropriate to regional employment opportunities as well as improving access to higher education opportunities external to the region.

#### *Strategies/Actions*

- Encourage schools to become more active in adult education classes, especially with literacy and numeracy skills.
- Explore options to integrate community sports and recreation activities with community schooling.
- Expand the role of the Gulf Education, Training and Employment Management (GETEM) committee to better coordinate employment, education and training programs in the region.
- Coordinate service delivery between DETIR, the Gulf TAFE and other training programs to ensure equitable access to training programs throughout the region.
- Develop training programs in consultation with the GETEM, employment agencies and the community to maximise local employment opportunities.
- Co-ordinate Government sectors to explore options for training local labour to fill full-time, part-time and multi-skilled positions.
- Support ATSIC to improve the employment outcomes from the CDEP programme in terms of increasing the skills base of employees and generating longer-term employment.

### **Community Services Strategy**

#### *Aims*

- coordinate the delivery of community services and facilities
- meet community demand for a range and choice of housing in an equitable and affordable manner
- provide equitable access to a full range of health services
- provide equitable access to emergency services
- reduce crime rates through prevention and improve law enforcement.

- provide a range of sporting and recreational facilities and programs in a manner which meets community needs.

#### *Strategies/Actions*

- Host forums in each of the Gulf communities of all the Government community services and social welfare providers in order to coordinate service delivery, identify gaps and avoid duplication.
- Initiate investigations aimed at improving access to:
  - mental health;
  - preventative health care;
  - aged care specialists;
  - specialist referrals;
  - mental health and disabled services;
  - substance abuse programs;
  - environmental health programs.
- Promote the establishment of Indigenous health worker training and employment programs to meet the National standard of one worker for 150 Aboriginal persons in the population.
- Develop and implement mechanisms to improve housing affordability throughout the region.
- Undertake a thorough assessment of the shortage of mainstream public housing in the Gulf townships based on an accurate assessment of need.
- Implement the strategies of the *Gulf Regional Sport and Recreation Plan* in order to address community needs and to foster greater inter-community activity.

### **Community Development and Planning Strategy**

#### *Aims*

- develop urban forms that are functional, cost-effective and which promote a high quality of living environment; and
- promote and facilitate the maintenance and development of the lifestyle and culture of the region in a manner that ensures the needs and aspirations of the community are met.

#### *Strategies/Actions*

- Incorporate social planning impact assessment mechanisms into planning and development processes.
- Review local Government Planning Schemes and Aboriginal Community Council Plans to ensure they address land availability and needs within the Gulf towns for housing, economic development, community infrastructure and services.
- Initiate community based programs to improve the amenity of the Gulf towns, consistent with the character of each centre.
- Initiate a holistic and coordinated approach to the development of outstations by all levels of Government and the key Aboriginal stakeholder groups.
- Establish a *Regional Cultural Group* aimed at meeting the cultural and recreational needs and aspirations of the community.

#### **Infrastructure Strategy**

##### *Aims*

- provide equitable and cost-effective access to communications and information technology to meet business, industry and community needs.
- meet the regions energy needs for business, industry and community purposes in a cost effective, equitable, timely and ecologically sustainable manner.
- ensure the timely cost-effective and ecologically sustainable provision of water supply infrastructure to meet the regions future water needs in terms of domestic needs as well as demands from tourism, business and industry developments.
- ensure the timely, cost effective and environmentally appropriate disposal of effluent, solid and regulated waste products

##### *Strategies/Actions*

- Develop and implement a *Regional Communications and Information Strategic Plan* - ensuring adequate representation from the Indigenous and non-Indigenous sectors - in line with the proposed *State Communications and Information Strategic Plan*.

- Ensure all residents of the Gulf have access to appropriate and affordable power supplies regardless of location.
- Ensure town water supplies are a safe and acceptable standard throughout the Gulf region.
- Ensure appropriate and cost effective waste disposal systems in the Gulf towns.

#### **Integrated Transport Strategy**

##### *Aims*

- improve and maintain the regional road transportation network, including linkages to centres external to the region for use for trade, freight passenger, emergency and community access as well as for providing key linkages with other modes of transportation.
- improve the air transportation network in terms of access for emergency services, freight and trade, air passenger transport as well as linkages with other modes of transportation.
- improve sea transportation facilities and services in terms of trade, economic development, freight, barge passenger services as well as linkages with other modes of transport.
- explore options to improve rail transportation and linkages with other modes of transportation.
- provide an integrated transport system that supports the social and economic development needs of the community in an ecologically sustainable manner.

##### *Strategies/Actions*

- Develop an agreed schedule of road works priorities to inform the Department of Main Roads Regional Road Investment Strategy and the road works programs of the Gulf Local Governments and Aboriginal Community Councils.
- Identify any strategically appropriate rural airstrips to be upgraded to RFDS standard.
- Extend existing air passenger services within the region with a priority to provide a link between Kowanyama and Normanton and Kowanyama and Mornington Island.

- Initiate a review of barge transport services in the Gulf in consultation with the service providers and the relevant Government and include investigation of options to improve community access to passenger barge services.
- Facilitate implementation of the actions in the Gulf Savannah Integrated Regional Transport Plan (IRTP).
- Support Queensland Transport's proposed transport modal and cross modal workshops throughout the region to ensure integration of transport planning.

## Coordination and Implementation

The GRDP and its subsequent implementation can be considered in three stages

- Stage 1 - Plan Making
- Stage 2 - Implementation and Further Work
- Stage 3 - GRDP Review

It should be recognised that the process of implementation, monitoring and review is on going. Regular reviews and any necessary revisions should occur throughout the life of the GRDP, beyond the end of Stage 3.

To progress to Stage 2 it is recommended that the Gulf RPAC continue as the peak regional body driving the GRDP project. This group will be required to:

- coordinate and drive implementation of the GRDP; oversee further studies and strategy development work as recommended in the GRDP;
- negotiate a Regional Land Use Framework Agreement between all relevant parties; and
- oversee a review of the GRDP as a result of the above-mentioned activities.

In order to achieve these tasks, the following organisation structure is proposed:

- **Gulf RPAC:** Representative body with overall responsibility for the GRDP project – meets on an as-needed basis to consider or resolve higher order or contentious regional issues.

- **Implementation Coordination Group (ICG):** to consist of senior managers and action officers from implementation agencies, industry groups etc. Responsible for overseeing *actual* implementation of GRDP, meeting regularly to consider day-to-day implementation issues. The ICG will delegate strategy implementation to various working groups created as required.
- **Working Groups:** to be formed, as required, to address specific strategies (eg. Environment and Natural Resources, Economic Development, etc.). It is recommended that one working group be formed to address the issue of negotiating a Regional Framework Agreement for land use across the region.
- **Further Studies and Strategy Development Project Team:** responsible for conducting further studies and continuing development of strategies as recommended by the GRDP. This project team can also provide technical assistance to the RPAC, ICG or the various working groups.

It must be recognised that sufficient resources will have to be obtained before Stages 2 and 3 of the GRDP can commence. At the time of preparation of this document, no resourcing or funding has been made available beyond Stage 1.

## **Glossary of Terms**

|           |   |
|-----------|---|
| ABS       | Australian Bureau of Statistics   |
| ACC       | Aboriginal Coordinating Council   |
| ANZECC    | Australia - New Zealand Environment Conservation Council                              |
| ATSIC     | Aboriginal and Torres Strait Islander Commission                                      |
| ATSIHP    | Aboriginal and Torres Strait Islander Housing Program                                 |
| CAMBA     | China - Australia Migratory Birds Agreement   |
| CASA      | Civil Aviation Safety Authority   |
| CDEP      | Community Development and Employment Program  |
| CEDS      | Common Effluent Drainage System   |
| DETIR     | Department of Employment, Training and Industrial Relations                           |
| DME       | Department of Mines and Energy  |
| DNR       | Department of Natural Resources   |
| EPA       | Environmental Protection Agency (previously Department of Environment and Heritage)   |
| ESD       | Ecologically Sustainable Development  |
| ERP       | Estimated Resident Population   |
| FNQEB     | Far North Queensland Electricity Board  |
| GADC      | Gulf Aboriginal Development Corporation   |
| GETEM     | Gulf Education, Training and Employment Management Committee                          |
| GSD       | Gulf Savannah Development (previously Gulf Local Authorities Development Association) |
| GRDP      | Gulf Regional Development Plan  |
| GSTO      | Gulf Savannah Tourism Organisation  |
| Gulf RPAC | Gulf Regional Planning Advisory Committee   |
| HACC      | Home and Community Care   |
| ICM       | Integrated Catchment Management   |
| IPA       | Integrated Planning Act 1997  |
| IRTP      | Gulf Savannah Integrated Regional Transport Plan                                      |
| IT        | Information Technology  |
| JAMBA     | Japan Australia Migratory Bird Agreement  |
| LPG       | Liquefied Petroleum Gas   |
| MPIP      | Management of Public Intoxication Program   |
| NCP       | National Competition Policy   |
| NHT       | Natural Heritage Trust  |
| ERGON     | Ergon Energy (previously North Queensland Electricity Board)                          |
| NRS       | National Reserve System   |
| PMP       | Property Management Plan  |
| QFS       | Queensland Fisheries Service (formerly Queensland Fisheries Management Authority)     |
| QGAP      | Queensland Government Agent Program   |
| Ramsar    | International Agreement for the Conservation of Wetlands                              |
| RAPS      | Remote Area Power Supplies  |
| RFDS      | Royal Flying Doctor Service   |
| ROC       | Regional Organisation of Councils   |
| RSG       | Regional Strategy Group   |
| RTIF      | Regional Telecommunications Infrastructure Fund                                       |
| SES       | State Emergency Service   |
| SIA       | Social Impact Assessment for the North West Mineral Province                          |
| TAFE      | Technical and Further Education   |
| USO       | Universal Service Obligation under the <i>Telecommunications Act</i>                  |

# **Table of Contents**

|  |            |
|--|------------|
| EXECUTIVE SUMMARY .....                                    | I          |
| GLOSSARY OF TERMS.....                                     | VI         |
| TABLE OF CONTENTS.....                                     | VII        |
| LIST OF MAPS .....   | IX         |
| LIST OF FIGURES.....                                       | IX         |
| LIST OF TABLES.....  | IX         |
| <b>1 INTRODUCTION .....</b>                                | <b>1</b>   |
| 1.1 PURPOSE.....   | 1          |
| 1.2 HOW TO READ THIS PLAN.....                             | 1          |
| 1.3 THE REGION.....  | 5          |
| 1.4 THE GULF REGIONAL PLANNING ADVISORY COMMITTEE.....     | 11         |
| 1.5 BACKGROUND PAPERS .....                                | 12         |
| 1.6 COMMUNITY CONSULTATION ON THE PLAN .....               | 12         |
| 1.7 OTHER REGIONAL AND LOCAL PLANNING PROCESSES .....      | 13         |
| <b>2 KEY REGIONAL ISSUES .....</b>                         | <b>15</b>  |
| <b>3 2020 VISION .....</b>                                 | <b>21</b>  |
| <b>4 GUIDING PRINCIPLES .....</b>                          | <b>23</b>  |
| <b>5 GOALS .....</b>                                       | <b>25</b>  |
| <b>6 NATIVE TITLE STRATEGY .....</b>                       | <b>27</b>  |
| <b>7 ENVIRONMENT AND NATURAL RESOURCES STRATEGY .....</b>  | <b>33</b>  |
| 7.1 NATURAL ENVIRONMENT.....                               | 34         |
| 7.2 CULTURAL HERITAGE.....                                 | 50         |
| 7.3 NATURAL RESOURCE MANAGEMENT.....                       | 54         |
| <b>8 ECONOMIC DEVELOPMENT STRATEGY .....</b>               | <b>65</b>  |
| 8.1 COMPETITIVE ADVANTAGE .....                            | 66         |
| 8.2 TOURISM.....   | 69         |
| 8.3 PASTORAL INDUSTRY.....                                 | 77         |
| 8.4 MINING .....   | 80         |
| 8.5 SMALL BUSINESS.....                                    | 83         |
| 8.6 FISHING .....  | 86         |
| 8.7 CROPPING AND HORTICULTURE .....                        | 91         |
| 8.8 INDIGENOUS MANAGED INDUSTRY .....                      | 97         |
| 8.9 OTHER NATURAL RESOURCE BASED INDUSTRIES.....           | 99         |
| <b>9 EMPLOYMENT, EDUCATION AND TRAINING STRATEGY .....</b> | <b>105</b> |
| 9.1 EDUCATION .....  | 106        |
| 9.2 TRAINING AND HIGHER EDUCATION.....                     | 114        |
| 9.3 EMPLOYMENT.....  | 117        |
| <b>10 COMMUNITY SERVICES STRATEGY .....</b>                | <b>119</b> |
| 10.1 COMMUNITY SERVICE DELIVERY .....                      | 120        |
| 10.2 HEALTH.....   | 123        |
| 10.3 HOUSING.....  | 129        |
| 10.4 EMERGENCY SERVICES .....                              | 136        |
| 10.5 LAW AND ORDER.....                                    | 140        |
| 10.6 SPORT AND RECREATION .....                            | 143        |

|           |   |            |
|-----------|---|------------|
| <b>11</b> | <b>COMMUNITY DEVELOPMENT AND PLANNING STRATEGY.....</b> | <b>149</b> |
| 11.1      | COMMUNITY DEVELOPMENT.....                              | 150        |
| 11.2      | POPULATION GROWTH.....                                  | 154        |
| 11.3      | SETTLEMENT PLANNING.....                                | 157        |
| <b>12</b> | <b>INFRASTRUCTURE STRATEGY .....</b>                    | <b>167</b> |
| 12.1      | COMMUNICATIONS.....                                     | 168        |
| 12.2      | ENERGY.....   | 174        |
| 12.3      | WATER SUPPLY.....                                       | 180        |
| 12.4      | WASTE DISPOSAL.....                                     | 184        |
| <b>13</b> | <b>INTEGRATED TRANSPORT STRATEGY .....</b>              | <b>187</b> |
| 13.1      | ROADS.....  | 191        |
| 13.2      | AIR TRANSPORT .....                                     | 206        |
| 13.3      | SEA TRANSPORT .....                                     | 210        |
| 13.4      | RAIL.....   | 212        |
| 13.5      | INTEGRATED TRANSPORT PLANNING .....                     | 214        |
| <b>14</b> | <b>IMPLEMENTATION AND COORDINATION .....</b>            | <b>217</b> |
| 14.1      | INTRODUCTION .....                                      | 217        |
| 14.2      | IMPLEMENTATION AND REVIEW ARRANGEMENTS .....            | 218        |
|           | <b>REFERENCES .....</b>                                 | <b>222</b> |

## **List of Maps**

|                                      |     |
|--------------------------------------|-----|
| LOCALITY MAP .....                   | 3   |
| ENVIRONMENTAL ASSETS MAP.....        | 35  |
| WATER INVESTIGATION AREAS MAP .....  | 93  |
| SETTLEMENT PATTERN MAP .....         | 159 |
| ELECTRICITY SUPPLY MAP.....          | 175 |
| MAJOR TRANSPORT LINKAGES MAP .....   | 189 |
| GULF REGIONAL ROAD NETWORK MAP ..... | 193 |
| TRANSPORT MAP .....                  | 201 |

## **List of Figures**

|   |     |
|---|-----|
| FIGURE 13.5.1: INTEGRATION OF THE TRANSPORT NETWORK.....        | 214 |
| FIGURE 14.1: STAGES OF THE GULF REGIONAL DEVELOPMENT PLAN ..... | 218 |
| FIGURE 14.2: STAGE 2 ORGANISATIONAL STRUCTURE .....             | 221 |

## **List of Tables**

|  |     |
|--|-----|
| TABLE 1.2: ELEMENTS OF THE GULF REGIONAL DEVELOPMENT PLAN.....             | 1   |
| TABLE 1.4: COMPOSITION OF THE GULF RPAC .....                              | 11  |
| TABLE 7.1.1 (A): FAUNA OF CONSERVATION SIGNIFICANCE.....                   | 43  |
| TABLE 7.1.1 (B): FLORA OF CONSERVATION SIGNIFICANCE.....                   | 45  |
| TABLE 7.1.1 (C): REGIONAL ECOSYSTEMS OF CONCERN.....                       | 46  |
| TABLE 7.3.1: MAIN WEED SPECIES OF THE GULF REGION.....                     | 59  |
| TABLE 9.3.1: EMPLOYMENT IN THE GULF REGION - 1996 .....                    | 117 |
| TABLE 10.1.1: SOCIO-ECONOMIC INDICATORS.....                               | 120 |
| TABLE 11.2.1: GULF POPULATION.....   | 154 |
| TABLE 11.3.1: HIERARCHY OF TOWNSHIPS.....                                  | 157 |
| TABLE 12.3.1: QUALITY OF GULF TOWN WATER SUPPLIES .....                    | 182 |
| TABLE 12.4.1: EFFLUENT WASTE DISPOSAL SYSTEMS.....                         | 184 |
| TABLE 13.1.1 (A): COMMERCIAL FREIGHT SERVICES .....                        | 195 |
| TABLE 13.1.1 (B): BENEFITS OF IMPROVEMENTS TO REGIONAL ROAD LINKAGES ..... | 200 |
| TABLE 13.1.3 (A): RECOMMENDED NEW ROAD COMMENCEMENTS .....                 | 205 |
| TABLE 13.1.3 (B): RECOMMENDED MAINTENANCE AND IMPROVEMENTS .....           | 205 |
| TABLE 13.2.1: AIRPORTS IN THE GULF.....                                    | 206 |



# **1 INTRODUCTION**

## **1.1 PURPOSE**

The Gulf Regional Development Plan (GRDP) brings together the outcomes of the various studies and consultation processes undertaken for the Gulf Regional Development Planning Project.

The Regional Plan is intended to provide an integrated framework of desired strategic outcomes, strategies and priority actions to guide planning and development throughout the region over the next 20 years.

## **1.2 HOW TO READ THIS PLAN**

The GRDP is set out in a number of sections as described in Table 1.2 below.

**Table 1.2: Elements Of The Gulf Regional Development Plan**

| <b>SECTION No.</b> | <b>ELEMENT</b>                  | <b>COMPOSITION</b>   |
|--------------------|---------------------------------|--|
| <b>1</b>           | Introduction                    | Provides a brief overview of the Gulf region. Explains the Gulf Regional Planning Process.   |
| <b>2</b>           | Key Regional Issues             | Provides a summary of the key regional issues that are addressed in the Regional Plan.   |
| <b>3</b>           | Vision                          | Provides a conceptual image of the region as it should be in the future.   |
| <b>4</b>           | Guiding Principles              | Provides the basic concepts upon which the development of the plan is based. Provides guidance for development of the regional strategies.   |
| <b>5</b>           | Regional Goals                  | Identifies specific goals for the regions economic, social and environmental outcomes.   |
| <b>6 - 13</b>      | Regional Strategies             | In no specific order. Provides detailed strategies and priority actions to address key issues confronting the region in order to achieve desired strategic outcomes. The strategies and priority actions do not necessarily identify local agencies; nor do they include costings. These matters will be resolved during the implementation phase. |
| <b>14</b>          | Implementation and Coordination | Provides advice to Government, stakeholder groups and the community on mechanisms to implement the priority actions of the plan.   |



**Locality Map**



## 1.3 THE REGION

### *Physical Environment*

The Gulf of Carpentaria region is located in the far northwest of the State of Queensland, adjoining the Gulf of Carpentaria (the Locality Map refers). The region covers some 186,000 square kilometres and a large part of the southern waters of the Gulf of Carpentaria.

The Gulf region has a tropical monsoon climate with marked seasonality. Temperatures are high throughout the year, with the mean ranging from a daily minimum of 20°C to a maximum of 33°C. In the inland parts of the Gulf, mean maximum temperatures range from 34 to 38°C.

There is a decreasing annual rainfall gradient from 900mm-1600 mm at the coast to approximately 400 mm around Cloncurry (approx. 200km south of the study area). Weather is influenced by the northwest monsoons that generally move south into the region during summer. About 80% of annual rainfall occurs during the four-month period from December to March.

Stream flows are correspondingly highly variable and seasonal, resulting in flooding during summer and very low flows during the rest of the year. The Gulf is drained by 28 drainage basins, with the majority of streams flowing north and northwest into the Gulf of Carpentaria.

The topography of the Gulf region is mostly riverine floodplains that continue for more than 300 kilometres southwards towards Cloncurry.

From the Northern Territory border to the Norman River, a 40 kilometre-wide coastal plain consists of silty deposits and salt flats with occasional low beach ridges. Older ridges, which run roughly parallel to the present coastline, lie up to 30 kilometres inland. Continuing past Karumba, the marine plain environment - which includes saltpans, tidal flats and tidal streams fringed by mangroves - is narrower (20 kilometres) and beach ridges occur close to river mouths.

To the east, the Einasleigh uplands comprise exposed granites and metamorphic rocks. The southern outliers are buried under a succession of very recent (150,000 years) basalt flows with cinder cones and exceptionally large lava tubes forming natural tunnels in old creek beds.

The Cloncurry-Mount Isa Massif dominates the western uplands, which is a rugged relief of around 300m. Further west, marine sediments that have formed sandstone, limestone and shale fill the shallow Georgina Basin.

The vegetation of the region is mostly open woodland dominated by *Eucalyptus* spp. and *Corymbia* spp. with grasses in the understorey. Other vegetation communities include:

- *Melaleuca* spp. dominated open woodlands which occur in the eastern part of the study area,
- non-Spinifex grasslands (with scattered trees) which occur in a broad band on floodplain areas in the southern part of the Gulf,
- Lancewood (*Acacia shirleyi*) dominated gravelly ridges within open woodlands which occur in the eastern part of the study area,
- Spinifex grassland (with scattered trees) which occur in drier upland areas in the west of the study area,
- Salt marsh, mudflats, mangrove and sand dune communities which occur in a broad band along the coast,
- Small areas of vine forest which occur in the higher rainfall eastern part of the region, and
- Riparian woodland and forest that occur along the more permanent watercourses.
- The marine flora of the Gulf is made up of three communities:
- Saltpan communities - These constitute more than 50% of the areal extent of overall intertidal plant communities and may extend for 20 kilometres or more from the coast.
- Mangroves - There are extensive mangrove areas throughout the Gulf with up to 12 species in some areas

- Seagrasses - Eleven species of seagrasses occur in the area. The main areas are to the west of the Wellesley Islands, but smaller areas are found along the coast in protected estuaries and lagoons

Large numbers of birds regularly migrate between catchments within the region and from outside the region, following seasonal rain and flooding. These birds congregate in permanent headwaters, river mouths, scattered waterholes and lagoons during the dry.

A rich and diverse marine fauna is also found in the near-shore marine and estuarine waters in the Gulf of Carpentaria.

### **Regional Economy**

Despite its vast area, the economy of the Gulf is very limited. Large distances between the scattered communities - which are often isolated for months during the wet season - in addition to their modest size and limited opportunities, will continue to constrain development in the Gulf.

The Gulf region possesses an abundance of natural, cultural and historical assets. Its emerging tourism industry is built largely on nature-based activities such as camping, bird watching, fishing, fossicking, as well as on the Indigenous and non-Indigenous culture and heritage of the region.

Tourism in the Gulf has grown rapidly over the past ten years, mainly as a result of improvements to the regional road network. Based on anecdotal evidence and the limited available data it is estimated that the number of visiting tourists to the region is in the order of 80,000 to 100,000 per annum.

There are presently over 100 pastoral enterprises in the region. The Gulf's beef cattle herd was approximately 750 000 in 1996. The advent of the "Asian Economic Crisis" in the late 1990's saw a downturn in live cattle exports from the region. However, the cattle industry is now recovering from this situation and cattle exports have improved. In the longer term there is the potential for export growth in the industry.

In addition to fodder production, notable mango and neem farms (tree crop - source of oil which is a natural insecticide) exist on the Gilbert River in Etheridge Shire, although, on an area basis, hay is the largest crop. The Queensland Government's Water Infrastructure Taskforce is completing an assessment of land potentially suitable for horticultural purposes.

Whilst the prawning industry is worth more than \$ 40 million to the Gulf region, much of the processing and supplies are based around mother ships that work in the Gulf. Hence the dollar return coming directly from this industry into the Gulf is relatively low. However, Karumba is being used as a support centre for the prawning industry as it services a large proportion of the commercial fleet.

Mining is an important industry in the Gulf region's development. The region contains major mineral deposits of great economic importance as well as areas of interest to smaller operations and independent miners. Pasminco has commenced production at Century Mine, which is one of the world's largest zinc and lead mines.

The region's varied geology still provides incentives for the testing of new theories of mineral occurrence. In 1998, the Kidston open cut gold mine in Etheridge Shire produced 6.15 tonnes of gold at a value of \$105 million. The mine employs 353 people, but is expected to cease operation at this site by 2002. Further exploration for gold deposits is presently under way.

Retailing, restaurants, hotels and clubs dominate the small business sector. Growth in tourist visitation numbers will provide numerous retail and other service opportunities. As the road network improves, access to the Gulf will become more convenient and tourist and visitor demand will increase further.

A number of Aboriginal organisations operate a variety of enterprises, including: transport and airline agencies; service stations; plant hire, construction and maintenance; and school tuckshops. The Community Development Employment Programs (CDEP) set out many proposed income generating activities. However, the

level of private enterprise development in most Aboriginal communities is limited.

### ***Regional Communities***

The region extends east from the Northern Territory - Queensland border to include the Shires of Burke, Mornington, Carpentaria, Croydon and Etheridge as well as the Aboriginal Community Council areas of Doomadgee and Kowanyama.

### **Carpentaria Shire**

The largest proportion of the Gulf population resides in Carpentaria Shire (3359 persons counted in 1996). This population is concentrated in the towns of Normanton and Karumba. The balance of the Shire's population resides on rural and remote properties.

Established in 1868, Normanton became the principal port for the Gulf Region. Located at the head of the navigation of the Norman River, Normanton was served by barge. Goods were transported by rail to and from the goldfields at Croydon, 150 kilometres to the east-southeast. With the decline of the goldfields, Normanton also faded as a commercial centre, later to develop prominence as a centre of local government and service provider for the central Gulf. With the completion of the sealing of the Gulf Developmental Road between Normanton and Cairns, considerable opportunities for tourism and trade are likely to be experienced in Normanton and Karumba.

The Normanton area of the Gulf is the traditional country of the Gkuthaarn, Kukatj and Kurtijar people. The initial period of contact coincided with considerable pastoral expansion in the area. The activities of the native police were particularly harsh which largely decimated the original Indigenous population. The survivors and their descendants worked on the surrounding cattle properties or settled in camps on the fringes of Normanton. Two reserves were established, one of which was developed as a town camp. People were gradually resettled into housing in Normanton from the 1960s. Bynoe Corporation was established in the early 1970s. The original reserves were recently handed back to a trust representing traditional and historical interests.

Many Indigenous people also settled in Normanton from other locations, including Mapoon, after the closure of the mission in the early 1960's. The Takalaka people from Croydon also came to live at Normanton. The Indigenous population of Normanton is made up of different traditional and historical groups.

Karumba in the 1930's was a refuelling depot for flying boats. It subsequently developed a reputation as a spirited Gulf town servicing the prawn fleet and was promoted by Ansett as an exciting tourist destination. When the prawning industry shifted operations to the south, the future of Karumba was unclear. Today, the following operations are undertaken through town: live cattle exports; fishing; barramundi restocking; tourism; and the export of Pasminco Century mine product.

### **Doomadgee Aboriginal Community**

The population of Doomadgee (estimated to be over 1000 people) is centred in the Doomadgee Township but current plans are underway to significantly increase outstations on traditional homelands.

The Aboriginal people who came to live at Doomadgee originated from a large area that ran along the Gulf Coast and inland from Borroloola in the west to Burketown in the east. This includes several different tribal groups especially Ganggalida, Waanyi, Garrawa and Yanyula and Minginda. This aggregation of different tribal groups occurred largely due to a voluntary migration from the Northern Territory around the turn of the century.

The first Doomadgee mission was established in 1933 by the Plymouth Brethren at a site on the coast near Bailey Point. Early in 1936 a cyclone destroyed many of the buildings and later that year the mission was shifted to its present site on the Nicholson River.

The mission was established considerably later than other missions in Queensland and by this time the bulk of the population had had long contact with the region's cattle stations and towns.

In the days before Government financial support, the economy of Doomadgee was largely based on the provision of labour to pastoral and other rural industries. Most of the population regularly left the community for periods of employment, sometimes as far as southern Queensland. However with the introduction of the minimum wage and the trend to mechanised cattle mustering, the number of local Aboriginal people employed in the industry declined.

Doomadgee Aboriginal Community Council is a local authority in its own right under the *Community Services (Aborigines) Act*.

The emerging community of Old Doomadgee is close to the site of the original mission. Old Doomadgee is central to Ganggalida country along the coast, and is the focal point for a potentially large population movement from Doomadgee Township. The Ganggalida Aboriginal Corporation was established in 1992 and accepted the transfer of Old Doomadgee Deed of Grant in Trust (DOGIT) in 1994. It also holds title to five pastoral properties along the coast. Existing improvements are limited to the Old Doomadgee outstation site, but a further nine outstations are proposed.

### **Burke Shire**

The majority of the Burke Shire population (677 persons counted in 1996) live in Burketown, with small populations at Gregory and on pastoral stations.

Burketown, established in 1865, is situated at the head of the navigation on the Albert River, the natural dividing line between the northern wetlands and the grasslands to the south. The town is the major service centre for the Burke Shire community and is the entrance to the Western Gulf country and to the Gulf of Carpentaria, 25 kilometres away by boat.

Currently, the main function of the town is as a service centre and also a tourist destination due to its unique history, location and the lifestyle it has to offer.

The town experienced a minor resurgence in 1998 with seven houses being constructed and the Council is constantly looking at new opportunities to ensure this growth continues.

The Burketown area of the Gulf was the traditional country of the Minginda people. In the early part of this century, there were several town camps on the outskirts of Burketown, but many people were progressively removed to Mornington Island, Doomadgee and other missions around Queensland. Today, a sizeable proportion of the town population is Indigenous.

The small township of Gregory is located on the pristine Gregory River 117 kilometres to the south of Burketown. The township became established following the construction of a coach house and changing station on the coach route to Burketown.

The area was a campsite for Aboriginal people in the early part of the century and an Aboriginal reserve was created there in 1936. The Bidunggu Aboriginal Corporation was established in 1992 and accepted the transfer of the Gregory Aboriginal reserve in 1994.

Gregory is currently a small township but is quickly developing as a tourist location and as the "gateway" to the Pasmenco Century mine site, some 65 kilometres to the west. There is also increasing development pressure for residential purposes both in the Council subdivision and development of the outstation at Gregory by the Bidunggu Aboriginal Corporation.

### **Mornington Shire**

The bulk of the Mornington Island population (1114 persons counted in 1996) is concentrated in the township of Gununa; however, there are also communities at outstations and on surrounding islands. Bentinck Island is the largest of these communities with a population of approximately 50 people.

Gununa is a community of over 1000 people located on Mornington Island, which is the largest of 22 islands in the Wellesley Island group. These islands are the traditional county of the Lardil, Yaugkaal and Kaiadilt people.

The Northern Protector of Aborigines first visited Mornington Island in 1901, and a Presbyterian mission was established on the island in 1914. There continues to be strong family ties with Aboriginal people from Doomadgee, Aurukun, Kowanyama and the Burketown area. Mornington Island became a Local Government Authority in 1978 under the *Local Government (Aboriginal Lands) Act*. Mornington Shire is today made up of the 22 islands of the Wellsley group (excluding Sweers Island). There is a strong existing homeland movement with almost 30 established outstations throughout the Shire.

The Kaiadilt people of Bentinck Island lived an isolated existence for many years, even after the development of the town of Carnarvon on Sweers Island in 1867. This isolation largely continued until 1948 when the remaining residents were transferred to Mornington Island mission. Since that time, the Kaiadilt have continued to retain their separate identity while living in neighbouring country. In 1984, the Kaiadilt Aboriginal Corporation was established. Bentinck Island was subsequently transferred over to the Kaiadilt Aboriginal people in 1994 under the *Aboriginal Land Act*. The centre for current development is Raft Point, but there are five outstation sites around the island. Raft Point has a permanent population of 20 to 50 people, and is an emerging community in its own right.

### **Croydon Shire**

Croydon Shire has the smallest population in the region of 316 persons counted in 1996 and this is concentrated in the town of Croydon. The Shire's population is located on rural holdings that are comparatively smaller than in other areas of the Gulf.

Croydon was once the focal point of the Croydon Goldfields and a busy mining town of over 7,000 people in the mid 1890's. The legacy of this bygone era remains today in the form of heritage buildings. Croydon today is a neat and tidy reminder of these times with streets kerbed with original sandstone. The railway line to Normanton, which today carries tourists between the two towns, was built in 1891 to link the goldfields with the port.

Town roads have been sealed, as has the link between Cairns and Croydon. A major new dam near the town has resulted in the creation of Lake Belmore. This has the potential to attract tourists and to provide a wide range of water based recreation opportunities. A stocking program is under way with the recent introduction of Barramundi and Black Bream to its waters.

The Township continues to recapture some of its former vitality with improvements to parks, gardens and general streetscape, and the construction of sports facilities. The Council is committed to restoring and preserving historical machinery, including the reconstruction of a working gold stamper, restoration of the original steam locomotive, and preservation of old vehicles.

The future is being visited also, with the installation of a state of the art telecommunications system providing free to air and pay television signals, radio signals, affordable Internet access, and telephone facilities. As recently as the 1980's residents were required to use the telephone exchange and had to book trunk calls, often with several hours delay. An Economic Development Officer has been contracted to seek opportunities and investors for the Shire.

### **Kowanyama Aboriginal Community**

The Kowanyama Aboriginal Community has a large population base of 912 persons counted in 1996. The population is centred on Kowanyama Township with some outstations, but this number of outstations will grow in the future.

Kowanyama Aboriginal Landholdings consist of the Deed of Grant In Trust (DOGIT) land and the Sefton and Oriners (Helmsley) Pastoral Leases. This area includes the tribal lands of the Koko-bera, Kokomenjen, Kunjen and Koko-Nar people.

The Anglican Church established the mission at Trubanaman around 1904. Around 1917 the mission was moved and became known as the Mitchell River mission. A further Anglican mission was established further north on the Edward River (Pormpuraaw) in 1938. Both communities were almost completely destroyed by cyclone Dora in 1964. The subsequent rebuilding of the two townships coincided with the hand-over from the mission to the Department of Aboriginal and Islander Affairs.

The Kowanyama Aboriginal Community Council is today a progressive local authority that deals with a broad range of issues including community justice, environmental health, Indigenous customary issues, housing and other local government activity. The Kowanyama Land and Natural Resource Management office is widely held to undertake best practice in Indigenous land and natural resource management.

### **Etheridge Shire**

The Etheridge Shire population (1,280 persons counted in 1996) is centred on the communities of Georgetown (300 people), Mt Surprise (65 people), Forsayth (65 people) and Einasleigh (40 people). Like Croydon Shire, Etheridge has a scattered population on relatively small rural properties.

Europeans first explored the Etheridge Shire area in the 1840's and pastoral settlement began in the 1860's. Much of the development of the Shire can be accredited to mining when copper was first discovered in the mid 1860's. Gold rushes followed and saw the settlement of numerous towns, including Georgetown in 1870.

The Etheridge Goldfield was proclaimed in 1872 but it had fluctuating fortunes over the next 30-40 years resulting in decline in the 1920's. However, fresh interest was shown in the 1970/1980's when world prices for gold and other base metals increased dramatically. This saw a resurgence of exploration activity and Kidston Gold Mine commenced production in 1984.

Local Government commenced in the area when the Einasleigh Divisional Board was constituted in the late 1870's. This board became Einasleigh Shire Council in 1902 and later the Etheridge Shire Council in 1919.

## 1.4 THE GULF REGIONAL PLANNING ADVISORY COMMITTEE

The Gulf Regional Development Plan (GRDP) project was initiated in December 1997 with the formation of a Regional Planning Advisory Committee (RPAC) to oversee preparation of the GRDP. The Department of Communication and Information, Local Government, Planning and Sport (DCILGPS) and Gulf Savannah Development (GSD) provide project management for the regional planning project.

The Gulf RPAC comprises 22 members together with an Executive Officer of the Department of Communication and Information, Local Government, Planning and Sport. The composition of the Gulf RPAC is described in Table 1.4.

The Gulf Local Governments and Aboriginal Community Councils each nominated two representatives on the Gulf RPAC.

The four State Government representatives were nominated from the Regional Managers Forums in Townsville and Cairns. State Government agencies based in Mt Isa were represented by the Townsville based delegates as well as the Commonwealth Government representative, who at that time was based in Mt Isa. The Commonwealth Government representative left the region during the planning process and was replaced by a representative from Environment Australia, based in Canberra.

The three Aboriginal Land Councils and ATSIC regions were contacted in writing and requested representatives be nominated. All the ATSIC regions deferred to the Mt Isa Regional Council, which provided the delegate from ATSIC. The Carpentaria Land Council, the North Queensland Land Council, and the Cape York Land Council agreed to representation by a single delegate on a rotating basis.

**Table 1.4: Composition of the Gulf RPAC**

| Stakeholder Group                                    | Number of Delegates |
|--|---------------------|
| Local Government (5 Local Governments)               | 10                  |
| Aboriginal Community Councils (2 Community Councils) | 4                   |
| State Government (2 Regional Managers Forums)        | 4                   |
| Commonwealth Government                              | 1                   |
| ATSIC (3 Regions)                                    | 1                   |
| Aboriginal Land Councils (3 Councils)                | 1                   |
| Gulf Savannah Tourism Organisation                   | 1                   |
| Total  | 22                  |

## 1.5 BACKGROUND PAPERS

The first stage of the planning process was to engage four consultants each to undertake the preparation of a regional strategy paper including:

- Economic Development - John Northage and Associates;
- Community Development - Research Australasia;
- Infrastructure Provision - Gutteridge Haskins and Davey Pty Ltd;
- Environment Protection - Environment North.

The consultants were provided with a list of relevant reports and contacts. A whole of Government meeting was hosted in Cairns for their benefit and they were also taken on a 12-day consultation tour of the region. During this tour, a series of public meetings were held in the Gulf towns, with the exception of the Indigenous communities where individual meetings with key stakeholders were arranged. The consultants met with all the Gulf Local Governments and Aboriginal Community Councils and time was also made available in each town for consultation with key community groups and organisations.

The background papers were finalised and presented to the Gulf RPAC on 30 April 1998. There were mixed results with the four papers and this was primarily due to the fact that the papers were developed without the collection of new data. They were based on existing sources and the work collected during the consultation process. In some areas, such as economic development, there was a wealth of information available. In the environment protection area there were a number of site-specific reports but no real information on broad scale environmental values. The site-specific information was not in a form that allowed for the respective findings to be applied to the wider Gulf region. The papers were also limited by budgetary and time constraints.

The Gulf RPAC made comments on the four papers and the project managers used these comments to integrate the four strategy papers to develop the draft GRDP.

## 1.6 COMMUNITY CONSULTATION ON THE PLAN

The draft GRDP was placed on public exhibition over January and February 1999. A consultant was engaged to undertake consultation in the Gulf Indigenous communities. This included:

- Distribution of a flyer to the key Indigenous stakeholders;
- Meetings in each of the Gulf Indigenous communities with key stakeholder groups and Councils as well as a public meeting on Mornington Island;
- A meeting of the Indigenous representatives on the Gulf RPAC; and
- Consultation and meetings with key Government agencies including ATSIC Mt Isa.

At the same time as the Indigenous consultation process was in progress the project managers undertook the remaining community consultation. This included:

- Public meetings in the Gulf communities with the exception of the Indigenous communities;
- Distribution of a questionnaire as part of the public consultation process;
- Whole of Government meetings in Cairns, Townsville and Mt Isa.

A number of issues arose from the consultation processes. The Gulf communities consider themselves to be over-consulted in relation to issues that affect them. It is felt that they have repeated these same issues on numerous occasions with little or no feedback or outcomes as a result of consultation. As a result GRDP community consultation feedback sheets were developed and distributed to all participants.

## 1.7 OTHER REGIONAL AND LOCAL PLANNING PROCESSES

The following comprises a listing of other regional planning or assessment projects under way in the region.

Wherever possible these studies and processes have been integrated and coordinated into the GRDP. The Implementation Stage (Stage 2) of the GRDP will need to include the outcomes from these projects. Where relevant, strategies and priority actions throughout the GRDP have identified the need for and recommended the review of GRDP strategies in relation to the outcomes of these various planning investigations and reports.

- The **State Infrastructure Plan (SIP)** will predominantly address the economic infrastructure requirements of the State. The SIP will comprise Regional Infrastructure Strategies, which are aimed at aligning infrastructure provision with economic development opportunities in the given region. One such strategy is being developed for the North West Queensland region – there must be close interaction between the GRDP and the SIP to ensure compatibility between strategies and actions relating to infrastructure.
- The **North West Queensland Development Initiative (NWQDI)** is working to identify and evaluate economic opportunities in North West Queensland to build upon the activities of significant mining developments. The initiative has developed through a process of close partnerships between the State Government and private sector; involving 75 people across a number of sectors, identifying ten priority projects to build greater economic and social prosperity.
- The **North West Queensland Community Benefits Strategy** incorporates the Carpentaria/Mt Isa Mineral Provinces Social Impact Assessment project, which under the Century Mine Agreement is required to identify regional issues and concerns, including future social infrastructure and service needs. As the Social Impact Assessment Project is a legal obligation of the Queensland Government in the Century Mine Agreement, it may be strategically important in the future for the implementation of the GRDP to be coordinated with the North West Queensland Community Benefits Strategy.
- The **Multiple Use Strategic Plan (MUSP)** for the Southern Gulf of Carpentaria arose out of the Century Mine Agreement. The MUSP generally focuses on the waters of the Southern Gulf, as well as the broad coastal strip of seasonally inundated wetlands called the Karumba Plains. The MUSP aims to achieve a balanced and sustainable approach to multiple use and development of resources in the region.
- The **Water Infrastructure Planning and Development Study** is investigating water availability and soil suitability in proximity to the Gregory, Einasleigh, Copperfield, Mitchell, Lynd, Flinders, Gilbert and Fitzroy Rivers along with a number of other rivers outside the GRDP region. The initial studies are near completion, and findings indicate significant opportunities to develop irrigation projects west of Georgetown on the Gilbert River and at the O'Connell Creek Storage at Richmond. Initial analysis also indicates that the potential economic benefits of irrigation projects to the local populace could, with careful planning, be at least equivalent to other existing industries such as cattle and mining.

- The **Northern and Southern Gulf Regional Strategy Plans** – these natural resource and biodiversity management strategies are under development by their respective Regional Strategy Groups. These strategies will assist in decision making in regard to regional natural resource management. Once completed, these strategies will have an important role in informing the ongoing implementation of the relevant strategies of the GRDP.
- The **Gulf Regional Sport and Recreation Plan** addresses the need for both regional and local sport and recreation facilities and activities in the region. It also details current provision of sport and recreation opportunities and provides direction for sport and recreation facility development, and services for individual local communities in the region.
- The **Gulf Savannah Integrated Regional Transport Plan** is being prepared by Queensland Transport to provide a broader regional transport network. The IRTP has three stages:
  1. Study to identify transport related issues;
  2. Development of a plan providing high level strategies;
  3. Development of strategies by and for individual agencies and service providers.

Stage 1 of the IRTP has been completed, with considerable work undertaken in collecting data and analysing the transport needs and demands of the Gulf Savannah region. Stage 2 is currently in draft stage, and incorporates the strategies and actions identified by the GRDP. Stage 3 will commence with the completion of Stage 2.

## **2 KEY REGIONAL ISSUES**

The Key Regional Issues confronting the Gulf Region are as follows (in no specific order):

### ***Native Title***

The tenure of the majority of the Gulf region comprises non-exclusive pastoral leases over which native title rights and interests may still exist. The Gulf community recognises that resolution of native title issues is fundamental to the environmental, social and economic future of the region.

Processes that are clearly outside the scope of regional planning will resolve the determination of native title rights and interests. However, there is a need to acknowledge the potential existence of native title rights and interests and to ensure ongoing native title processes and regional planning activities do not conflict.

Although there are several instances in the Gulf of successful coexistence between native title claimants and landowners/leaseholders, the recent history of native title claims is characterised by protracted negotiations, and expensive litigation. There have also been delays to development in the time taken by Government to process native title clearances.

### ***Environment and Natural Resources***

Growth in tourism, industry and associated services is a potential threat to the high conservation values of the Gulf region. The difficulty of managing these issues at a regional level is compounded by:

- a lack of coordination between the different types of conservation and management strategies;
- lack of comprehensive environmental information.

Knowledge of the cultural heritage values of the Gulf region needs to be updated to identify key sites and ensure appropriate management practices are in place. This will assist in the preservation of these areas, and in devising appropriate strategies for managed tourism, which has educational and economic benefits.

The most significant issues in natural resource management in the Gulf region include water quality, control of weeds and pest animals (including an increasing need for increased Customs and quarantine measures), fire management, managing the aspects of development and implementing land management strategies, particularly for larger land holdings. A lack of information hinders the development of control/eradication and management strategies.

### ***Economic Development***

Economic development in the Gulf region is constrained by remoteness and service inadequacies, allowing limited competitive advantage for industry in the region. These constraints contribute to a low level of economic confidence in the Gulf region, and subsequently limit access to financing for industry or enterprise development.

The Port of Karumba presents a considerable competitive advantage for the pastoral industry of the Gulf, with increasing potential for live cattle exports. This opportunity is constrained by unreliable road infrastructure and inadequate port facilities.

Growth in tourist numbers has been, and will continue to be, largely dependant upon access by road network. Future tourism in the region must progress from an emphasis on 'self-reliant' tourists and integrate the different modes of tourist transport - such as bus tours, trains, etc. The Gulf community recognises the significant tourism potential represented by a possible 'Savannah Way' linking Cairns to Darwin.

Future tourism in the region will rely on the availability of a range of infrastructure and services, including water, sewerage and power, telecommunications, health and emergency services. A range of accommodation facilities must also be provided, ranging from serviced facilities to home-stays and camping facilities.

The successful development of an eco-tourism industry in the Gulf is reliant on the provision of the appropriate infrastructure and experiences without becoming over developed or over-commercialised. Most ventures of this kind are associated with National Parks and protected areas, however there is considerable potential for eco-tourism on private lands.

Horse races, rodeos, shows, and fishing competitions are amongst the events conducted in the region that have potential to attract tourists. Investment in marketing and resourcing will be required if such events are to feature as a significant component of Gulf tourism.

The Gulf region contains major mineral deposits and is one of the most prospective mineral provinces in Australia. Whilst mining ventures can have considerable potential value in terms of employment, training, infrastructure and revenue, there is a concern among the Gulf communities that the major long-term benefits of mining are more often experienced externally to the region. There is an opportunity for the Gulf community to work with the mining industry to work together to maximise the benefits of mining to the region.

Retail business in the Gulf services the needs of the resident community, as well as the travelling public and tourists. Given the potential for improved accessibility to the region, and a corresponding growth in tourist numbers, there is a need to stimulate retail business throughout the Gulf.

The Gulf is well situated to take advantage of an earlier cropping season than the east coast. The issues which need to be addressed in order to progress the development of this industry relate to the remoteness of the area (transport costs, distance to markets, availability of infrastructure) and further investigation is required into the effects of irrigation schemes and dams, and the potential impact of pest insects.

The achievement of economic independence for Indigenous communities is constrained by a lack of appropriate skills and training, shortage of capital and the remote location of these communities. The significant potential for Indigenous enterprises - particularly in arts and crafts - requires appropriate market identification and support for industry development.

Little information exists on forestry resources in the region, so the potential for this industry is unknown. Investigation is required to identify appropriate species for timber production, as well as the potential for the native food plant industry.

The potential for extractive industry in the Gulf is limited by the lack of an inventory of quarry resources. The identification of local sources is necessary to avoid the high costs of imported material.

The production of foodstuffs for use within the region has important implications for community well being in terms of reduced cost and increased availability, particularly during the wet season. Any such production will be based upon the management of the targeted natural resources of the region.

Fishing - particularly commercial fishing - will continue to be a significant industry in the Gulf region. Issues include:

- a concern for the long term sustainability of the fishing industry, including the traditional fishery, in the Gulf, and the need to identify sustainable yields; and
- a need to increase the dollar return and associated flow-on benefits from the operation of these industries in the Gulf.

Aquaculture is an option for diversification, but the region's remoteness presents several obstacles, including:

- a lack of appropriate infrastructure and technical support services for an industry which is technology dependant; and
- lack of access to markets.

### **Employment, Education and Training**

While current unemployment prospects in many of the established industries may be limited, there is significant employment potential in mining, construction, tourism, environmental management, cropping and horticulture. There is also potential to provide a local pool of skilled workers for Government jobs. In many instances, local industry employment will be reliant on the availability of necessary skills training which may not be available in the region.

There is limited and often inequitable access to basic schooling in the Gulf region. Some towns don't have primary schools. There are only a few high schools in the region and none of those offer education beyond Year 10.

There are few links between education, training and employment opportunities. There are also few support mechanisms in place for students who wish to further their education.

There is a need to provide the core skills appropriate to the future economic development and subsequent employment needs of the region. This should be provided through existing organisations to avoid duplication.

The Gulf Education, Training and Employment Management Committee (GETEM) has been established with representation from the business, industry, education and training sectors. The challenge is to identify future employers, and promote self-employment training.

### **Community Services**

The respective roles of Government service providers are often not clear, with duplication in some areas and deficiencies in many others. There is a need to clarify these roles, as well as to focus on the delivery of appropriate and coordinated services.

There is a critical shortage of doctors and trained medical staff in the region. This basic problem leads to deficiencies in other related areas, including:

- preventative health care;
- aged health care;
- specialist referrals
- mental health and disabled services;
- substance abuse;
- environmental health.

There are few if any houses for rent in the Gulf towns, and the cost of construction of private housing is extremely high, due to the difficulties associated with remote localities. Additionally, financing is difficult to obtain.

There is a need for a coordinated approach by government and local authorities on housing availability. Maintenance and appropriate design of housing, as well as the provision of crisis accommodation, requires immediate attention.

Gulf communities are reliant upon the Royal Flying Doctor Service, but some of these communities suffer periods of inaccessibility due to the condition of their airstrips. The provision of emergency services in the region is heavily reliant on volunteers, and the availability of adequate telecommunications.

Some communities within the Gulf have no permanent police presence. Police in the region require cross-cultural skills and the support to operate in a remote location. Community policing has the potential to assist in addressing alcohol related crime and substance abuse, as well as domestic violence and abuse.

The lack of sporting and recreational opportunities is a major quality of life issue in the region. Given the generally poor health indicators among the Gulf communities, there is a need to improve sporting and recreation opportunities and infrastructure.

## ***Community Development***

The Gulf communities need to plan for the future in terms of accommodating growth and maximising opportunities for community development. However there is a need to ensure the community roles, lifestyles and presentation are not compromised as a result of that development.

In order to achieve this, Local Governments and Aboriginal Community Councils need to convey the range of values, and the aspirations of the communities they serve to higher levels of Government. In doing so, this will significantly reduce the risk of inadequate or inappropriate policy responses from these higher levels of Government.

The threats and opportunities from future development and growth in the region can be offset by a pro-active planning response, which requires an assessment of the community's needs and values. This is particularly necessary given the diversity of strong cultural associations with the region.

The inaccuracy of existing data and the fluctuating populations in Indigenous communities presents difficulties in planning for provision of services.

The outstation movement, a high priority amongst the Gulf Indigenous communities, has to date not been well coordinated or planned, and has major implications for service providers.

## ***Infrastructure***

Communications provides an important form of access for a region that is subject to extended periods of physical isolation. Despite improved telephone communications in the Gulf, maintenance and repair of telephone lines is a continuing problem owing to their remote location.

Communications are an essential link with outside world and in the case of emergencies they are the only link with basic medical services. Communications also provide enormous potential to conduct business and education via services such as the Internet, but there are concerns that the extension of new technologies may continue to be considered uneconomic.

Power supplies in the Gulf region range from mains power via a grid, package power supplies for towns to remote area supply schemes and individual diesel generators. Power supply in the region is generally inefficient and costly. In order for the region to develop, effective and affordable power supplies will be needed at the domestic level as well as at the business and industry level.

The majority of Gulf communities are serviced by reticulated water, however there are problems with water quality. The future requirements for non-urban uses need to be considered, particularly in relation to the proposed irrigation areas for cropping and horticulture.

Most communities rely on septic systems, which have health risks associated with seasonal flooding. The wet season also has implications for solid waste disposal via landfill. Siting considerations are also an issue.

## ***Transport***

The unsealed condition of several key road links is a critical issue in the Gulf region. Reliable access is a key component to future growth in the region. There are implications for freight, tourism, pricing and availability of foodstuffs, and the general mobility of the community for social, sporting or business purposes.

Due to the unreliability of the road network and the travel distances involved, air transport plays an important role for freight and passenger travel. Affordability is low, and the quality of airstrips is variable. This has cost implications for freight. Access for the RFDS is also a major concern.

Karumba is the only major port in the Southern Gulf and accommodates a fishing fleet as well as export facilities. Given the access problems associated with other forms of transport in the Gulf, there is potential for expansion of passenger and freight movements by barge.

External rail linkages are limited to a tourist train with no freight capacity. Access to rail services outside the region is constrained by poor road linkages. Internal rail services are limited to one tourist train service.

There needs to be greater linkages and integration between transport modes, such as linking compatible services and coordination of timetables.



### **3 2020 VISION**

The regional vision statement is presented under three broad headings relating to economic development, environmental values and quality of life in the Gulf communities.

It provides a conceptual image of what the Gulf region should look like in the year 2020.

#### ***The Gulf Region's Economy***

In the year 2020, the region exhibits a sustainable, broad based and increasingly competitive economy. Economic enterprise is focused on the pastoral, fishing, tourism and mining industries as well as the community services sector including Local Government, Aboriginal Community Councils, health, education and law enforcement. In addition, the emerging new industries of cropping and horticulture, aquaculture, and cultural arts as well as communication and information technology are well established and contribute substantially to the economic base of the region. These industries employ skilled local labour who have taken advantage of regional training opportunities.

The region enjoys a substantially increased economic independence. A cooperative approach has been used to overcome the issues of resourcing and capacity building in regional communities, especially Indigenous communities. Local enterprise and small business produces an increasing proportion of the region's goods and services. The Aboriginal subsistence economy provides a sustainable local source of food, however particular bulk goods are still imported. There is an efficient and cost-competitive freight industry operating from a number of regional and interstate sources. This has considerably improved the range and affordability of goods and services that are available to the Gulf communities.

Karumba has a role as a major economic activity and transportation node for the region. The region's ability to export and import through the Port of Karumba and through Mt Isa, Townsville, Cairns, and the Northern Territory and direct to southern markets via road and rail links has significantly improved since the development and integration of key transportation facilities. While transportation routes continue to be impacted by wet season flooding, state controlled roads are closed only by major flood events and there is decreased closure on other local roads.

#### ***The Gulf Region's Natural Environment and Resources***

In the year 2020, the principles of ecologically sustainable development are accepted and implemented by land managers, stakeholders and the regional community. Populations of endangered and threatened species have been stabilised, threatening processes identified and mitigated with landholders and community, supporting, and active in, recovery programs. There is a coordinated and agreed view of regional conservation priorities and objectives. The environmental quality and the community's various historical, cultural and spiritual values have been integrated and are sustainably managed in accordance with their significance. Environmental management and protection regimes exist over a number of tenures that range from national parks to conservation agreements on private holdings. There are sufficient resources to properly plan for and manage natural areas, including protected areas.

The economic potential of the region's natural resources, particularly land, fisheries and minerals has been realised on a sustainable basis. Best practice natural resource management regimes have been negotiated, agreed and implemented by stakeholders, landowners and resource managers. Degradation caused by pest infestations, particularly rubbervine, has been controlled. There is now a viable industry from the control of feral pigs. The impacts of contamination from past mining practices have also been minimised and contained.

### ***The Gulf Region's Communities***

In the year 2020, the quality of life enjoyed by Gulf communities has improved substantially. All communities in the region have essential infrastructure to meet their needs including potable water supplies, waste and effluent disposal, energy, communications and access to information technology. Social services are available including health, housing, law and order, sport, recreation and access to emergency services. The demands of visitors and tourists on infrastructure and services have been taken into account.

Physical access to and between communities has been improved such that there is a choice of reasonable and affordable means of access within the region and to external service centres.

Gulf townships have developed into vibrant, busy places with facilities, services and amenities that meet the needs of the communities they serve. The quality of development and the amenity of towns and communities have improved dramatically thereby adding to quality of life and community well being.

Community aspirations in terms of employment, training and education have been realised through a coordinated approach by Government, industry and the communities themselves. A regional education and training centre has been established to meet the needs of the community. It caters for a wide range of people regardless of age, background, skill level or experience.

Through capacity building and self-determination in the Indigenous sectors, all regional communities are more able to effectively participate in planning, development and decision making in the region. There is an effective regional focus and understanding which assists communities to work in concert on a cooperative basis. The qualities of tolerance, respect and cultural identity are well established in the minds of Gulf residents.

Native title rights and interests and land tenure issues have been resolved through reconciliation and voluntary negotiated agreements and there is widespread respect for each other's values.

## 4 GUIDING PRINCIPLES

### ***Ecologically Sustainable Development (ESD)***

The sustainability concept recognises that the quality of people's lives and the economy will be undermined if there is a continuation in the degradation or loss of natural biological or resource values.

The *National Strategy for Ecologically Sustainable Development* defines ESD as:

*...using conserving and enhancing the community's resources so the ecological processes, on which life depends, are maintained and the total quality of life now and in the future can be increased.*

Key principles of ESD are ecological sustainability, resource sustainability and social and socio-economic sustainability. The National Strategy for ESD has been adopted as a Guiding Principle for the development of the GRDP. The National Strategy is based on the following goals, objectives and principles:

The National ESD goal is:

*...development that improves the total quality of life, both now and in the future, in a way that maintains the ecological processes on which life depends.*

The three core objectives for ESD are:

- to enhance individual and community well being and welfare by following a path of economic development that safeguards the welfare of future generations;
- to provide for equity within and between generations; and
- to protect biological diversity and maintain essential ecological processes and life support systems.

Seven guiding principles have been derived from the goal and core objectives:

- decision making processes should effectively integrate both long and short term economic, environmental, social and equity considerations;

- where there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.
- the global dimensions of environmental impacts of actions and policies should be recognised and considered;
- the need to develop a strong, growing and diversified economy which can enhance the capacity for environmental protection should be recognised;
- the need to maintain and enhance international competitiveness in an environmentally sound manner should be recognised;
- cost-effective and flexible policy instruments should be adopted, such as improved valuation, pricing and incentive mechanisms; and
- decisions and actions should provide for broad community involvement on issues which affect them.

### ***Social Justice***

- Planning, and development decision-making should be based on the application of social justice principles including:
- *Equity* - a fair distribution of economic resources and political power;
- *Access* - fair and equal access to good quality public services in areas essential to achieving and maintaining a decent lifestyle;
- *Participation* - the opportunity for full participation in social and political life and in decisions which affect people's lives; and
- *Equality* - equality of opportunity without discrimination (the capacity to live without discrimination and to achieve according to potential).
- *Reconciliation* - is a process of gaining mutual understanding and respect and agreeing to take the steps necessary to maintain that understanding into the future. Protocols and mechanisms need to be established to form new relationships between Aboriginal and Torres Strait Islander people and the wider community.



# 5 GOALS

To achieve the vision, the following goals will be pursued. The Regional Goals are set out under a number of headings for ease of presentation. All goals are of equal status and will be applied to decision making as an integrated set rather than individually. The goals will be addressed primarily through the guiding principals, aims and desired outcomes of the corresponding strategies.

## ***Native Title***

To recognise the need to protect and integrate land-holder and native title rights and interests into the regional planning framework, and to facilitate an agreements-based approach to the reconciliation of land rights and interests.

## ***Environmental and Natural Resources***

To ensure the conservation, enhancement and sustainable management of the region's environmental quality, biological diversity, visual amenity, and other natural resources – including cultural heritage and historic values.

## ***Economic Development***

To facilitate and encourage sustainable economic development in order to promote a robust regional economy capable of providing wealth creation and employment opportunities for Gulf communities.

## ***Employment, Education and Training***

To promote opportunities for local job creation in the economic development, community servicing and environmental management of the region and to provide relevant education and training programmes to develop labour skills in these fields.

## ***Community Services***

To provide for the consolidation of the service centre role of established townships in the region and to meet community and social development needs through the coordinated and cost effective provision of social infrastructure and services.

## ***Community Development***

To provide a wide range of activities including social and economic planning, infrastructure planning as well as the negotiation of culturally appropriate planning processes and protocols. This includes strategies for better housing, outstation development, purchase of land and land use agreements as well as better community services.

## ***Infrastructure***

To ensure for the timely and cost effective delivery of communications, energy, water supply, waste disposal infrastructure to meet the needs of Gulf communities.

## ***Integrated Transport***

To provide for the increased reliability, efficiency, safety and affordability of an integrated transportation network.

To recognise the various elements of the network and their interrelationships, and respond to community needs and economic development requirements whilst developing the transportation system in an ecologically sustainable manner.



## **6 NATIVE TITLE STRATEGY**

### *Overview*

The tenure of the majority of the Gulf region comprises non-exclusive pastoral leases over which native title rights and interests may still exist. The Gulf community recognises that resolution of native title issues is fundamental to the environmental, social and economic future of the region. Furthermore, native title issues, with their broad nature, potentially influence all aspects of the regional planning process.

The recent history of native title claims is characterised by protracted negotiations, expensive litigation and delayed development. The Gulf community seeks to avoid such contention and to secure greater certainty for the future of the region.

Processes that are clearly outside the scope of regional planning will resolve the determination of native title rights. However, there is a need to acknowledge the potential existence of native title rights and interests and to ensure ongoing native title processes and regional planning activities do not conflict. Accordingly, the GRDP encourages the future use of an agreements-based approach as a means to reconcile coexisting rights and interests, and as a catalyst for much-needed regional development.

The aims of this strategy are:

- to integrate the regional planning process with ongoing native title processes;
- to facilitate an agreements-based approach to the reconciliation of native title and community rights and interests on a regional scale; and,
- to facilitate an agreements-based approach for future developments, using compulsory acquisition powers only if all reasonable negotiation processes fail.

## 6.1.1 Issues

### **Native Title Concepts**

On 3 June 1992, the High Court of Australia delivered the Mabo judgement, which rejected the concept of *terra nullius* (a land belonging to no-one) and held that native title pre-existed and survived colonisation.

Native title has been defined as the communal group or individual rights and interests of Aboriginal peoples or Torres Strait Islanders in relation to the land or waters, where:

- the rights and interests are possessed under the traditional laws acknowledged, and the traditional customs observed, by the Indigenous peoples; and,
- the Indigenous peoples, by those laws and customs, have a connection with the land or waters; and,
- the rights and interests are recognised by the common law of Australia.

Native title also includes hunting, gathering or fishing.

In accordance with the *Racial Discrimination Act 1975 (Cth)*, native title must be dealt with equally before the law, in the same way as ordinary title.

In 1996, the High Court's Wik judgement determined that native title was not necessarily extinguished on pastoral leases, as had been generally thought. Where leases provide for non-exclusive possession, the rights and interests of all title owners (both Indigenous and non-Indigenous) must be represented in any land dealings.

### **Native Title and the Gulf Region**

The tenure of the majority of the GRDP region comprises non-exclusive pastoral leases over which native title rights and interests may still exist. Several native title claims throughout the area are currently in process.

Whilst rights and interests of native title holders may coexist with pastoral leases in the region, the Wik judgement is clear that if there is any conflict between these rights and interests, the rights of the pastoralist will prevail.

Processes that are clearly outside the scope of the GRDP will resolve the determination of native title rights and interests. However, the GRDP needs to acknowledge the potential existence of native title rights and interests and ensure ongoing native title processes are not undermined by GRDP outcomes.

Planning and decision making processes in the region need to be aware of native title issues and to incorporate appropriate mechanisms to deal with these issues. In order to do this, it is important for the GRDP to consider a range of possible native title rights and interests and how these may affect regional planning. Any future progress on issues relating to native title should be accompanied by extensive public awareness campaigns to "dispel any myths" and ensure that all sections of the community the community are well informed.

### **Native Title Rights and Interests**

Discussion of common law native title principles and the resolution of related issues should proceed on the basis that:

- native title rights and interests are derived from the traditional laws and customs acknowledged and observed by native title holders;
- native title already exists; it is not granted by a court or government - native title processes involve the protection, recognition, suppression or extinguishment of existing rights and interests;
- it is not possible to sell native title - native title rights and interests can only be addressed in accordance with the Commonwealth *Native Title Act 1993*;
- native title is a developing area of law and the content of native title may change over time;
- more than one group may have native title rights and interest in an area;
- the content of native title will vary from area to area, group to group, individual to individual and hence case to case;

- general principles will emerge with greater clarity and detail as more cases are authoritatively resolved.

### **Commonwealth/Queensland Legislative Framework**

In response to the Mabo decision, the *Native Title Act 1993 (Cth)* was enacted in 1993, setting out a framework and procedures for dealing with native title. It was then amended in September 1998 to include provisions that protected native title whilst providing mechanisms to allow future acts, - eg. developments, issuing of permits, leases, etc. - to go ahead.

These provisions included:

- a regime that dealt with future acts;
- confirmation and validation of certain past and intermediate acts;
- Indigenous Land Use Agreements (ILUAs);
- the right to negotiate process.

The Queensland Government has identified the use of Indigenous Land Use Agreements (ILUAs) as the preferred mechanism to resolve native title issues. (ILUAs are discussed further under 'Agreements')

However, in some cases an ILUA may not be the appropriate mechanism, and thus other options under the Commonwealth *Native Title Act 1993* and corresponding State Government Native Title Work Procedures are available to be used, as native title must be addressed prior to each and every land dealing proceeding. Such options include:

- provisions for the doing of future acts for which notification and opportunity to comment is required. These allow certain future acts, eg. the issuing of a permit, to go ahead as long as there has been notification of that act to the relevant native title parties, and an opportunity to comment has been provided before the act is done;
- a non-claimant application by:
  - (a) person who holds a non-native title interest in relation to the whole of the land in relation to which the determination is sought;

- (b) the Commonwealth Minister or the State Minister.

The application is made to the Federal Court, which will then determine whether native title exists over the land or not;

- compulsory acquisition (under a law of the Commonwealth or State) of native title and non-native title rights and interests by the government for the government, eg. to provide an infrastructure facility. The native title parties have the same procedural rights as if they held ordinary title to the particular and surrounding land/ or waters;
- compulsory acquisition (under a law of the Commonwealth or State) of native title and non-native title rights and interests by the government for a third party. The relevant native title parties have the same procedural rights as above. However, before the act is done, they also have the right to be notified, to object, be consulted, be heard, and for a determination to be made by an independent body. (Note: This option will have limited application in Queensland);
- the right to negotiate process (RTN) which requires that the relevant parties negotiate with a view to reaching agreement before the act is done, and provides procedures for that negotiation. If agreement cannot be reached then an arbitral body or a Minister will make a determination. The RTN process applies to certain mining lease renewals, certain conferral of mining rights, and certain compulsory acquisitions of native title rights and interests.

It is important to note that compulsory acquisition of native title rights and interests should only be used as a last resort.

### **Agreements**

The use of agreements between parties is not a new concept. Within the Gulf Region itself there are various examples of formal and informal agreements between property owners and tribal groups. Local Governments and Indigenous Australians

continue to develop local and regional agreements as tools to address issues of access, service delivery, land and other specific local issues and to advance reconciliation in Australian communities.

The Australian Local Government Association has developed a comprehensive kit to assist the negotiation of agreements between local government and Indigenous Australia. The kit, *Working Out Agreements - A practical guide to Agreements between Local Government and Indigenous Australians* has already been used to good effect in local planning processes.

#### Indigenous Land Use Agreements (ILUAs)

The amended Commonwealth *Native Title Act 1993* clarified and strengthened a mechanism for negotiated settlements through the use of Indigenous Land Use Agreements (ILUA) as a means to avoid expensive and protracted litigation. The *Native Title Act 1993* sets out what they will cover and a framework for developing the three different types of ILUAs proposed.

ILUAs are also strongly supported by current State Government policy that seeks to avoid protracted litigation of native title issues in the courts.

Whether they are negotiated before or after a determination of native title, the main benefits of ILUAs are the flexibility of their content, the legal certainty that follows registration and the avoidance of time consuming and expensive litigation.

There are many factors that show the potential flexibility and other benefits of an ILUA. For example:

- an agreement can deal with one land use or multiple uses, it can be part of a package of agreements which operate independently of each other and/or are staged over time;
- an agreement can include as many issues and as many parties as appropriate;
- although the State may not have to be a party to every agreement, there are considerable practical advantages in having the State and/or local government involved in the agreement

(The State must be involved if an ILUA provides for extinguishment);

- the negotiations can be user friendly - the parties can determine what they want to achieve, a time frame within which to negotiate and the way in which they want to negotiate;
- the agreement can provide certainty to participating parties with respect to physical development projects, including time lines, information requirements, protocols, costs and implementation plans;
- there is potential for better ongoing relations and reconciliation between Indigenous people and the wider community; and,
- an agreement is not dependent on, and need not wait for a Court determination of native title.

#### ILUAs in Queensland

The development of ILUAs is a recent initiative in Australia, and there are few examples to be drawn on. In Queensland to date there have been two ILUAs negotiated in Mackay that have been registered with the National Native Title Tribunal.

The Queensland Government's preferred approach in relation to the future management of lands where native title is an issue is through compliance with the Commonwealth *Native Title Act 1993* and comprehensive agreements, negotiated with good will and good faith, by all interested parties.

Accordingly, the State Government has established Native Title Services, a unit within the Department of Premier and Cabinet, which will provide negotiation, historical/anthropological research and communication services to support the successful negotiation of ILUAs.

It is also possible to seek negotiation services through the National Native Title Tribunal and the Commonwealth Attorney-General.

#### Other Agreements

ILUAs, because of the broad scope of matters covered, are the most far-reaching form of agreement that can be secured and then registered with the National Native

Title Tribunal. However there is also scope for other forms of negotiated agreement to replace litigation in other important areas.

The process leading to a native title determination can be negotiated and agreed upon between all of the parties.

Special purpose agreements can include any combination of:

- native title rights and interests
- land use management
- cultural heritage management
- natural resource management
- governance (eg representative bodies, regional boundaries)
- protocols of behaviour
- Indigenous cultural and intellectual property rights
- economic participation and development assessment
- shared State government services (eg training, health)
- service delivery (eg road maintenance, waste management)
- share infrastructure (eg roads, grid power)
- disaster planning
- joint industry ventures
- development control planning for community and homeland sites into a LGA planning scheme.

### **Agreements and the GRDP**

The resolution of native title is beyond the scope of a regional plan, yet native title issues cannot be overlooked or ignored in the GRDP. Native title has far-reaching implications for many of the issues that the GRDP addresses, and many of the actions and other implementation activities proposed by the GRDP will need to take native title into account. There is a need to explore cooperative arrangements and agreements that could be developed by the Gulf community in this regard. It is anticipated that this exploration will assist in establishing an agreed regional position and protocols to facilitate more detailed negotiations, as well as acting as a catalyst for progress on seemingly intractable issues.

The adoption of an agreement-based approach is well suited to a region whose people value a pragmatic, respectful, "common sense" solution that is driven from within the community and not by external interests. All sections of the community are agreed on their desire to avoid the often lengthy, expensive and antagonistic legal alternatives. Resolution of these issues will also contribute to increased certainty regarding the future development of the region.

The parties to any agreement are free to determine its area, scope and content. The area covered can be an entire region, a local government area, a native title claim or an individual pastoral property. The scope of an agreement can also vary significantly. In its simplest sense, an agreement can be a short statement of intent, commitment and respect between all parties.

An umbrella *Native Title Regional Framework Agreement* can define the principles and protocols under which future negotiations may take place - similar to the *Cape York Heads of Agreement*. Negotiations of a more specific nature can only benefit from the establishment of a framework agreement.

The negotiation of agreements is an iterative and long-term process. As a first step under Stage 2 of the GRDP it is proposed to develop a *Native Title Regional Framework Agreement* in order to establish protocols and principles for native title dealings and other issues concerning regional development. This could also provide for more detailed agreements to be developed separately in accordance with this umbrella agreement.

The process of negotiating a *Native Title Regional Framework Agreement* will require involvement of relevant appropriate stakeholder groups, such as traditional owners, Government, and peak industry and environmental groups. In particular, this process will need to resolve a unified community perspective on key regional issues. It is expected that this will go beyond tenure to include social, economic and environmental aspects of regional development, on a wide range of issues such as tourism, infrastructure and service provision.

## 6.1.2 Strategy

### *Desired Strategic Outcomes*

- Recognition and protection of native title and non-native title rights and interests in respect of the regional planning process.
- Agreements reached which reconcile native title and other community rights and interests and integrate these rights and interests with the aims of the GRDP.

- Acknowledge the existence of native title rights and interests in the region.
- Ensure planning and decision-making processes in the region incorporate appropriate mechanisms to acknowledge or deal with native title issues.
- Encourage negotiation to resolve native title issues in order to avoid expensive and time-consuming litigation.
- Encourage the use of agreements to resolve native title issues where appropriate.
- Identify mechanisms which:
  - include native title holders in decision making affecting their interests;
  - provide for the negotiation, protection and management of Indigenous cultural heritage values which may be affected by development or changes in land use.
- Ensure compliance with the Commonwealth *Native Title Act 1993* and use of State Government Native Title Work Procedures.

## 6.1.3 Priority Actions

- Encourage the use of an agreements-based approach to resolve native title rights and interests particularly in respect of resource-based industries.
- Seek funding to investigate a negotiated *Native Title Regional Framework Agreement* to define the principles and protocols for negotiations in respect of native title rights and interests and regional development. This funding must be commensurate with the requirements of facilitating a representative, inclusive and consensual agreement, including promoting public awareness of issues and implications.

# **7 ENVIRONMENT AND NATURAL RESOURCES STRATEGY**

## *Overview*

The Gulf exhibits a diversity of natural environments, including areas of high environmental values of National, State and regional importance. Despite the significance of the natural environment, there has been little assessment or documentation of the various ecosystems in the region.

The majority of the regions' primary industries are dependent on the natural resources of the Gulf. To ensure that economic development is ecologically sustainable, there is a need for increased knowledge of the ecological processes, values and threats.

The region is rich in cultural heritage including historic and cultural artefacts; however, these values are not well documented or managed. There is increasing vandalism and theft and management strategies are needed to protect these assets.

There are a number of land management issues in the region relating mainly to weeds, animal pests, fire and some land use activities. Strategies need to be put in place to address these issues. These strategies need to be developed in consultation with the relevant stakeholders and land managers.

Development pressures in the region arise primarily from mining, tourism and potentially from demand for irrigation for horticulture and cropping. Mechanisms need to be established to ensure land use activities and developments in ecologically sensitive environments have a minimal impact. In the case of the mining industry there is a need to rehabilitate some areas as a result of past activities.

The aims of this Strategy are to:

- initiate the development of a comprehensive and representative protected area estate, based upon an assessment of the natural values of the region and having regard to relevant economic and community impacts and opportunities.
- ensure that protected areas are sustainably managed to preserve their ecological integrity and cultural and recreational values in accordance with provisions of the *Nature Conservation Act*.
- ensure that natural resources are identified, utilised and managed in a coordinated, consultative and ecologically sustainable manner.
- identify, protect and manage natural, cultural and heritage values of significance to the communities.
- ensure that all development is ecologically sustainable and that environmental impacts are identified, minimised and contained.

## 7.1 NATURAL ENVIRONMENT

### 7.1.1 Issues

There is spreading recognition that there is a need for a comprehensive and representative reserve system coupled with a whole-of-landscape approach to land management throughout the region. This system should be identified and developed in consultation with all stakeholder groups including landholders, conservation organisations and Indigenous traditional owners. *The single biggest impediment to initiating these processes is the overall absence of appropriate biophysical information for the region.*

The Environmental Assets Map (following page) indicates the location of National Parks and the various categories of reserve listing. The Australian Heritage Commission defines the categories indicated on the Environmental Assets Map as follows:

- *Indicative:* data provided to or obtained by the Commission has been entered into the database and the place is at some stage in the assessment process. The Commission has not made a decision on whether the place should be entered in the Register
- *Interim List:* the place has been publicly proposed for entry in the Register and the Commission may be awaiting any objections, considering objections or seeking other data before making a decision on whether the place should be entered in the Register proper.
- *Registered:* the place is in the Register of the National Estate. Although some places may be legally registered because they are within a larger registered area they may not necessarily possess intrinsic significance.

#### **National Parks**

With the declaration of the Lawn Hill National Park and the Riversleigh World Heritage Area, conservation values in the Gulf have become more widely recognised. National Parks in the region include: Bulleringa and Staaten River National

Parks which is only partly in the region, Lawn Hill, Mitchell-Alice Rivers, Undara Volcanic and Blackbraes.

National parks in the region total 5,056 square kilometres, which is about 2.7% of the total region.

The protected estate in the Gulf is managed primarily by the State. Some joint management with Indigenous groups, for National Parks made available for claim under the Aboriginal Land Act is becoming more common. The *Nature Conservation Act* allows for the development of management plans for protected areas. Few national parks however, have such plans in place and there are scarce resources for on-going management. Draft management plans for a number of the large national parks are currently being developed. This process needs to be continued to ensure management plans are completed and implemented.

There appears to be a degree of opposition across various sectors of the Gulf community to the declaration of new national parks in the region. This is due to:

- Perceived removal of productive land from the grazing industry;
- A perception that national parks are poorly managed and as such become the source of weeds, animal pests and wildfires;
- Concern over the loss of rate revenue to Local Governments as rural holdings are incorporated into a national park;
- Access is usually via Local Government roads, yet there is no mechanism to recover the costs of road works and maintenance.

**Environmental Assets Map**



Several national parks in the region have greatly increased tourist interest in the Gulf. This often places considerable pressure on scarce Local Government resources, particularly in relation to the maintenance and improvement of access roads. Local Government have difficulty recovering these costs, either from the Queensland Parks and Wildlife Service or from the individual park users (Subsidies are available through the Department of Main Roads' Transport Infrastructure Development Scheme (TIDS)). In the case of Bulleringa National Park there is no public access permitted into the park. This limits tourist traffic but also has the implication of limiting access to the park by local residents.

The financial return to local communities could be increased by the promotion of the wider natural values of the region, with opportunities for provision of facilities on private lands providing eco-tourism experiences in addition to those available on national parks. The development of an eco-tourism industry also requires the provision of infrastructure and services to meet the needs of tourists.

### ***Cooperative Management Arrangements***

Cooperative management arrangements offer an alternative to the gazettal of national parks. The *Nature Conservation Act* provides several ways for landholders to commit themselves formally to protecting wildlife and habitat as an integral part of managing their properties. Landholders have the opportunity to have some or all of their land declared a "nature refuge" or join with others in a "coordinated conservation area". Conditions for managing these areas are set out in a conservation agreement.

A conservation agreement is a contract between the Minister of Environment and the landholder, and outlines the activities that can occur on the nature refuge. The agreement can be for a certain length of time, or it can be permanent and registered on the land title. Nature conservation and future generations will benefit most if agreements are added permanently to land titles.

A nature refuge becomes part of the network of protected areas. The emphasis of conservation agreements is on multiple

use and managing land and resources for a variety of purposes which do not degrade them but lead to long term sustainable and productive use. Ownership of the land remains with the landholders. These arrangements between landholders and the Environment Protection Authority (EPA) do not require landholders to be displaced from their properties.

The National Reserve System (NRS) is a comprehensive national system of protected lands across a range of tenures. The involvement of private landholders requires a commitment to protect and manage the resources of the land in perpetuity. In this regard, the property must become a formal protected area by conservation covenant or a reserve under the *Nature Conservation Act*.

The NRS also makes provision for conservation in Indigenous protected areas. It may include areas of land and water over which Aboriginal and Torres Strait Islanders are custodians. This is to be achieved through assistance to Indigenous people to establish and manage protected areas on their estates for which they hold title. The program promotes the integration of Indigenous ecological and cultural knowledge into contemporary protected area management practices.

### ***Resource Reserves***

A resource reserve is an area protected under the *Nature Conservation Act*. Resource reserves may exist within a national park or other form of protected area. They usually cover mineral deposits or extractive industry resources but may include cultural aspects of past exploration or development activity such as mining towns or camps, plant and machinery. The resource reserves within the region include: Lawn Hill (Arthur Creek), Lawn Hill (Creek), Lawn Hill (Gorge Mouth), Lawn Hill (Stockyard Creek), Lawn Hill (Widdallion), Mount Rosey, Moonstone Hill, Kennedy Rd Gravel Reserve and Blackbraes.

A management plan is formulated for each resource reserve by consultation between the joint trustees of the reserve. Trustees are usually the Environmental Protection Agency (EPA) and the Department of Mines and Energy (DME). The management plans outline procedures to protect and use cultural and natural resources.

Resource reserves may be gazetted in perpetuity or for a specific time period. This allows for exploration and definition of the resource and to propose any subsequent development in line with the management plan. On expiry of the specified time period, the area normally reverts to being part of the surrounding National Park or other protected area.

### ***The National Estate - Natural Areas***

The region also has a number of natural areas listed on the National Estate. Many of these listings are already included in some form of protected area, usually a national park. Natural areas listed on the register of the national estate exhibit some or all of the following values: natural history importance; uncommon, rare or endangered species; and scientific and historical information services.

The areas are identified on the Environmental Asset Map and include:

- Cobbold Creek Gorge/Robertson River;
- Constance Range;
- Fish Hole area at Forsayth;
- Inkerman - Galbraith Area;
- Lawn Hill Gorges and National Park;
- Mitchell River - Nassau River;
- Mitchell and Alice Rivers National Park;
- Nicholson Musselbrook;
- Point Austin Little Tern Site at Normanton;
- Rocky and Manowar Islands;
- South Mitchell River;
- Southern Gulf Plains from Burketown to Karumba;
- Staaten River National Park;
- Undara Crater and Lava Tubes;
- Wenworth/Troutbeck;
- Westmoreland Sandstone Country.

National estate listing by the Australian Heritage Commission requires the Commonwealth Government and its authorities to take note of heritage values but does not affect other users. There is a need to ensure the maintenance of the values of areas listed on the National Estate, particularly for those areas not currently included in some form of protected area. The presence of a natural heritage listing could provide the promotional basis for a nature based tourism venture.

There is a list of cultural and historic places on the register of national estate and this matter is addressed further in the Cultural Heritage section.

### ***Water Resources***

The Gulf is drained by 28 drainage basins, with the majority of streams flowing north and northwest into the Gulf of Carpentaria. While the catchment areas of the drainage systems vary in size the mean annual discharge of streams entering the Gulf account for about 20% of Australia's annual surface run-off.

A number of major tributaries, including the Alice, Palmer, Walsh, Lynd and Tate Rivers discharge into the Gulf via the Mitchell River. The Flinders, Gilbert, Leichhardt, Nicholson, Norman and Staaten basins are also significant regional catchments.

The Gulf region is particularly reliant on the maintenance of its catchment systems and watercourses. The regions water courses provide for a range of natural and economic functions, including habitat and nursery grounds for aquatic organisms, particularly those which support the extensive Gulf fishery and terrestrial organisms and wildlife, water supply for domestic, natural and agricultural purposes, sport, tourism and recreation as well as ecological links and corridors.

There is a need to ensure the values of watercourses and their associated riparian functions are protected. The riparian zone is the area between the low flow level of the watercourse and the highest point of transition between the channel and the flood plain. The role and importance of riparian zones in protecting the health of river systems in terms of habitat, wildlife corridors, bank stability and aesthetics needs to be protected.

In the Gulf region, domestic water supplies are extracted directly from watercourses and opportunities to treat water supplies are only offered within the town areas. Therefore there is a need to ensure water quality is of a standard acceptable for human consumption as well as maintaining in-stream ecology.

Suspended sediment loads pose a major threat to water quality. Management strategies should be on a catchment basis to properly address these issues and should include protection and revegetation of waterway riparian vegetation.

Key sustainability issues for the future use of water resources in the region are:

- excessive use of surface water for irrigation, mining, or even road-building use may lead to reductions in environmental flows, thereby affecting ecosystems;
- extraction of groundwater may result in lowering of water levels, pressure and quality,
- impoundment of surface waters in dams and weirs may diminish environmental flows and modify in-stream habitats,
- irrigation schemes may involve cross-basin transfers and subsequent spread of aquatic pests.

### **Groundwater**

Basement rocks in the Gulf consist of tough, mineralised granitic and/or metamorphic rocks. These rocks outcrop in the east of the region around Georgetown and Croydon. Very few productive groundwater supplies are associated with the rocks. The quality of the water is generally mediocre to poor. Hence there is little development potential for groundwater in these rocks.

Sediments of the Carpentaria Basin underlie the majority of the region. The water from these deep sediments is moderately saline but suitable for the watering of stock. One problem associated with this water can be high fluoride content. Fluoride values of up to 25 mg/L can occur around Croydon. These levels are not suitable for stock water but in many cases no alternative supplies are available.

The Karumba Basin overlies the Carpentaria Basin sequence. It occupies the western side of Cape York Peninsula from Weipa to Normanton. Flowing supplies of groundwater are obtained in the Kowanyama area from depths of about 200 m. This water is of good chemical quality, being low in salinity. Non-flowing supplies are also obtained from this sequence.

The groundwater reserves of alluvial sequences associated with major rivers are under investigation in some areas. The Department of Natural Resources has recently carried out a preliminary investigation of the groundwater reserves associated with the Gilbert River in the vicinity of Georgetown. The Department has also completed a desktop review of the groundwater reserves in the Mitchell River delta.

Small supplies of groundwater are also drawn from dune sequences on the western side of Cape York Peninsula. These supplies are obtained from hand-sunk walls.

Burke, Carpentaria, Croydon and part of Etheridge Shires are proclaimed under the *Water Resources Act*. This means that all bores need to be approved by the Department of Natural Resources. There is a bore rehabilitation program currently under way in the basin, and free flowing bores within this area are systematically being capped. There is an 80% subsidy for rehabilitation works to protect the basin subject to eligibility criteria.

### **Wetlands**

Vegetation and wetlands perform critical functions for protection of the landscape and the ecological integrity of both the land and marine ecosystems. Wetlands are low-lying areas that are regularly inundated by shallow waters. They support ecosystems dependent on their specific flow regime. Wetlands include both freshwater and tidal areas (swamps, mangroves, salt marshes, lagoons). They have high habitat and nursery value for birds, fisheries, aquatic and marine animals as well as terrestrial mammals. Development in the Gulf to date has resulted in limited actual loss of wetland habitat. However a significant threat to wetlands is the spread of aquatic weed species such as *Hymenachne* and *Mimosa pigra*.

A total of 698 wetland sites are recognised in Australia. Twenty of these occur in the Gulf region and are identified on the Environmental Assets Map and include:

- North East Karumba Plain Aggregation;
- Northern Holroyd Plain Aggregation;
- Undara Lava Tubes;
- Lawn Hill Gorge;

- Bluebush Swamp;
- Buffalo Lake Aggregation;
- Dorunda Lakes Area;
- Forsayth Island Wetlands;
- Macaroni Swamp;
- Marless Lagoon Aggregation;
- Mitchell River Fan Aggregation;
- Musselbrook Creek Aggregation;
- Nicholson Delta Aggregation;
- Smithburne - Gilbert Fan Aggregation;
- South East Karumba Plain Aggregation;
- Southern Gulf Aggregation;
- Stranded Fish Lake;
- Wentworth Aggregation;
- Gregory River;
- Langlovale Lakes.

While none of the Gulf wetlands are listed on the Ramsar "List of Wetlands of International Importance", the Southern Gulf Aggregation is a potential nomination. As a signatory to the Ramsar agreement, the Australian Government is obliged to ensure the sustainability of the wetlands in the Gulf region. However, no specific management strategies have been put in place yet. The *Multiple Use Strategic Plan* for the Gulf of Carpentaria Waters is likely to identify a number of issues relating to the management of wetlands, particularly those located on or near the coast or offshore islands.

Carpentaria Shire Council is in the process of facilitating the development and acquisition of an area known as Mutton Hole to be set-aside as a wetland/fish habitat area. The Mutton Hole (approx. 90 km<sup>2</sup> in area) is adjacent to Normanton and is bordered by the Norman River and Wills Creek. It is partly within the Southern Gulf Plains and although not officially listed it is widely recognised as a significant wetland.

### **Fish Habitat Areas**

The *Fisheries Act* protects declared fish habitat areas. The Environmental Assets Map identifies these areas including, the Nassau River, Staaten, - Gilbert Rivers, Morning Inlet-Bynoe River and Eight Mile Creek.

Maintenance and protection of the region's fish habitat areas is critical to the sustainability of the region's fishing industry, marine life and ecology, recreation, tourism and cultural values.

Fish habitats are any areas or ecosystems involved in the life cycle of fish and other marine and freshwater species.

Key fisheries habitats are marine and freshwater wetlands and associated vegetation, watercourses and spawning sites such as sand bars and river mouths.

There are significant areas of seagrass and mangroves around estuaries that provide habitats for terrestrial and marine wildlife. These resources are critical for fisheries habitats.

Although the *Fisheries Act* allows for the preparation of management plans for fish habitat areas, few such plans are in place. Development of future fish habitat areas should include consideration of the need for community and economic infrastructure.

The management of fish habitats needs to be incorporated into existing and developing coastal and catchment management processes.

The *Multiple Use Strategic Plan* for the Gulf of Carpentaria Waters is likely to identify a number of issues relating to the management of fish habitats. The outcomes of the MUSP should be incorporated into this plan.

## **The Coast**

Management of coastal areas should focus on maintaining the natural values and ecological integrity of the coast. There are considerable areas of seagrass and mangroves around estuaries that provide habitats for terrestrial and marine wildlife and they are critical for fisheries habitats. These need to be protected.

The coastal areas of the Gulf are known to have potential acid sulphate soil (PASS) conditions. PASS are soils that, when exposed to oxygen, result in iron sulphide in the soil oxidising to produce sulphuric acid and release of aluminium and other metals. Once oxidation has occurred, the heavy metals are stripped from the soil and pose a threat to water quality in nearby water bodies, rivers and streams. Any major development in the coastal areas of the Gulf should include an assessment of the potential impacts on conservation values in terms of acid sulphate soil conditions.

The preferred management strategy for PASS is to avoid disturbance of these soils, thereby avoiding potential problems. When disturbance is unavoidable, appropriate management processes are required to avoid potential adverse impacts.

To conserve ecological values, recreation, heritage, scenic amenity, ports and fishing activities on the coast, an holistic approach is needed. Areas of significance need to be identified and managed accordingly. In this regard, the Environment Protection Authority has advised that it proposes to prepare a regional coastal management plan for the Gulf of Carpentaria under the *Coastal Protection and Management Act 1995*.

The State Coastal Management Plan, and its subordinate Regional Coastal Management Plans, will describe how Queensland's coastal zone (including catchment areas and coastal waters of the Gulf Region) is to be managed. These plans will have the force of law as statutory instruments – the plans do not remove existing use rights, nor impact on native title rights and interests.

The State and Regional Coastal Management Plans will include coastal management outcomes, principles and policies that all relevant agencies must have regard to in developing plans, assessing applications and making management decisions. While the major focus will be on planning and assessment of new development, the plans will seek to provide for and encourage more effective management of existing development and resources in the Gulf Region coastal zone.

Erosion prone areas, as defined by the *Beach Protection Act 1968*, occur in the GRDP region and, prior to works occurring within these areas, consultation must be undertaken with the Beach Protection Authority.

Carpentaria Shire Council is soon to commence a planning scheme review. This review will ensure the scheme complies with the *Integrated Planning Act*. Part of this scheme will be a coastal strategic plan for Karumba, which is experiencing considerable development pressure. Demand for tourist access, recreation and cultural use of the coast is high. The Port of Karumba is also a key source of development pressure. The Ports Corporation of Queensland has recently completed a Land Use Plan for the Port of Karumba, and will be actively involved in the development of the Coastal Study to be undertaken by Carpentaria Shire Council.

The *Multiple Use Strategic Plan* for the Gulf of Carpentaria Waters is likely to identify a number of issues relative to the management of the coast. The outcomes of the MUSP should be incorporated into this Plan.

### **Fauna of Conservation Significance**

Modern human pressures such as grazing and the spread of pest species have impacted the condition of land based biological communities in the region. As a result, some species are presumed extinct across parts of their former range (e.g. the Western quoll - *Dasyurus geoffroii*). Despite some limited knowledge regarding a few specific losses, little is presently known regarding rare and restricted species within the region, or the extent to which they are threatened.

Some 58 species of marine and terrestrial vertebrate species are thought to be of conservational significance in the region. These are listed in Table 7.1.1(a) (*over*) and of these:

- 1 is extinct;
- 7 are endangered;
- 18 are vulnerable; and
- 32 are rare.

An analysis of the habitats of the threatened terrestrial vertebrate species suggests that:

- woodland is the most valuable habitat in terms of the likely occurrence of rare or threatened fauna with 38% of species recorded from this habitat type;
- approximately 16% of rare or threatened fauna are likely to occur in grasslands and forests; and
- the overall number of rare or threatened fauna recorded from minor habitats (coastal, riparian and vine forest) is high considering their relatively small areas.

**Table 7.1.1 (a): Fauna Of Conservation Significance**

|  |  |
|--|--|
| <b>EXTINCT</b>   |  |
| Western Quoll <i>Dasyurus geoffroii</i> (Woodlands)  |  |
| <b>ENDANGERED</b>  |  |
| Carpentaria Rock Rat <i>Zyomys palatalis</i> (Thickets on Sandstone ranges)                        | Star Finch <i>Neochmia Ruficauda</i> (Grasslands near water)                                 |
| Golden Shouldered Parrot <i>Psephotus chrysopterygius</i> (Woodlands)                              | Olive Ridley Turtle <i>Lepidochelys olivacea</i> (Marine)                                    |
| Red Goshawk <i>Erythroriorchis radiatus</i> (Forests, woodlands)                                   | Loggerhead Turtle <i>Caretta caretta</i> (Marine)  |
| Gouldian Finch <i>Erythrura gouldiae</i> (Savanna woodlands)                                       |  |
| <b>VULNERABLE</b>  |  |
| Lesser Wart-nosed Horseshoe bat <i>Hipposideros stenotis</i> (Diverse habitat)                     | Masked Owl (northern subsp.) <i>Tyto novaehollandiae kimberli</i> (Forests, woodlands)       |
| Orange Horseshoe Bat <i>Rhinonictoris aurantius</i> (Open woodlands)                               | Red-tailed Tropicbird <i>Phaethon rubricauda</i> (Tropical seas)                             |
| Common Sheath-tail Bat <i>Taphozous georgianus</i> (Rocky country)                                 | Little Tern <i>Sterna albifrons</i> (Coastal waters, lakes)                                  |
| Dugong <i>Dugong dugon</i> (Marine)  | Estuarine Crocodile <i>Crocodylus porosus</i> (Marine, waterways)                            |
| Beach Thick-knee <i>Esacus neglectus</i> (Beaches, tidal mudflats)                                 | Flatback Turtle <i>Natator depressus</i> (Marine)  |
| Grey Falcon <i>Falco hypoleucos</i> (Open woodlands)   | Hawksbill Turtle <i>Eretmochelys imbricata</i> (Marine)                                      |
| Purple-crowned Fairy Wren <i>Malurus conronatus macgillivrayi</i> (Thickets fringing watercourses) | Green Turtle <i>Chelonia mydas</i> (Marine)  |
| Yellow Chat <i>Epthianura crocea</i> (Rushes on wetlands)  | Yakka Skink <i>Egemia rugosa</i> (Open woodlands)  |
| Crimson Finch <i>Neochmia phaeton</i> (Tall grass near water)                                      | Red finned blue eye <i>Schaturiginichthys vermeilipinnis</i> (Freshwater streams)            |
| <b>RARE</b>  |  |
| Mareeba Rock Wallaby <i>Petrogale mareeba</i> (Rocky country)                                      | Great Crested Grebe <i>Podiceps cristatus</i> (Wetlands, bays)                               |
| Ghost Bat <i>Macroderma gigas</i> (Diverse habitat)  | Painted Snipe <i>Rostratula benghalensis</i> (Wetlands, open woodlands)                      |
| Pygmy Long-eared Bat <i>Nyctophilus walkeri</i> (Watercourses)                                     | Rajah Shelduck <i>Tadoma radjah</i> (Wetlands, estuaries)                                    |
| Irrawaddy River Dolphin <i>Orcaella brevirostris</i> (Marine, estuaries)                           | Common Death Adder <i>Acanthophis antarcticus</i> (Forests/woodlands)                        |
| Indo-Pacific Humpback Dolphin <i>Sousa chinensis</i> (Marine)                                      | Skink <i>Ctenotus schevilli</i> (Grasslands)   |
| Black-necked Stork <i>Ephippiorhynchus asiaticus</i> (Coastal wetlands)                            | Skink <i>Ctenotus zebrilla</i> (Open woodlands)  |
| Sooty Oystercatcher <i>Haematopus fuliginosus</i> (Beaches, tidal mudflats)                        | Skink <i>Lerista ameles</i> (Woodlands)  |
| Square-tailed Kite <i>Lophictinia isura</i> (Forests, woodlands)                                   | Skink <i>Lerista Karlschmidti</i> (Forest, woodlands)  |
| Carpentarian Grasswren <i>Amytomis dorotheae</i> (Spinifex, woodlands)                             | Skink <i>Lerista Storri</i> (Woodlands)  |
| Zitting Cisticola <i>Cisticola juncidis</i> (Tall grass on coastal plains)                         | Sea Snake <i>Hydrophis belcheri</i> (Marine)   |
| Ground Cuckoo Shrike <i>Coracina maxima</i> (Open grasslands)                                      | Sea Snake <i>Hydrophis atriceps</i> (Marine)   |
| Painted Honeyeater <i>Grantiella picta</i> (Forests, woodlands)                                    | Fierce Snake (western taipan) <i>Oxyuranus microlepidotus</i> (Open grasslands, floodplains) |
| Black-chinned Honeyeater <i>Melithreptus gularis</i> (Forests, woodlands)                          | Collett's Snake <i>Pseudechis colletti</i> (Open grasslands)                                 |
| Pictorella Mannikin <i>Lonchura punctulata</i> (Grasslands near water)                             | <i>Ramphotyphlops broomi</i> (unnamed blind snake) (Woodlands)                               |
| Rufous Owl (southern subsp.) <i>Ninox rufa queenslandica</i> (Vine forests, woodlands)             | <i>Simoselaps warro</i> (unnamed striped or banded snake) (Forest, woodlands)                |
| Eastern Curlew <i>Numenius madagascariensis</i> (Estuaries, tidal mudflats)                        | Rusty Monitor <i>Varanus semiremex</i> (Mangroves)   |
| <b>COMMON</b>  |  |
| Echidna <i>Tachyglossus aculeatus</i> (Forest, woodlands, grasslands)                              | Koala <i>Phascolarctus cinereus</i> (see note below) (Forest, woodlands)                     |

**Source:** Environment North (1998)

Notes: Common names listed where available;

*Phascolarctus cinereus audustus* is considered by the EPA to be endangered (M. Trenerry pers. Comm.).

The Southern Gulf Plains are the subject of two international migratory bird agreements between Australia and China (CAMBA) and Australia and Japan (JAMBA). The various bird species included in these agreements, are:

- Mongolian Plover (*Charadrius mongolus*)
- Great Knot (*Calidris tenuirostris*)
- Large Sand Plover (*Charadrius leschenaultii*)
- Sanderling (*Calidris alba*)
- Lesser Golden Plover (*Pluvialis dominica*)
- Broad billed Sandpiper (*Limicola falcinellus*)
- Grey Plover (*Pluvialis squatarola*)
- Marsh Sandpiper (*Tringa stagnatilis*)
- Ruddy Turnstone (*Arenaria interpres*)
- Common Greenshank (*Tringa nebularia*)
- Red necked Stint (*Calidris canutus*)
- Grey-tailed Tattler (*Tringa brevipes*)
- Curlew Sandpiper (*Calidris ferruginea*)
- Common Sandpiper (*Tringa hypoleucos*)
- Red Knot (*Calidris canutus*)
- Terek Sandpiper (*Tringa terek*)

Under the conditions of the treaties, there is a general obligation for the Australian Government to manage and protect birds that are in danger of extinction. This includes the management of their environment. While action has been taken to include the Southern Gulf Plains on the Register of the National Estate, no management strategies are known to exist. However, a Regional Coastal Plan under the Coastal Protection and Management Act will identify significant coastal resources, tenure and mining intent for the Southern Gulf Plains.

### **Flora of Conservation Significance**

There are 71 species of protected plants that have been identified as occurring in the Gulf region. These are listed in Table 7.1.1(b) (over) and include:

- 9 species considered vulnerable under the *Nature Conservation Act*;
- 35 species considered rare under the *Nature Conservation Act*;
- 12 species considered common but protected (species subject to commercial exploitation) by the *Nature Conservation Act*; and

- 14 species considered provisionally threatened by the Queensland Herbarium.

Most of these species occur in grasslands and woodlands, but due to the absence of detailed vegetation mapping it is not possible to state in which specific types of vegetation communities or associations these species may be expected to occur.

Based on existing known occurrence, the species appear concentrated in the Einasleigh Uplands and in the North West Highland. It must be stated, however, that the areal extent of most of these plants remains unknown.

**Table 7.1.1 (b): Flora Of Conservation Significance**

| <b>VULNERABLE PLANTS</b>  |                            |  |   |
|---------------------------|----------------------------|--|---|
| Chamaesyce carissoides    | Acacia guymeri             | Solanum carduiforme                    | Acacia crombiei                         |
| Tephrosia leveillei       | Acacia ramiflora           | Cycas cairnsiana                       | Ectrosia blakei                         |
| Cycas platyphylla         |                            |  |   |
| <b>RARE PLANTS</b>        |                            |  |   |
| Grevillea singuliflora    | Dodonaea oxyptera          | Brachychiton collinus                  | Argyrea queenslandica                   |
| Alectroyon tropicus       | Wrightia versicolor        | Cycas brunnea                          | Ipomeoa antonschmidii                   |
| Atalaya calcicola         | Brachychiton albidus       | Cycas couttsiana                       | Ipomeoa saintronanensis                 |
| Trianthea rhynchocalyptra | Rhamphicarpa australiensis | Aponogeton queenslandicus              | Eucalyptus pachycalyx subsp. Pachycalyx |
| Trachymene glandulosa     | Aponogeton elongatus       | Peripleura sericea                     | Eucalyptus hoowittiana                  |
| Labichea brassii          | Fimbristylis vagans        | Vallisneria nana                       | Phyllodium pulchellum                   |
| Lobelia douglasiana       | Desmodium macrocarpum      | Acacia armitii                         | Sesbania erubescens                     |
| Lepturus xerophilus       | Acacia meiosperma          | Acacia jackesiana                      | Myriophyllum implicatum                 |
| Leptospermum pallidum     | Corymbia gilbertensis      | Acacia longipedunculata                |   |
| <b>COMMON PLANTS</b>      |                            |  |   |
| Cymbidium madidum         | Cymbidium canaliculatum    | Xanthorrhoea johnsonii                 | Dockrillia linguiformis                 |
| Dendrobium trilamellatum  | Dockrillia mortii          | Davallia denticulata var. Dennticulata | Banksia aquilonia                       |
| Dockrillia bowmanii       | Sarcophilus minutiflos     | Dicranopteris linearis                 | Platyserium veitchii                    |
| <b>PROVISIONAL PLANTS</b> |                            |  |   |
| Fimbristylis carolinii    | Lamprolobium grandiflorum  | Lepturus sp. (M. Godwin C2576)         | Eragrostiella bifaria var. Bifaria      |
| Fimbristylis distincta    | Goodenia heteroptera       | Oldenlandia spathulata                 | Cycas desolata                          |
| Fimbristylis micans       | Goodenia stirlingii        | Drummondita calida                     | Keraudrenia adenolasia                  |
| Fimbristylis odontocarpa  | Santalum lanceolatum       |  |   |

**Source:** Environment North (1998) (Note: Common names listed where available)

### **Threatened Regional Ecosystems**

The following assessment of threatened regional ecosystems has been undertaken for each of the biogeographic regions (as defined by Thackway and Cresswell 1995). The assessment of the conservation status of each regional ecosystem is based on:

- occurrence of ecosystem (i.e. some ecosystems are of restricted occurrence);
- loss of ecosystem due to European settlement; and
- extent of threatening processes that continue to degrade the ecosystem.

Two levels of conservation status have been recognised for ecosystems occurring in the region. These are:

- Endangered - which means that less than 5% of pre-European extent of the ecosystem remains in intact condition; and
- Of Concern - which means that 10-30% of pre-European extent of the ecosystem remains in intact condition.

From this, eleven critical regional ecosystems are considered to be endangered. These are:

- Vine forest/thicket ecosystem - 1
- Eucalypt woodland/forest ecosystems - 5
- Acacia woodland ecosystem - 1
- Riparian woodland/forest ecosystems - 2
- Freshwater wetland ecosystem 1
- Ecosystem based on natural springs 1

A further 54 regional ecosystems can be considered to be of concern which implies that these are of local or greater significance. These are summarised in Table 7.1.1(c). From the Table it would appear that woodland ecosystems have the highest number of threatened communities across the region. Freshwater ecosystems are the next most threatened community but are mostly restricted to the Gulf Plains bioregion. The Gulf Plains bioregion has the highest number of threatened ecosystems (25) whilst the Cape York Peninsula bioregion has the lowest (1).

**Table 7.1.1 (c): Regional Ecosystems of Concern**

| ECOSYSTEMS               | NUMBERS OF ECOSYSTEMS OF CONCERN IN EACH BIOREGION |                    |             |                      |       |
|--------------------------|--|--------------------|-------------|----------------------|-------|
|                          | Cape York Peninsula                                | Einasleigh Uplands | Gulf Plains | North West Highlands | Total |
| Littoral zone            | 1  |                    | 2           |                      | 3     |
| Vine forest/thicket      |  | 4                  | 1           |                      | 5     |
| Woodlands                |  | 7                  | 11          | 11                   | 29    |
| Riparian woodland forest |  | 2                  | 2           | 1                    | 5     |
| Freshwater wetlands      |  | 2                  | 9           | 1                    | 12    |
| Total                    | 1  | 15                 | 25          | 13                   | 54    |

**Source:** Unpublished assessment of the conservation status of Queensland's regional ecosystems by the Department of Environment.

The areal extent of these threatened ecosystems is impossible to determine, as they have not been accurately mapped. The extent and floristic composition of the ecosystems recognised in the region are, in general, extremely poorly known.

The determination of regional ecosystems and land systems for most of the region has been from synoptic vegetation assessments of the 1950s and 1960s that were undertaken at the 1:1,000,000 or greater scale. Despite the fact that the location of the various ecosystems can be obtained from the 1:1,000,000 maps, there is a strong need to upgrade the level of vegetation assessment in the region to 1:250,000. This would provide more accurate data on ecosystem distribution, conservation status and therefore management priorities. Such an assessment would also provide better baseline data on individual species occurrence, including those of conservation significance.

A systematic resource inventory to document environmental values, biodiversity and threats should be a priority action to ensure any development decisions are based on a sound understanding and knowledge of these values. There is also a need for a strategy to reduce environmental threats.

### **A Regional Approach**

In the Gulf region, various initiatives with conservation components are in place or are under consideration, including:

- national park management plans

- coastal management plans
- fish habitat areas
- Landcare projects
- natural resources management plans
- cultural conservation programs
- property management plans
- Local Government planning schemes, and
- environmental management plans for resource projects and infrastructure developments.

All of these have been formulated with at least the partial purpose of achieving conservation outcomes as part of an overall commitment to a healthy environment. However, coordination of these initiatives is lacking, both operationally and strategically, and effectiveness is likely to suffer as a result.

For the purposes of the Natural Heritage Trust (NHT), Queensland has been divided into 12 bioregions. These should not be confused with the biogeographic regions defined by Thackway and Cresswell in 1995. They are based on:

- a catchment or catchments,
- a land or vegetation type, or
- a socio-economic group within which sustainable management requires an integrated approach across a range of issues.

Planning on a bioregional basis enables all of the inter-related processes within a specific natural area or ecosystem to be considered with respect to each other. Under the NHT classification, there are two bioregions in the Gulf:

- the Northern Gulf; and
- the Southern Gulf.

Two Regional Strategy Groups (RSG) have been established for both of these bioregions. The role of these groups is to produce strategies for the management and protection of the bioregions. Supporting this process at the catchment level, are catchment co-ordinating and Landcare groups. Strategies are expected to incorporate the following topics:

- relevant State and National agreements and legislation,
- existing programs and activities aimed at improving environment and natural resource management within the region,
- any statutory plans or strategies which contain natural resource management components; and
- existing regionally-based activities which have a statutory basis.

An implementation plan is required for each strategy and this should contain a series of action plans to address the issues identified in the Regional Strategy.

The cooperation and commitment between the Regional Strategy Groups, Integrated Catchment Management and Landcare groups, local government, agencies, industry groups and other stakeholders must be encouraged. The outcomes of processes such as the Regional Strategies must be integrated into the implementation of the GRDP.

As previously stated, the greatest impediment to successful development and ongoing monitoring of management strategies and the like is the overall absence of comprehensive and appropriate biophysical data.

There is considerable work that could be undertaken on a coordinated and cooperative basis to improve the knowledge base of conservation values in the region. This would include:

- mapping of terrestrial ecosystems including wetlands
- mapping of vegetation with a priority being given to the Einasleigh Uplands and the North West Highlands
- surveying fauna and threatening processes with a focus on terrestrial fauna, freshwater fish diversity and areas for rare and threatened species

- obtaining baseline data on the condition and quality of the Gulf ecosystems
- assessing geological resource values
- obtain baseline data on the condition of watercourses in the Gulf including water quality and quantity.
- Vegetation Mapping of Gulf Plains and Mitchell Grass Plains.

## 7.1.2 Strategy

### *Desired Strategic Outcomes*

- An integrated and coordinated approach to the identification, protection and management of the natural environment of the region consistent with its regional conservation significance and values.
- A comprehensive and representative reserve system reflecting the conservation significance and environmental values of the region.
- The consideration of ecological, economic and social impacts and opportunities in the extension of the protected area estate.
- A systematic and comprehensive resource inventory of regional environmental values, biodiversity and ecological threats.

- Improve the knowledge base of the region's environmental values, biodiversity and ecological threats.
- Develop and implement a comprehensive and representative reserve system, including areas subject to co-operative and voluntary agreements, reflective of the conservation significance and environmental values of the region.
- Develop and implement a coordinated approach to the management and protection of the region's environmental values, biodiversity and ecological threats by all levels of Government, landholders and the community.
- Ensure the impacts and opportunities of extending the protected area estate are assessed in terms of economic, social and ecological implications.
- Improve the management of protected areas commensurate with the values to be protected.
- Ensure development in coastal areas is sustainable and consistent with preserving the values of the coast and minimises the disturbance of acid sulphate soils.
- Ensure water quality impacts from mining operations are managed in accordance with EPA requirements.

### 7.1.3 Priority Actions

- Review the priority actions of this Strategy in relation to the recommendations that arise from the completion of the following strategies:
  - The Northern Gulf Regional Strategy;
  - The Southern Gulf Regional Strategy;
  - The Multiple Use Strategic Plan;
  - The Regional Coastal Management Plan.
- Undertake a systematic resource inventory of the region's environmental values, biodiversity and ecological threats at a scale that allows meaningful identification of ecosystems and habitat of conservation significance.
- Develop, in consultation with all stakeholders and land managers, a comprehensive and representative reserve system in the protected area estate.
- Review Local Government and Aboriginal Community Council plans to incorporate measures conserving regional environmental assets in accordance with their significance.
- Develop a comprehensive and representative system of areas under co-operative and voluntary agreements to compliment the protected area reserve system.

- Develop mechanisms to identify opportunities and assess the impact of extending the protected area estate prior to the declaration of Natural Parks.
- Develop mechanisms for social, economic and ecological impact assessment as well as the identification of opportunities for consideration in the extension of the protected area estate and in particular in the declaration of national parks.
- Initiate Management Plans for all the Gulf national parks that address social, economic and ecological issues within and related to each national park including the cultural, recreation and tourist demands.
- Explore options for cost recovery by Local Government for infrastructure and servicing of access to these protected areas.
- Investigate possible extensions to existing fish habitat areas and/or declaration of new fish habitat areas.
- Prepare and implement Regional Coastal Management Plans as provided under the *Coastal Protection and Management Act*.
- Obtain better on-ground management resources for protected areas including local officers with powers under relevant legislation.

## 7.2 CULTURAL HERITAGE

### 7.2.1 Issues

#### ***Cultural Heritage, Landscapes and Seascapes***

Cultural heritage places landscapes and seascapes are those built or natural places that are important to the community, or sections of the community, because of their cultural significance and meaning. This cultural significance may be social, historical, spiritual, aesthetic, architectural or archaeological.

Cultural heritage includes a range of areas and periods from ancient to the contemporary. It may be tangible or lifestyle related, small and local or on a landscape scale. The region's communities identify with, and have a long spiritual, physical and cultural association with, elements of the regions' landscapes, seascapes and natural environments.

Important areas for Indigenous cultural heritage are likely to be found along riverine corridors that may include habitation sites, and rock art sites, especially in areas of sandstone and granite. In the black soil plains areas, sites are generally located around water holes, particularly those that are more permanent.

Although for Indigenous people, areas, places and items of cultural heritage significance are often important manifestations of their native title rights and interests, native title and cultural heritage are not the same. Cultural heritage values are not dependent on tenure and may exist on freehold, pastoral and other forms of tenure. Cultural heritage can still exist even if native title has been extinguished. However, the existence of cultural heritage values in land does not mean that native title exists or that Indigenous people will claim it.

There are 15 Indigenous sites on the Register of the National Estate listed at Burketown, Dajarra, Doomadgee, Mornington, the Monument and Timberoo Station. For reasons of cultural sensitivity the locations and specific details of these sites will not be disclosed. The actual number of sites recorded is most probably a consequence of research effort and should not be taken as implying that these areas are particularly important or that other areas are not.

Cultural heritage places are important to communities and their sense of identity for present and future generations. They need to be identified and preserved and managed according to their significance. There may be a strong reluctance on the part of some Indigenous communities to the identification and mapping of cultural heritage sites, leading to public knowledge of their whereabouts.

Because of cultural sensitivities surrounding knowledge of cultural heritage values in the region, it is unlikely there will be any systematic survey or documentation of significant values or sites. However, processes can be established including current best practice in the field of cultural heritage management, including community consultation, data management, site assessment and management strategies in order to protect cultural heritage values on a case-by-case basis. These mechanisms can assist to identify and protect cultural heritage values in any situation where there is a change of land use/or potential for impact on cultural heritage places.

The key to proper management and protection of cultural heritage values and places is the involvement of and consultation with communities.

The Queensland Government has recognised that current Queensland legislation does not provide effectively for the appropriate protection of cultural heritage. In addition, sections of the Gulf community hold the view that the current legislation does not provide a workable process for the consideration of cultural heritage values in the context of land use. A legislative review is currently underway incorporating public submissions.

Matters that may be addressed by this new legislation include:

- work procedures for the protection of cultural heritage in the changing of existing land use, for example mining and infrastructure development;
- establishment of regional and local cultural heritage committees;
- mechanisms for identifying which Indigenous people may speak for which areas of the country;
- appropriate protocols for discussions with people who speak for the country; the effective conservation of 'areas' of cultural heritage value, where values may be less tangible than those for discrete 'sites';
- partnerships for cultural heritage conservation between communities and government;
- processes for managing cultural information which is of a secret or sacred nature;
- incentives for land users and Indigenous people to enter into voluntary heritage agreements; and
- provisions for intellectual and cultural property rights.

### **Historic Buildings and Places**

Historic sites on the Register of the National Estate for the Gulf include the:

- Croydon Courthouse, Croydon - Registered
- Homeward Bound Mine Battery Dam, Croydon - Registered
- Kidston Gold Battery - Registered
- Normanton-Croydon Railway system, Normanton - Registered
- Station Masters residence, Forsyth - Registered
- Boiling Down Works Site, Truganini Rd, Burketown - Registered
- Burketown Post Office & Residence, Musgrave St, Burketown - Registered
- Normanton Railway Terminus, Railway Reserve, Normanton, - Registered
- Westpac Bank, Landsborough St, Normanton - Registered

An application has been made for the Chinese Temple site at Croydon to be included on the register. In addition, application has also been made to include the Normanton Gaol on the register.

The Department of Mines and Energy, in conjunction with the Environmental Protection Agency, has undertaken considerable work in identifying mining heritage sites across the State. In the Gulf region, this includes:

- 3&4 South Golden Gate (Duffy's) Mine & Mill site;
- Content Mine;
- Cumberland Chimney, Battery & Cyanide Works, Tramway & Mine;
- Croydon Consols Mine Site, Pump Shaft & Mill Site (Richardson's) at Golden Gate;
- Croydon Quartz Crushing Company Cyanide Works & Tramway Sites;
- Daintree Mine;
- Enterprise Mill & Cyanide Plant Site at Golden Gate;
- Durham Mine;
- Federation Mill Site – Table Top;
- Forsythe's Mill Site;
- Golden Valley Mill Site;
- Havelock Mine, Switchback Railway & Battery Site;
- Homeward Bound Dam & Mill Site;
- Iguana Consols Site, Croydon;
- Jubilee Consols Mill Site, Twelve Mile;
- Kidston State Battery;
- Morgan's Shaft at Golden Gate;
- Perseverance Mill Site, Twelve Mile;
- Roger's No.1, Golden Gate;
- Stanhill's Tin Battery Site;
- True Blue Block Mine.

Other areas with known historic values in the Gulf region include:

- the dry stone dam wall near Croydon,
- the Agate Creek gem fields,
- the Cumberland Chimney,
- the 'Ant Bed' House, Georgetown;
- the 'old bore' at Burketown.

The Gulf communities have expressed a strong desire to protect areas of historic value and to promote this as one of the key focuses of tourism for the region. The **Economic Development Strategy** addresses this matter.

### ***Cultural Artefacts***

There is also a desire to protect cultural artefacts that are widespread throughout the region. However, there are some concerns over appropriate management regimes, including cultural sensitivities, and incidences of theft and vandalism. While there is recognition of the need to identify, protect and manage the regions' cultural heritage, there is also concern that private property rights will be restricted and land uses curtailed.

## 7.2.2 Strategy

### *Desired Strategic Outcomes*

- The identification, protection and management of cultural heritage throughout the region commensurate with values and community expectations.
- The protection and enhancement of historic buildings and places in the region.
- The protection and management of cultural materials and areas.

- Initiate a register of accessible cultural and heritage sites.
- Ensure the cultural sensitivities surrounding the identification and management and protection of cultural and heritage values.
- Initiate appropriate management of Indigenous cultural heritage by Indigenous people.
- Protect the historic buildings and places of national, state and regional significance and explore options to promote restoration and use.
- Initiate appropriate management strategies to protect cultural artefacts on private lands and where appropriate promote controlled public access to these areas.

### 7.2.3 Priority Actions

- Investigate the extent of cultural heritage values in the region with a view to sensitive management of areas under threat.
- Develop Mechanisms to empower Indigenous groups and interests to identify, manage and protect their cultural heritage values.
- Explore options to avoid public disclosures of culturally sensitive areas and values that could be threatened by visitor impact.
- Explore options to promote voluntary agreements between all landholders and users to protect and manage areas of cultural significance and value.
- Review and develop Local Government and Aboriginal Community Council plans to incorporate measures to identify and protect cultural heritage values particularly where there is a change of land use or potential impact from proposed development.

## 7.3 NATURAL RESOURCE MANAGEMENT

### 7.3.1 Issues

The region's natural resources include the land, which comprises soils, minerals, flora, fauna and ecosystems. The water resources include watercourses and their associated riparian zones, wetlands, groundwater systems and the coastal intertidal and marine ecosystems.

Air quality is also a key natural resource. In the Gulf regions, impacts on air quality are caused primarily by fire and dust storms. There are no intensive urban or industrial sources of air pollution.

The land and water resources of the Gulf are threatened in two key ways:

- Impacts of current land uses which include grazing, mining, fishing and tourism activities: and
- Impacts of new developments

A key issue for the region is to sustain the economic use of its natural resources so as not to threaten ecological, environmental, social and cultural values. Without appropriate management, economic use of land and resources can result in pollution, land degradation, ecological damage and/or loss of cultural and amenity values. These effects are indications that the activity is not ecologically sustainable. The following sections identify the key threats to land and water resources:

#### **Mining**

Mining activities generally occupy small areas of land but result in high, localised environmental impacts. There are two key issues relating to mining:

- containment and minimisation of impacts during and after mine operations; and
- rehabilitation and amelioration once mine operations have ceased.

Pollution generated by past mining operations constitutes a significant environmental problem in terms of water quality. The most serious concerns emanate from the Croydon area that contains old mines, tailings dams, open pits and collapsed mine shafts. Known effects include significant acid production with correspondingly low values of pH, and high levels of heavy metals particularly cadmium, lead, copper and aluminium.

While water quality testing undertaken to date suggests that the extent of influence is limited to about 30 km from the old mines, no comprehensive studies have confirmed this. There are fears that the effects could be far more widespread and that pollution could affect public health and the Gulf fishery. Action needs to be taken to both confirm the extent of the problem and to undertake the necessary remediation works.

Some remediation work to decommission waste dumps and open pits has resulted in a substantial improvement since rehabilitation efforts began in 1996/97. It is estimated that the total cost of remediation for the mine sites could exceed \$10 million.

The following sites are of most concern:

- Federation Pit. - Significant acid production and high levels of heavy metals, particularly cadmium, as well as elevated lead, copper and aluminium levels exceed ANZECC (1992) water quality guidelines. Runoff enters Federation Creek, Tabletop Creek and the Carron River. Testing reveals that high cadmium levels persist for more than 8 km downstream in Tabletop Creek. The pH of the water has been measured at 3.3 in Federation Pit, increasing to just 4.1 at a point 8km downstream.

- Glencoe Pit - Concerns relate to elevated cadmium, aluminium and zinc levels. Furthest sampling point (located 2.5 km downstream on Dead Horse Creek) indicates that cadmium levels are six times greater than ANZECC guidelines for stock water. The pH of the water leaving the pit has been measured at 3.8 increasing to just 4.0 some 2.5 km downstream.
- Golden Gate Tailings Dam - Poned water in the tailings dam is highly acidic (pH 2.8). The water also contains very high levels of cadmium, copper, zinc, sulphates and aluminium. Surface water runs into an old shaft/well. The presence of lead indicates seepage from elsewhere in the dam. While surface flow is at background levels by 1.5 km downstream, groundwater remains at risk of contamination.

Long-term strategies are being developed and implemented to rehabilitate and manage these disused mines. The community can take on a monitoring role, providing assistance to Government agencies or industry groups. This may assist in overcoming the perception of vested interest. The Commonwealth Government's Waterwatch Programme has been very popular nationally and can provide community groups including Indigenous, school and others with the equipment and training to undertake independent water quality assessment in freshwater streams, groundwater and estuarine areas.

Mining ventures will continue to be subject to stringent environmental impact assessment procedures and environmental management and remediation requirements. There is a need to ensure these regulations are enforced and are adhered to.

Existing and future mining activity is of importance to the region in terms of employment, training, infrastructure and revenue. Known mineral, petroleum and extractive resources should be identified and protected as appropriate to prevent alienation by the encroachment of incompatible land uses.

### **Tourism**

It is anticipated tourism will continue to be a growth industry in the region and this growth may lead to a number of impacts including:

- overloading of domestic sewerage, water and waste disposal facilities;
- land degradation associated with unrestricted four wheel drive access;
- public health issues associated with large influxes of tourists for events such as the Gregory River canoe races;
- litter and contamination of waterways, killing stock, clearing, weed dispersal, general nuisance, disturbance of sites of cultural or spiritual significance;
- excessive recreational fishing catches and the lack of bag limit enforcement; and
- spread of fire.

There is increasing pollution of watercourses due to uncontrolled tourist camping along streams and rivers. This causes water quality problems for downstream communities, which draw domestic water from the river without water treatment facilities. The camping areas need to be formalised and controlled.

The area of most concern in this regard is the Gregory River at Gregory where large numbers of campers camp on the edge of the river. With improvements to the Lawn Hill road, this is likely to attract greater tourist numbers and place further pressure on this site. As Gregory currently has no facilities in terms of power or wastewater treatment works, developing alternative camping facilities to prevent pollution will be difficult until infrastructure services at Gregory are improved. Composting toilets need to be considered at these sites.

Efforts to encourage or obtain funding to promote tourism must incorporate the need to manage the impacts associated with growth in tourism numbers.

The **Economic Development Strategy** identifies eco-tourism as a key growth industry in the Gulf region. This is likely to place increasing pressure on high quality environments for use by tourists. There is a need to ensure there are appropriate mechanisms in place to guide future eco-tourism development in a manner that minimises ecological threats. This can best be achieved through Local Government Planning Schemes and Aboriginal Community Council plans by establishing performance criteria that need to be met in any new eco-tourism development proposals. Issues that need to be addressed include:

- preservation of the ecological values of the site
- vegetation clearing
- land management including weed, pest and fire management
- potential impacts on watercourses through run-off and waste disposal; and
- visitor management

### **Urban Development**

Most development in the Gulf region occurs in the townships. Currently there is a shortage of land in appropriate tenures within these communities to meet growth and to accommodate future development. There is a need to make additional land available. The assessment and identification of any new areas for expansion should include a thorough investigation of potential environmental impacts.

There are a number of environmental problems currently being experienced in some of the Gulf towns. They mostly relate to water quality and include:

- pollution of stormwater by litter and runoff from paved areas and vehicle servicing depots,
- leakage of partially treated sewage effluent into watercourses (especially during seasonal flooding), and
- pollution of watercourses from runoff and leakage from municipal tips.

Adequate planning and design controls need to be implemented to ensure development in the Gulf towns does not impact on its environmental values. A key consideration is the timely provision of infrastructure and services, including efficient waste disposal and stormwater runoff measures, prior to development of the land.

The **Infrastructure Strategy** has identified a number of current facilities that require immediate improvements. It also identifies the need for new facilities in a number of communities.

### **Fish Restocking and Aquaculture**

The Gulf Barramundi Restocking Association in Karumba is the only licensed aquaculture operation in the southern Gulf of Carpentaria. Interest has been expressed in a range of pond and cage aquaculture involving fish, red claw, prawns and other crustaceans. There is also interest in restocking inland waterways and dams based on the Barramundi restocking program at Karumba.

While there is strong support for this initiative, concerns have been raised that the need to restock reveals that current rates of fish extraction are non-sustainable. There are also concerns over the ecological impact of large releases of fingerlings with little genetic diversity.

The EPA has a draft policy that generally prohibits re-stocking in areas under its jurisdiction. It advises that caution should be exercised when considering re-stocking and that full impact assessment is undertaken. In addition, the Department of Primary Industries has developed a draft translocation policy to minimise environmental harm associated with the introduction of fish and crustaceans not naturally found in particular areas.

Without appropriate management, aquaculture developments have the potential to involve adverse environmental impacts including:

- pollution of water courses,
- loss of wetland flora and fauna habitat,
- introduction of exotic fauna and bacteria and subsequent release to natural systems,
- possible acid sulphate soil problems, and
- changes in salinity of groundwater.

### **Port Development**

The Port of Karumba has experienced growth over recent years and is an important node in the transport network. Threats from port activities include:

- land clearing for expansion,
- discharge of ballast water from ships (this can contain pollutants and exotic or introduced organisms),
- pollution from oil, fuel, chemical and other spills,
- stormwater drainage from industrial areas where treatment is not adequate,
- issues arising from live cattle export (nutrient loading, waste management, possible spillage of Cydectin),
- loss of zinc concentrate or other products during loading,
- disposal of water from the zinc slurry dewatering process, and
- the effects of dredging (siltation, turbidity, loss of benthic habitat).

The Ports Corporation has an Environmental Plan for the Port of Karumba as well as an Environmental Management System in place to address these issues. It is also likely the MUSP will be addressing this issue.

### **Grazing**

In terms of land area, grazing is the most extensive economic activity in the Gulf. Key sustainability issues are:

- over-grazing in some areas, especially in wetlands and adjacent to watercourses (this may be a seasonal issue as cattle seek out remaining feed adjacent to streams as the dry season advances),
- stock watering direct from watercourses and causing erosion,

- introduction of exotic ponded pastures for grazing which can decrease habitat values of watercourses and wetlands,
- inappropriate fire management, resulting in increased soil erosion, suppressed vegetation growth, alterations in the composition of vegetation species and increase fuel loads producing “hot fires”
- the spread of weeds,

All of these activities can lead to soil erosion, soil compaction, reduction in water quality and in-stream habitat values, habitat loss and weed invasion. The variability of rainfall means that stock levels that are sustainable in good years may exceed carrying capacity in poor years. Thus if stock numbers are held constant at the higher level, land degradation can occur in poor years.

The cyclical nature of carrying capacity can also lead to the need to import fodder in poor years and this carries the risk of importing pests. For example, the weed Thorn Apple (*Datura stramonium*) is believed to have been introduced to the Gilbert River catchment via raw cottonseed or cottonseed meal used for fodder.

The effects of grazing are concentrated and have high impacts on localised vulnerable areas such as river frontages. The soils are very erosion-prone and riparian areas are severely impacted by both overgrazing, trampling and weed invasion such as rubber vine. These areas are also the high value areas for conservation and visitor use. Stock access to watercourses needs to be controlled. This can only be achieved through fencing of watercourses, which is a costly exercise for landholders. Subsidies for the fencing of watercourses need to be considered.

### **Weeds**

Introduced weeds are plants that pose a threat to the integrity of ecosystems and native plant species. Declared weed control is the responsibility of the Department of Natural Resources with pest management planning a responsibility of Local Government. The Department of Natural Resources facilitates declared weed control through advice to both landholders and Local Government. Declared Plants are considered to be a serious enough pest to warrant legislative

control. Other plants, while not being declared under the *Rural Lands Protection Act* still threaten the natural resources and economic development potential of the land.

Table 7.3.1 lists the main weed species found in the Gulf. The distribution of weed species around the Gulf is, in general, poorly known. Historically, there have been few resources directed towards the control of weeds across the region. Low human population levels and large tracts of land make weed management extremely difficult.

Rubbervine is currently causing the greatest problems within the Gulf. In 1993, the Department of Lands found that rubbervine was spreading at a rate of up to 3% per annum across its range. A conservative estimate of cost to primary industry in Queensland is \$8 million per annum. The Department of Natural Resources is currently developing a strategy to identify a rubbervine containment boundary in order to control its westward spread into the Northern Territory. This will involve an extensive survey program to identify areas where control can be achieved. It is most likely that this boundary will fall in the Nicholson/Gregory River catchments.

**Table 7.3.1: Main Weed Species of the Gulf Region**

| Common Name (Scientific Name)         | Ecosystem   | Distribution in the Gulf  | Threat to Ecosystem   |
|---------------------------------------|---|---|---|
| Rubbervine (Cryptostegia grandiflora) | Gallery and other riparian communities, dry rainforests | Major infestation throughout study area, particularly along watercourses and Gulf of Carpentaria                                  | Destroys riparian and vine forest vegetation, smothers trees, shrubs and shades out the ground layer.                         |
| Calotrope (Calatropis procera)        | River frontages, pasture areas                          | Well established from Mt Surprise, Georgetown, Etheridge Shire through to Croydon, Normanton and up to the Gilbert River area.    | Forms dense, impenetrable thickets on best soils along riversides, competes with grass, chokes crops and hinders cultivation. |
| Chinee apple (Ziziphus mauritiana)    | Native grasslands, cleared areas.                       | Scattered throughout, in particular Croydon, Georgetown and Forsayth.   | Forms dense infestations that produce impenetrable thickets.  |
| Mesquite (Prosopis pallida)           | Waterways, floodplains and pasture areas.               | Major outbreaks at Karumba (controlled) and Brookdale Station, otherwise scattered or isolated infestations through central Gulf. | Infests waterways, out-competes natives and blocks access to watering places.   |
| Parkinsonia (Parkinsonia aculeata)    | Ephemeral wetlands and riparian communities.            | Throughout region, in particular the Gilbert Basin.   | Invades mesic habitats and seasonal wetlands, threatens waterbird habitats.   |
| Prickly acacia (Acacia nilotica)      | Pasture areas and waterways, native grasslands.         | Isolated infestations, preferring heavy cracking clay soils.  | Out-competes native vegetation, blocks access to waterways.   |

Source: Study team compilation, March (1995), Hardwick and Kelford, pers. Comm.

The increasing density and extent of native and naturalised plant species such as Mimosa bush (*Acacia farnesiana*), Guttapercha (*Excoecaria parvifolia*), Terminalia Oblongata and Whitewood (*Atalaya hemiglauca*) has resulted in major problems for pastoralists. Other introduced weeds in the region are Para grass (*Brachiaria mutica*), Buffel grass (*Cenchrus ciliaris*) and Blue thunbergia (*Thunbergia grandiflora*) and Bellyache bush (*Jatropha gossypifolia*).

Aquatic weeds such as Salvinia (*Salvinia molesta*), Hyacinth (*Eichhornia crassipes*), Cumbungi (*Typha* spp.) and Para grass all pose threats to the regions waterways and aquatic ecosystems.

The Department of Natural Resources operates a Strategic Weed Eradication and Education Program (SWEEP) which fosters a cooperative approach to control and management through joint initiatives with Shires and landholders. Eight major strategic control projects have been conducted in the Gulf. Bio-control agents have been used, as well as other control methods such as burning off to maximise overall control.

Sensitive plant (*Mimosa pigra*) has the potential to become one of the worst weed species in the Gulf. The weed is presently found in the Northern Territory and it is feared that the plant may be introduced by waterbirds or through fishing activities.

In addition, there have been several limited outbreaks of parthenium in the region that are being managed. Parthenium weed (*Parthenium hysterophorus*) is a declared weed which spreads rapidly and reproduces quickly. The presence of parthenium in the Upper Burdekin catchment, which is a few kilometres from the headwaters of the Gilbert River, poses a major threat.

These cases emphasise the urgent need to develop strategies to prevent the introduction of new weed species into the region.

#### **Pest Animals**

There are two types of pest animal:

- introduced/exotic species able to exploit their new environment extremely successfully (outcompete native species; effective reproductive mechanisms, no native predators etc.)

- native species able to expand their population into suitable habitats as a result of large scale habitat modification. For example, wide spread land clearing changes the pre-existing habitat (e.g. Scelrophyll open forest) to open grassland which can be successfully exploited by the kangaroo and other native species particularly suited to that habitat.

Animal pests under the *Qld Rural Lands Protection Act* are now referred to as “declared animals”. While the distribution of pest animals around the Gulf is poorly known, some of the main pest species are as follows:

- Feral pigs (*Sus scrofa*) are considered to exist in almost plague proportions causing major destruction of native ecosystems, particularly wetlands and permanent waterways. They are also potential vectors for exotic livestock diseases.
- Dingos (*Canis lupus dingo*) and feral dogs (*Canis familiaris*), which cause loss to livestock by predation and are vectors for disease.
- Feral cats (*Felis catus*), which are predators of native animals and are also potential vectors for exotic diseases.
- Brumbies (*Equus caballus*), which cause destruction of native ecosystems particularly around waterholes and in wetlands as well as being potential vectors for exotic diseases.
- Feral cattle (*Bos spp*), which compete with native herbivores for food and contribute to habitat degradation. They are also potential vectors for exotic diseases.
- Rabbits (*Oryctolagus cuniculus*), which compete with both native herbivores and grazing stock for food, and suppress native plant growth.
- Cane Toads (*Bufus Marinus*) has caused a dramatic decline in native wildlife species that feed on amphibians.

Other species become a problem in certain places or at certain times. For instance, locust outbreaks can cause widespread and severe damage. The abundance of macropods such as the Agile Wallaby (*Macropus agilis*) has led to their being considered a pest in some areas, particularly along the Gilbert River.

Concerns have also been raised over the possible invasion of released deer from the Charters Towers area, although the extent of this as an issue is not confirmed.

Currently, shooting, trapping, poisoning or biological control generally achieves control of pest animals. Additional options for the control of pest species include culling and short-term commercial exploitation of the pest species. However, commercial exploitation of pest species should not be used to sustain pest species. All use should be aimed at control and, ultimately, eradication.

### **Fires**

Fires in the Gulf region are mostly:

- *Managed burns*, which are used as a deliberate land management practice. These are initiated throughout the year depending on conditions and the requirements of land managers;
- *Wild fires*, uncontrolled fires commonly associated with lightning strikes, which mostly occur in the storm season between October and March. Wild fires also result from accidental or deliberate human action, wind-whipped power lines and birds nesting on power poles. Most wild fires are grass fires and their intensity increases as vegetation dries during the summer months.

In many ecosystems of the Gulf, fire plays an important role in the recycling of nutrients. Many plants are adapted to fire and it plays a role in the maintenance of vegetation communities. The main ecological threat posed by fire is the potential for it to affect existing vegetation patterns and animal habitats. Fire also temporarily reduces ground cover and depletes soil moisture, creating conditions for increased soil erosion.

If used appropriately fire can be a valuable management tool for both productivity and biodiversity needs. Fire is increasingly recognised as an effective means to control rubbervine and other woody weed and tree-thickening invasions. Fire also plays an important role in the maintenance of many natural communities, ecosystems and species (although understanding of its appropriate application is still being developed).

There is a need to ascertain the extent of burning required for a given area in order to develop appropriate management strategies. In particular, there is a need to raise awareness in the community of a fire management regime, and the dangers associated with indiscriminate burn-offs.

### **Agriculture**

The cropping industry is presently only small in scale and is concentrated around the Gilbert River. There is potential to increase the extent of cropping and horticulture in the region, provided adequate water supplies and areas of suitable soils can be found.

A report on potential irrigation projects in the Gulf by the Gulf Regional Water Planning Advisory Committee is now in preparation. The report identifies significant opportunities to develop irrigation projects west of Georgetown on the Gilbert River and at the O'Connell Creek Storage at Richmond. Refer to the **Infrastructure Strategy** for more detail.

There is concern throughout the region that any such schemes should not impact on downstream users or water supplies. In addition, there is a need to sustain ecological values of the watercourses in terms of maintaining stream hydrological processes and water quality.

Water infrastructure requirements for irrigation usually involve some form of dam or alterations to watercourses. There is potentially significant downstream environmental impact as well as impacts on downstream users. In this regard, there is a need to ensure evaluation process for future water infrastructure options are based on:

- a holistic appreciation of social, cultural, environmental and economic issues;
- assessment against a range of evaluation criteria related to social, cultural, environmental and economic objectives;
- whole of catchment management concepts and issues;
- involvement of consultation with community and stakeholder groups; and transparent decision making processes.

There are also potential impacts from cropping and horticultural uses, which need to be quantified and mitigated. These may include erosion, contamination of runoff water from use of pesticides and fertilisers, salinity and changes to the groundwater regime. A number of crops need to be well researched prior to being allowed to develop. An example is the neem tree, which is known to have an extremely high germination rate. This tree is presently being commercially cropped in the Gilbert River area. It has potential to be come a weed pest if not controlled properly. The Department of Natural Resources advises these impacts will be considered as part of the water infrastructure investigations in all locations where irrigation for cropping and horticulture is found to be feasible.

### **A Coordinated Approach**

Land in the Gulf region is managed by a large number of individual owners, lessees, traditional owners, Government agencies, Local Governments and Aboriginal Community Councils. In this regard, duplication in land management strategies and programs could occur. There has been little or no opportunity of coordination with existing regional planning processes. Options to ensure coordination between land management and planning processes need to be explored.

Most Local Governments have taken responsibility for land management within their Shire boundaries and in some cases local initiatives are being supported by a number of State and Commonwealth programs. The Gulf Shires of Etheridge and Croydon are currently developing Pest Management Plans for declared species of flora and fauna. Control measures for additional species as identified by land managers are to be sensitively incorporated where relevant.

The Kowanyama Aboriginal Community Council already has stringent land management strategies in place through the Land and Natural Resource Management Office. Strict fishing and tourism management procedures are in place and are enforced by local Aboriginal rangers.

There is considerable potential to involve Indigenous groups, including 'homeland' groups, in natural resource management. There are many successful precedents for this across Australia including Kowanyama. Kowanyama's Land and Natural Resource Management Office plays a lead role in terms of Indigenous land management both within the town and in the broader regional environment.

At present, only a limited number of Landcare/ICM groups are active in the region. These groups promote the cooperation of stakeholders and the coordination of natural resource management on a catchment and sub-catchment scale. They do not have statutory decision-making powers and operate through existing legislation administered by government departments, local governments and statutory agencies. If a group has endorsement of the Landcare and Catchment Management Council, access to Commonwealth support through the Natural Heritage Trust (NHT) will be provided to the year 2001.

As discussed in **Section 7.1: Natural Environment**, Regional Strategies are being developed for the Northern and Southern Gulf bioregions. These strategies address both natural resource and biodiversity management within these regions, and are intended to inform decision makers and land managers of the appropriate management processes to be followed in these areas. The outcomes of these strategies must be integrated into the implementation processes of the GRDP to ensure a consistent and coordinated approach to natural resource management in the Gulf region.

Property management plans are in operation in the Gulf region through joint arrangements involving the landholders, the Department of Natural Resources and the Department of Primary Industries. It is possible that economic incentives such as tax breaks and subsidies will form part of the suite of funding tools necessary to integrate property management plans into the management framework. These concessions will need to be balanced by firm commitments in the form of binding agreements to ensure that the landholders implement the conservation initiatives.

### 7.3.2 Strategy

#### *Desired Strategic Outcomes*

- A regional, coordinated and cooperative approach to sustainable land, water and natural resource management.
  - Effective planning for the management of future development particularly in areas of high ecological value.
  - Containment and remediation of the impacts of past mining activities.
- 
- Develop mechanisms to coordinate and integrate natural resource management issues, activities and programs that can be applied at the regional and local level.
  - Ensure tourism promotion efforts are accompanied by appropriate measures and resources to manage impacts arising from tourism growth.
  - Prepare and implement detailed management plans for weeds, pest animals, and fire, including:
    - setting priorities for existing and potential pests;
    - establishing contingency plans to cope with outbreaks;
    - incorporating Rural Fire Brigade strategy with regard to the management of “burn-offs”.
  - Minimise land degradation and rehabilitate those areas already degraded through control of land clearing, weeds, pest animals, fire and stock access to watercourses.
  - Ensure the water quality of the Gulf region is of a standard commensurate with its intended use eg., for human consumption and/or maintenance of ecological process.
  - Ensure any fish restocking programs undertake a thorough assessment and the ecological impacts of introducing large quantities of fish into the natural environment.
  - Remediate old mine sites that currently pose a significant, identified threat to human health and safety and to environmental quality.
  - Increase community involvement in minesite rehabilitation programs.
  - Ensure future mining activities have minimal levels of off-site impacts and seek to have impacts contained on-site as far as practicable.
  - Ensure water quality impacts from mining operations are managed in accordance with EPA requirements.
  - Ensure existing and future tourist activities are regulated in a manner that minimises impacts on the environment and maintains the high conservation values of nature-based tourist settings.
  - Further develop this strategy based on the outcomes of the MUSP in relation to the fishing industry, fish restocking programs, aquaculture development and pest eliminators.
  - Further develop this strategy based on the outcomes of the Gulf Water Infrastructure Task Force in relation to the potential impact of proposed water infrastructure and the expansion of cropping and horticulture.
  - Ensure the aspects of development are adequately regulated with all levels of Government.

#### **7.3.3 Priority Actions**

- Review the priority actions of this Strategy in relation to the recommendations that arise from the completion of the following strategies:
  - The Northern Gulf Regional Strategy;

- The Southern Gulf Regional Strategy;
  - The Multiple Use Strategic Plan;
  - The Regional Coastal Management Plan.
- Support the Regional Strategy Groups and Landcare/ICM/Coastcare groups as a preferred vehicle for disseminating land management information.
  - Introduce a community-based monitoring programme to ensure old mine sites no longer pose a threat to human health and environmental quality.
  - Undertake an assessment of potential ecological threats before introducing new plants or animals into the region and strengthen quarantine procedures to ensure that new pests are not inadvertently introduced.
  - Ensure pest and fire management measures are incorporated into property and environmental management plans, including the management of intermittent “burn-offs”.
  - Initiate immediate action to remediate contamination from past mining activities, at Federation Pit, Glencoe Mt and the Golden Gate Tailings Dam at Croydon.
  - Establish Aboriginal land and natural resource management centres, including an expansion of the Aboriginal Rangers Program provided by TAFE to encompass land management and rehabilitation, weed and feral animal control.
  - Initiate a Rubbervine control program to decrease its impact on the Gulf region and to assist in preventing its entry into the Northern Territory.
  - Develop strategies to prevent the introduction of Parthenium and sensitive plant (*Mimosa pigra*) into the Gulf region.
  - Investigate options to reduce costs involved in fencing watercourses to control cattle access.
- Review the proposed actions of this strategy based on the outcomes of the MUSP and the Water Infrastructure Task Force investigations.
  - Review and develop Local Government and Aboriginal Community Council plans to adequately regulate tourism, urban, aquaculture and Port related developments.

## **8 ECONOMIC DEVELOPMENT STRATEGY**

### *Overview*

The economic industries of the Gulf region include the pastoral, fishing, tourism, mining and community services sectors. The mining and fishing industries make the greatest contribution to gross state product, while the pastoral, retail, hospitality and tourism sectors make the greatest contribution to gross regional product. The tourism industry has the greatest potential for expansion in the short term.

The development of the Gulf economy is reliant upon reducing the costs of establishment and operation. Costs are presently high due to the low population, long distances for freight imports and exports, a lack of transportation and other infrastructure and support services, and the need to import and accommodate skilled labour.

The Gulf economy is also heavily reliant upon the quality and availability of the regions natural resources. Consequently, management and protection of the regions high quality and natural resource assets is critical to the sustainability of the economy. Many of these natural resources based and site dependent industries are located in remote areas, with little or no existing services or infrastructure. This makes it difficult to coordinate such support services and to reduce costs of business establishment and operation. A thorough investigation of the locational requirements of these industries will assist in addressing this issue.

The aims of this Strategy are to:

- promote sustainable economic developments which have a strong competitive advantage.
- undertake a regional and coordinated approach to the development of the tourism industry and to ensure that marketing, services, and infrastructure required to facilitate tourism can be provided in a cost-effective and timely manner.
- develop a diversified tourism product focussed on the Gulf's natural, heritage and cultural assets, which is ecologically and socially sustainable whilst supporting the economic development of the region.
- maintain and expand a sustainable pastoral and cattle export industry.
- maintain and expand sustainable fisheries industries consistent with values of the fishery for ecological, traditional and recreational purposes.
- protect mineral deposits for future development, in an ecologically sustainable manner.
- facilitate and expand the sustainable development of small businesses and industries to meet community, tourist and other industry demands.
- investigate the potential for the establishment of viable and sustainable horticulture and cropping industries for export and to meet local community needs for fresh produce.
- investigate the potential for the establishment of viable and sustainable Indigenous managed industries.
- investigate the potential for the establishment of a viable and sustainable forestry industry.
- protect existing extractive resources for future development in an ecologically sustainable manner.
- investigate the potential for the establishment of a viable and sustainable industry based on the commercialisation of protected areas and native fauna and flora.

## 8.1 COMPETITIVE ADVANTAGE

### 8.1.1 Issues

A sustainable competitive advantage is a situation where strategic skills or assets are strong, relative to that of competitors. A strategic skill is something the region does exceptionally well, such as manufacturing or tourism (at an industry level), for example. A strategic asset is a resource such as the workforce that has a high degree of importance to that industry or region.

There are considerable constraints to economic and industry development in the Gulf Region. This is due to its remoteness and inadequacies in infrastructure, communications, industry and business support systems. This generally gives rise to limited competitive advantages for industries in the region. In the Gulf region the following sectors have a degree of competitive advantage:

- Tourism, which takes advantage of the natural environment, cultural and heritage values of the region.
- Mining, which takes advantage of the region's considerable mineral resources and emerging mine related infrastructure.
- Pastoral industries, which can improve their competitive situation through improved road and sea transport infrastructure.
- Horticultural industries, which take advantage of an early cropping season on irrigated land.

In order to improve the competitive advantage of the region in the above sectors and to maximise opportunities for competitive advantage in additional sectors there is a need to adopt a strategic approach to economic development in the region.

The quality and extent of road infrastructure in the Gulf region underlies the regions disadvantaged and isolated status. While it is likely the transportation network in the Gulf may never be completely flood free, improvements to the network will decrease the time of road closures due to flooding thereby lengthening the time business and industry can operate continuously. The

*Integrated Transport Strategy* addresses this matter.

The Port of Karumba presents a considerable competitive advantage, which can provide increased access to markets both domestic and introduced. There is a need to promote the competitive advantages of Karumba as an industrial and tourist node base around the port facilities. More land, ready for development is required to attract business and investors. The future expansion and operation of the port is addressed in the *Integrated Transport Strategy*.

Most local scale economic development in the future will be located within the existing Gulf towns where the timely and cost-efficient provision of infrastructure can be coordinated to facilitate their establishment. The *Infrastructure Strategy* addresses this matter in more detail.

Most other regional scale economic developments in the Gulf are reliant on direct access to natural resources. This is particularly the case for the mining, tourism, pastoral and the potential future horticultural, agricultural and aquaculture sectors. Therefore these industries will establish in proximity to the location of the natural resources upon which they rely. This makes it difficult in many instances to coordinate the provision of infrastructure and support services to facilitate these industries in the future.

GSD has employed a Regional Business Adviser to promote and extend regional and local enterprises, as well as provide advisory and skills training programs. The position of Economic Development Officer now exists within Croydon Shire Council to assist with the establishment of industry and business within the Shire.

The Gulf communities presently lack labour with the skills required to maximise employment opportunities within the region or to initiate and operate enterprise development. Business and industry have to meet additional expenses in having to import skilled staff to the region. In most cases staff need to be provided with a staff accommodation due to a lack of alternative housing. The need for a locally based pool

of skilled labour is addressed in the ***Employment, Education and Training Strategy***.

The Gulf Indigenous Corporations such as the Gulf Aboriginal Development Corporation (GADC) need, for the purposes of competitive advantage in some sectors, to be consulted and involved in the activities of the regional economic development officers.

Businesses in the rural and remote areas across Australia can have considerable difficulty in accessing finance. This is due to a number of real and perceived factors including market fluctuations, native title issues, lack of adequate security, lack of accurate information and generally a low level of confidence in rural and remote areas such as the Gulf.

There is a need to consider access to cash as an essential service in remote regions. Tourist's demand for cash is also high and can leave local businesses low on money until more can be accessed from a bank or credit union. There are banking facilities at Normanton and Georgetown with agencies at Karumba, Burketown, Einasleigh, Forsayth and Mt Surprise. Consideration should be given to introducing community service obligations (CSO) into the banking sector to enable remote people to have access to sufficient cash to operate businesses and to provide for their daily requirements.

Joint ventures and partnerships are important for leveraging the resource and business potential of the region. Increasingly, business (including small business) is entering into multiple partnerships to develop new businesses, or to provide specific services to a town or region. The basis of many of these partnership arrangements is to enable communities to network and develop strategic partnerships with city-based businesses and for individuals to undertake enterprise development.

There is a substantial amount of Government 'red tape' which may be applicable to urban centres but which can be considered to be inappropriate and often irrelevant to the Gulf communities. This is seen to hinder small enterprises and impose an unnecessary impact on remote communities. This is of particular importance to the growing tourism industry in the Gulf region. For example, home stays and other on-farm types of tourism accommodation are prevented, by regulation, from serving home grown produce to tourists. Eggs must be approved by the Egg Board and meat by the meat inspectors.

Within the bounds of liability, it is important that Government recognises the need for a developmental framework and philosophy for the Gulf region which differs from the criteria and strategies applied to the more developed regions in the State. There needs to be:

- acknowledgment of the inappropriateness of some legislation regulations and standards to rural and remote regions.
- allowances for the more remote and smaller scale commercial operations and the flexibility to enable small businesses in remote areas to meet the freight and other costs and still satisfy health standards.

## 8.1.2 Strategy

### *Desired Strategic Outcomes*

- Increased competitive advantage for those industries that will promote economic development.
- Timely provision of regional infrastructure and services to promote competitive advantage.
- Coordinated regional approach to economic development throughout the region.
- Equitable access to finance and banking for enterprise development.
- A review of the relevance and applicability of Government legislation and standards to the region.

- Develop and implement strategies that will improve the competitive advantage of industries and economic activities in the region.
- Develop and implement infrastructure-sequencing programs to provide certainty for economic development in the region.
- Coordinate a regional approach to economic development by coordinating economic development officers, and the Indigenous development corporations.
- Improve access to finance and improve community savings through the expansion of Credit Unions or similar financial institutions, under 'Community Service Obligations'.
- Reduce the unnecessary constraints to economic development imposed by inappropriate Government standards, regulations and requirements.

### 8.1.3 Priority Actions

- Explore options to increase the competitive advantage of the tourism, mining, pastoral and horticultural industries in the region.
- Review and develop Local Government and Aboriginal Community plans to incorporate infrastructure sequencing programs specific to economic development.
- Encourage key Government Infrastructure and service providers to develop sequencing programs specific to economic development.
- Explore opportunities to allow greater flexibility in financial arrangements for business and industry.
- Initiate a review of all Government requirements that are inappropriate to economic development in the Gulf region.

## 8.2 TOURISM

### 8.2.1 Issues

The Gulf tourism industry is built largely on nature based activities such as sightseeing, camping, bird watching, bushwalking, fishing, heritage and fossicking. Between 70% and 90% of tourists are independent travellers, more than half of them are retired and most are over 45 years of age.

Tourism in the Gulf has grown rapidly over the past ten years. This is particularly as a result of conservation and promotion of natural and cultural resources accompanied by improvements to the regional road network. Given visitation figures for the tourist destinations of Lawn Hill National Park, Undara Volcanic National Park, Normanton and Karumba, it can be estimated that between 80 000 and 100 000 people visit the Gulf region annually. This is likely to increase significantly in the future.

The region comprises four broadly defined areas each of which provides tourists with a distinctive blend of tourism experience in terms of character and features – *Etheridge Fossicking; Central Gulf Heritage; Southern Coastal Gulf; and Western Gulf Savannah*. These areas, which overlap geographically, are described below.

***Etheridge Fossicking*** - This area includes the townships of Mt Surprise, Einasleigh, Forsayth and Georgetown.

There has been a significant increase in visitor growth at the Undara Resort, the main attraction being the impressive lava tubes. The area is rich in minerals such as agate, topaz, garnet, aquamarine and gold. It is a Mecca for the amateur prospector, with the most notable destinations being the O'Briens Creek Gemfield and Agate Creek Mineral Reserve.

The Fossicking Act has recently been amended to remove native title implications on all land other than National Parks and Conservation Parks, State Forests and Timber Reserves etc., and land on which there has been an approved native title determination. The Department of Natural Resources may approve a Fossicking Area, designate Fossicking Land or give general permission for fossicking on State Forests, timber reserves or similar. Indigenous Land Use Agreements may facilitate fossicking on areas where there has been an approved native title determination.

Other attractions include Cobbold Gorge, Tallaroo Hot Springs, the Cumberland Chimney, old mines and Forsayth Caves. Langlo Lake is the bird watching centre of the Eastern Gulf Savannah.

The historic Savannahlander train journey operates weekly between Cairns and Forsayth. The ***Integrated Transport Strategy*** addresses this railway in more detail.

***Central Gulf Heritage*** - The townships of Croydon and Normanton provide the best examples of preserved heritage architecture in the Gulf and give the tourist a glimpse of what life was like in the Gulf at the turn of the century.

Heritage attractions at Croydon include the Old Courthouse and Mining Warden's Office, the Working Mine Museum, the Club Hotel, the Croydon General Store and Museum, the old Police Station, Gaol and Hospital. Other attractions in Croydon include the Homeward Bound Dam Wall and Lake Belmore. Croydon Shire Council has employed a tourist guide and is purchasing a bus to operate tours.

The town has a working mining museum that produces gold. Croydon Shire is restoring the historic steam train and should be operating by the Year 2000. Genealogy is becoming increasingly popular and when considering 30,000 people lived in the Croydon area, the relatives of the early residents are returning or inquiring for information in increasingly greater numbers. This is expected to be a growing industry that will play a major role in attracting visitors to the region. As a result, Croydon Shire Council has made a microfilm collection of newspaper archives available to the public.

Heritage attractions at Normanton include the Normanton Railway Station, the old Normanton Gaol, the Westpac Bank, Burns Philp Building, Carpentaria Shire Council Chambers, the Cemetery and the old Town Well. Other attractions and activities at Normanton include the Mutton Hole Wetland and estuarine fishing.

The Gulflander heritage train operates between Normanton and Croydon on a weekly basis carrying passengers and vehicles. The **Integrated Transport Strategy** addresses this railway in more detail.

The Queensland Heritage Trails Network is undertaking work to develop trails through the Gulf region based upon the extensive heritage attractions, and this presents opportunities for tourism development.

**Southern Coastal Gulf** - A significant proportion of the Gulf's tourism industry is based on recreational fishing centred on Karumba. Kowanyama is also an extremely popular fishing destination but has a relatively minor role due to the strict regulation of visitor numbers. Estuarine and inshore fishing occurs primarily on the Norman and Mitchell Rivers. The species that dominate catches include barramundi, salmon, trevally, bream, mangrove jack, fingermark, grey mackerel, queenfish and grunter. There is a need to facilitate future development of marine based tourism facilities throughout the Gulf.

**The Western Gulf Savannah** - The Western Gulf Savannah provides the most diverse ecological experience in the region coupled with a predominance of Indigenous culture. Lawn Hill National Park near

Gregory has gained international recognition. Adel's Grove on the edge of the park provides camping sites.

Birri fishing lodge on Mornington Island caters for no more than eight guests and Sweers Island to the south caters for 21. Fishing is also a major activity at Burketown, which hosts the World Barramundi Championships. Nearby Escott Lodge provides powered caravan sites and camping. Activities offered include fishing, safaris, bird watching, scenic flights and canoeing. Kingfisher Camp on Bowthorn Station also has campsites and offers boat hire, a kiosk and gorge tours. Hells Gate, just within the Queensland-Northern Territory border, has significant tourism infrastructure.

Other attractions in the Western Gulf Savannah include the Gregory River at Gregory, 'Morning Glory' rolling cloud formations, the Burketown Cemetery, Town Bore and the historic Boiling Down Works, Aboriginal arts and crafts and Leichhardt Falls.

The internationally significant Riversleigh Fossil Beds located to the south of Lawn Hill are also just outside the Gulf area. The **Environment Strategy** addresses the need to protect the natural resources, associated with tourism development.

### **Cultural Heritage**

There are extensive areas containing cultural heritage artefacts including Aboriginal tools and cave paintings. Many of these sites are located on private property. For this industry to expand, a number of issues need to be addressed. These include:

- ensuring community values are not compromised through public knowledge of and access to these locations;
- protecting the cultural heritage resources in a way which prevents vandalism and theft, particularly in respect of artefacts which are easily removed;
- developing cooperative management arrangements where the land holders use rights over the land are maintained.

Refer also to the Cultural Heritage Section of the ***Environment and National Reserves Strategy***.

### ***Fossils***

In addition to cultural heritage features, there are also considerable numbers of fossils throughout the region. As with cultural heritage artefacts, the fossils are difficult to protect from vandalism and theft. As a result many landholders are hesitant to publicise their existence and location. There is also a perception that once they become known, the Environmental Protection Agency (EPA) would wish to take over their management. The strong local resistance to the extension of the protected area estate and in particular National Parks is addressed in the ***Environment and Natural Resources Strategy***.

### ***Arts and Crafts***

The development of an authentic, high-quality and culturally sensitive arts and crafts tourism industry has potential in the Gulf region. If undertaken in consultation with relevant Gulf community groups, there is potential to substantially increase opportunities for industry development in the arts and crafts throughout the Gulf region.

### ***Eco-tourism***

The Federal and State Governments define eco-tourism as nature-based tourism that involves education and interpretation of the natural environment and is managed to be ecologically sustainable.

GSD established the Savannah Guides, which is now a separate tourism based company. As with the GSTO, GSD still has administrative arrangements with the Savannah Guides including joint marketing strategies. The Savannah Guides act as guardians and professional guides at strategic locations throughout the region. All guides have an intimate knowledge of their local environments. This sector has the potential to expand in the future.

Whilst many areas of the Gulf have the potential to develop as major eco-tourism destinations, priority should be given to areas with existing access to both the environmental resources and the infrastructure needed to support tourism activity. The identification of appropriate locations for eco-tourism developments needs to be given a priority.

Eco-tourism centres need to provide a high level of service and infrastructure to accommodate tourists' needs including, guided tours, day attractions, interpretive centres and amenities, but should also not inhibit the eco - experience by over development or commercialisation.

Most ecotourism attractions are currently located on state lands and in national parks. However, considerable potential exists for ecotourism developments, on private lands. Any such development would need to ensure that the ecological values of the natural resources and features are not be compromised. The ***Environment and Natural Resources Strategy*** addresses this matter.

### ***Events and Entertainment***

Events such as horse racing, rodeos, camp drafts, balls, shows and fishing competitions make a significant contribution to the regional economy. There is concern over a potential reduction in financial support given to horse racing due to privatisation of the TAB. There is a need to ensure the continual future support for horse racing events in the region.

The largest attendance at any single event occurs at the annual Gregory Canoe Race in Burke Shire. These types of events are important to the community from a social, cultural and recreational point of view. (Refer to the ***Community Services Strategy***.) However, there is considerable effort required by volunteers in the Gulf communities to host regional events. There will be a need for considerable investment in tourism marketing for regional events to capitalise on tourism. An events calendar is one option to ensure tourists are aware of existing and emerging activities (an annual Arts Festival is being planned for Croydon).

## **Infrastructure and Services**

Future tourism in the Gulf depends largely on the development of regional infrastructure and the provision of services and tourism facilities. Much of the growth of the tourism industry hinges on the capacity of the public and private sectors to provide infrastructure in the region. The most common infrastructure requirements that will be necessary to meet the needs of tourists to the Gulf include reliable and efficient sewerage, water, electricity and telecommunications services. These services are most readily available in the Gulf towns. However developments in remote locations and for eco tourism will need to provide all the necessary services and infrastructure to meet the needs of tourists. The **Infrastructure Strategy** addresses these matters in more detail. Accommodation is a vital component of tourism infrastructure. For the majority of areas within the Gulf, opportunities for increased tourism accommodation exists by developing homestays, safaris and camping grounds. There are however, areas such as Karumba where 3-4 star accommodation is a viable option, as demonstrated by the La Tara in Georgetown. The tourism industry cannot develop to any significant extent until sufficient accommodation of an acceptable standard is provided. These facilities are likely to be located in proximity to key natural features of the region. The **Environment and Natural Resources Strategy** addresses the need for any such development to be undertaken in a sensitive and ecologically sustainable manner.

The tourism industry places considerable pressure on the Gulf's health and emergency services. For the Gulf communities, access to basic health services such as a doctor or a chemist is limited. This fact is not widely known by tourists prior to visiting the region. The **Community Services Strategy** recommends increased basic health services to meet both community and tourist demands. However, there is also a need to educate tourists about the Gulf so they may be better equipped and prepared before they enter the region.

## **Transport**

If the current market of 'self-reliant' tourists is to grow, this growth will be dependent on the provision and maintenance of transport infrastructure. Tourism packages are limited by the standard of roads and available transport methods.

The **Integrated Transport Strategy** identifies the existing regional road network in the Gulf. In this regard the North-South links to the region for tourism are well developed, through the Matilda Highway. This way essentially provides sealed road access from the south to Karumba via Normanton. The other North-South access route for tourists is the Wills Developmental Road, providing access to the Western Gulf centres of Burketown and Doomadgee. This route is not as well developed as the Matilda Highway, with the sealed road terminating at Gregory. This ensures tourist access to attractions like Lawn Hill Gorge but does not promote through travel beyond this destination.

The East-West links are less developed than the North-South links. The Gulf Developmental road between Cairns and Normanton is now sealed, however there is no sealed access in an East-West direction to link the western Gulf or the Northern Territory for tourist travel. Despite this there is increasing use of and pressure on these East-West routes. For example, the BP service station chain has produced tourist maps, which indicate a link from Cairns to Darwin through the Gulf region. The Northern Territory Government has also developed its road network to the Queensland border with a view to establishing a solid east-west interstate link between Cairns and Darwin through the Gulf region.

Transport access is needed to key locations and attractions, which are presently only accessible by 4WD, to allow for access by people travelling in conventional vehicles.

In order to expand the Gulf tourism market beyond the 'self-reliant,' 'self-drive' industry there is a need to increase the range of transport options and to integrate those modes wherever possible. Likewise, airstrip infrastructure must be improved if the fly-in fly-out tourist is to be attracted to the area. However this is a longer-term option. The ***Integrated Transport Strategy*** addresses this matter.

A tourist bus linking Mt Isa to the Gulflander train at Normanton, via other tourist attractions, and another bus linking Croydon to the Savannahlander at Forsyth will maximise economic returns from the Savannahlander extension to Cairns. This has the potential to dramatically increase backpacker and eco-tourism as well as other non-car based travellers. Increased bus services will also have considerable flow on benefits to the local community.

The transportation system is a significant component of the tourism experience and visitor perceptions can be undermined if transport services are deficient.

### ***Marketing and Promotion***

Whilst the Gulf attracts a wide range of tourists, the majority of visitors to the region are those who can be classified as 'Self-reliant Campers' of domestic origin. Such tourists do not typically inject as much money into the regional economy as compared to fly-in fly-out tourists who usually require local goods and services such as accommodation and transport.

An effort must be made in targeting a selective visitor market, including, those tourists who are likely to have a higher propensity to spend in the region and hence contribute to higher yields for the Gulf's tourism industry.

Research and analysis needs to be undertaken on a regular basis to ensure that marketing expenditure is used wisely. Presently, reliable information on visitor numbers is scant and resources are not available to undertake regular statistical analysis.

The marketing of the Gulf is of paramount importance to the future of the tourism industry. Significant financial resources are required to undertake successful marketing activities.

In order to achieve this level of marketing a priority needs to be given to the development of:

- a readily accessible tourist information system;
- regularly updated information on the tourism industry;
- accurately assessed visitor data (including forecasts); and
- established protocols to assess Government and industry information.

In response to any marketing and promotion strategies the tourism industries of the Gulf will need to provide a range of services to support the growth of the tourism industry. Such services include management, marketing, promotion, retail and personal services. A significant number of agents, businesses and operators in the region already provide booking services. However this network could be expanded to maximise the potential for promoting and cross-selling tourism services to visitors.

### ***A Regional Approach***

Gulf Savannah Development (formerly GLADA) was once a recognised regional tourism authority, receiving an annual contribution from the State Government for the marketing of the region. The funding has been transferred to Tourism Tropical North Queensland (TTNQ).

There is a need for regional coordination of tourism through an agreed and funded body or organisation which is representative of all interests and existing and potential future stakeholders in the region. This particularly relates to Indigenous-based tourist industries which have yet to be fully realised in the Gulf region. The GSTO is currently the only tourist organisation in the region, servicing its member tourist operators and visitors on a daily basis. The GSTO currently coordinates tourism development in the region. In order to better undertake this role the GSTO has developed a Strategic Plan. The Department of State Development supports

in principle the GSTO as a lead tourism body for the Gulf region.

Indigenous communities are generally proceeding cautiously with tourism at their own pace. Whilst recognising the importance of maintaining and promoting links with the GSTO, these communities do not see the GSTO as representing their interests. There is a need for consultation with Indigenous groups, to explore possible eco-tourism and cultural tourism ventures on Indigenous held land. Cooperative arrangements and ventures between different Indigenous communities and with the established non-Indigenous communities and with the established non-Indigenous tourism industry should be explored.

The Department of State Development in cooperation with the GSTO, tourism operators and Government agencies is working towards the development of a sustainable tourism industry in the Gulf region. In addition investigations are under way to develop business clusters in the region with a view to forming a backpacker corridor between Cairns and Darwin.

Further work is required in developing a holistic and regional approach to tourism development and planning in the region. This includes the need to:

- support and develop appropriate organisational structures to coordinate data collection, marketing, promotion and destination development;
- secure the ongoing financial resources necessary to promote the distinctive natural, heritage and cultural assets of the region;
- provide the framework for relevant regional, state, and national bodies to collect, analyse and distribute credible tourism related information on a regular and timely basis;
- establish a network of centres that provide professional tourism promotion and booking services, a range of accommodation and ancillary, tourism related goods and services;
- improve the region's directional and interpretive signage relating to tourist attractions, so as to enhance and preserve the self reliant visitor experience;
- maintain and enhance the region's position as an internationally significant eco-tourism destination;
- maintain and enhance the region's position as leading recreational fishing destination;
- improve and develop the heritage and cultural components of the tourism product by maintaining and broadening the product base available;
- promote the establishment of Indigenous tourism ventures where appropriate;
- support and develop events-based tourism that is innovative and imaginative and complements the region's unique identity;
- identify the need for public and private infrastructure and services on a timely basis to support the sustainable development of the tourism industry;
- establish mechanisms to facilitate the effective promotion and marketing of the Gulf railways with a view to increase patronage by tourists;
- improve bus, train tourist attraction linkages and use the established Cairns market to promote backpacker and non-car based travel opportunities in the region;
- secure the financial resources required for marketing and promotion;
- define and agree upon factors to be included in tourism information monitoring systems and the scope of data analysis required;
- facilitate the establishment of tourism promotion and booking services attached to existing businesses at Mt Surprise, Georgetown, Croydon, Normanton, Karumba, Gregory, Burketown, Doomadgee and other areas if deemed appropriate;
- seek appropriate support from the State to secure the future of horse racing;
- develop and promote tourist packages specifically aimed at identified markets for activities such as sightseeing, bird watching and bushwalking, recreational fishing and train travel;
- undertake regular research relating to the catch of the recreational fishing sector in the Gulf;
- Negotiate and work with landholders and resource managers to develop sustainable visitor sites and experiences on private lands;

- Investigate options to establish eco tourism interpretive centres at Karumba, Burketown, Mount Surprise, and Croydon; and
- Provide information to promote the provision of a range of accommodation facilities for visitors that reflect the demands of the market, are financially viable and are appropriately located with respect to infrastructure, services, facilities and attractions.

## 8.2.2 Strategy

### ***Desired Strategic Outcomes***

- An integrated and coordinated approach to regional tourism development.
- A holistic and comprehensive assessment of the needs of the tourism development industry.
- Timely, affordable and coordinated delivery of infrastructure and services to provide the development of the tourism industry.

- Identify a lead tourism development body in the Gulf region, which is representative of all interests, including Indigenous groups and the wider community. A priority should be given to utilising existing organisational structures such as the GSTO.
- Develop a regional tourism strategy (under the aforementioned regional tourism body) in order to ensure and further develop a holistic and comprehensive approach to the planning and development of the Gulf tourism industry. A priority should be given to the four key themed destinations of the Etheridge fossicking area, the central Gulf heritage area, the southern Gulf coastal area and the Western Gulf Savannah.
- Identification of key priority actions for incorporation in this strategy once there has been a thorough assessment of the needs and requirement of the tourism development industry in the Gulf region.
- Incorporate the needs and requirements of the tourism industry in Local Government, Aboriginal Community Council and relevant Government agency Plans and policies, once these needs and requirements have been thoroughly investigated. A priority should be given to the timely and affordable sequencing of infrastructure and services to accommodate the tourism industry.

### **8.2.3 Priority Actions**

- Identify all the relevant stakeholders and interest groups relating to the existing and potential future tourism industry in the Gulf region.
- Using existing organisational structures such as the GSTO, develop a regional tourism representative body.
- Explore options to resource further development of this regional tourism strategy.
- Ensure appropriate representation of tourism priorities/requirements in the Department of Main Roads Regional Roads Investment Strategy.

## 8.3 PASTORAL INDUSTRY

### 8.3.1 Issues

The pastoral industry in the Gulf is currently experiencing a downturn. Given the significant growth in live cattle exports over the past few years, the grazing industry in the Gulf appeared to have a prosperous future. In 1996 the Gulf's beef cattle herd was approximately 750 000 and the industry's Gross Value of Production was approximately \$ 61 million. In 1997, 70,785 head of live cattle were exported from the Port of Karumba, with a value of approximately \$30 million.

Restricted market conditions have constrained growth and the advent of the "Asian currency crisis" has made the future of the industry less secure. Only one live cattle shipment left the port of Karumba in the first three months of 1998.

The key destinations for live cattle export have been Indonesia and the Philippines, in addition to a number of other smaller markets. The Department of State Development in Cairns intends to consult with investors, the Department of Primary Industries and other Government Departments regarding export assistance for the live cattle industry.

The Indonesian market has recently collapsed with the devaluation of the rupiah and future market prospects are difficult to predict. The Philippine market is currently experiencing some difficulties due to the nation's economic downturn as well as rising feed prices and competition from imported buffalo meat and beef. However, over the medium to long term, the Philippines is expected to remain a strong and significant market which should continue to grow.

Karumba port is well located to take advantage of the live cattle trade and producers are likely to benefit from the development of Karumba as a live export port. However, inadequate road infrastructure is proving to be a major impediment to the live export market with access to Karumba restricted for part of the year. The transport of live cattle to the Port of Karumba is also affected by load limitations after flooding. These smaller loads increase the price of transport per

head and can jeopardise the commercial viability of the operation.

The Port of Karumba is most easily accessible from the eastern Gulf. This part of the region also has access to the port of Townsville for export purposes. However the western Gulf has limited access to those export parts, or to similar parts in the Northern Territory. In order to increase export options in the western Gulf and to encourage properties in the Northern Territory to export out of Karumba there is a need to improve the east - west link between the western Gulf and the port of Karumba. This matter is addressed in the ***Integrated Transport Strategy***.

A significant boost to the live cattle industry would be the provision of public infrastructure including public wharves at the port, public cattle holding yards complete with scales and dips. In addition government agencies involved in both the port and the live cattle industry could establish a presence at the port this would include pilots, Australian Quarantine and Inspection Service (AQIS) and Department of Primary Industries.

The pastoral industry in the region will continue to be vulnerable to price fluctuations, climatic variations and risk of disease. Currently the industry is experiencing depressed prices, low stocking levels, uncertain land tenure and inadequate access to finance. Individual domestic consumption of beef has fallen due to competition from white meat products, perceived red meat health issues and changes to the eating habits of Australians. Competition for this reduced market is coming from quality beef imports from New Zealand and the USA.

Smallholdings are most affected by the market, given that they cannot achieve the economies of scale of larger holdings. It is possible pastoral co-operatives may assist to achieve economies of scale in purchasing and marketing particularly for the smaller holdings.

The industry is also facing increasing pressure to improve its land management practices, including the control of feral animals and plants. Property Management Plans need to be prepared and implemented for pastoral properties in the Gulf. The ***Environment and National Reserves Strategy*** addresses land management aspects, however, property management plans should be comprehensive and not just focused on land management and sustainability considerations. These plans should also provide financial and marketing plans. Sustainability should be managed through the adoption of innovative techniques and new technologies to address land management, alternative land uses, marketing structures and profitability.

### ***Meat Processing***

Abattoirs operate at Kowanyama, Croydon and Normanton on a limited basis. In general, all other meat products are imported to the region. This has implications for the nutrition and health of the Gulf communities, issues that are dealt with in the ***Community Services Strategy***.

Potential exists to undertake meat processing as an import replacement activity at a number of locations across the Gulf to address local demand. It has been suggested that another option may be to establish a portable abattoir for use at various locations across the Gulf. This approach may allow a number of pastoralists to become involved in value adding beef production. A portable abattoir may also have potential as a means of establishing a feral pig game meat market on the Gulf.

### 8.3.2 Strategy

#### *Desired Strategic Outcomes*

- An economically and environmentally sustainable cattle industry in the Gulf.
- Increased market options both internal and external.
- Meat processing industries throughout the region to service local demand.

- Promote the development of the Port of Karumba as a key cattle export port.
- Ensure the timely delivery of road and port infrastructure facility to facilitate the expansion of the live cattle export industry.
- Investigate options to establish pastoral cooperatives to coordinate marketing activities for smaller holdings.
- Promote a program of Property Management Planning for economic and ecological sustainability, including the provision of financial and marketing planning.
- Investigate opportunities to provide meat-processing facilities in key locations to service the needs of the Gulf region.

### 8.3.3 Priority Actions

- Review and develop local Government, Aboriginal Community and relevant Government agency plans to incorporate provisions for the timely delivery of road and port facilities to facilitate the expansion of the live cattle export industry at Karumba with a priority being placed on improving road access to the port from the western Gulf region.

## 8.4 MINING

### 8.4.1 Issues

The Gulf region is one of the most prospective mineral provinces in Australia and contains resource deposits of major economic significance. As a result, there is considerable potential for new mining activity in the region in addition to existing mining ventures.

The western portion of the Gulf region lies within Queensland's North West Mineral Province. This region is already recognised as Australia's premier base metal province and possibly the world's premier zinc province. For example, a comprehensive new study of the province undertaken by the Queensland Department of Mines and Energy to promote mineral prospectivity for undiscovered resources has provided fresh interpretation of the area's geology and mineralisation.

There is a perception that major mining projects will significantly stimulate investment and generate local employment in the region. However, some Gulf communities are of the view that:

- 1) these projects, which involve between 5 and 10 years of planning, will not provide significant employment opportunities once construction work is completed; and
- 2) most of the materials, services, high skilled labour and technology supporting future large-scale projects in the Gulf would be sourced in major population centres outside the region.

Whilst mining ventures have considerable potential in terms of employment, training, infrastructure and revenue, there is a concern among Gulf communities that the major long-term benefits from mining are more often experienced outside the region.

Major mining projects do bring economic and employment benefits. Moreover, recent trends identified by the Australian Bureau of Agricultural and Resource Economics indicate that regional Australia is becoming increasingly reliant on the mining sector as other long-established industries go through periods of adjustment.

In the Gulf, mining will continue to be an increasingly important element of the regional economy. There is an opportunity for Gulf communities and the mining industry to work together to maximise the benefits of mining to the region through the resolution of issues relating to local employment and training, service and infrastructure provision, and land access.

Opportunities to maximise value-adding potential in mining within the region also need to be identified. This has been undertaken to some extent with the PasmaInco Century Mine Project, which has considerable investment in the region, including a program to employ local labour and to use local resources.

Whilst mining can be expected to continue in the future, further large-scale mining projects are not driven by local communities. The extent to which mining continues will depend on the management of resources as well as factors such as interest rates, commodity prices and native title. Unresolved native title issues are perceived to have constrained exploration in the region over the past 5 years. The resolution of these issues through the recent introduction of Alternative State Procedures for mining will see the area become a high priority for explorers.

There are significant environmental impacts associated with medium to large-scale mining and in the past these impacts have not been remediated by mining companies. The result, particularly in the Croydon area, is contamination of land and watercourses. This matter is addressed in the ***Environment and Natural Resources Strategy***.

#### ***PasmaInco Century Mine***

The PasmaInco Century Mine, which is located in Burke Shire, is one of the largest zinc projects ever to be undertaken in the world. At a capital cost of \$810 million, the mine has an operational workforce of around 450 people. The mine commenced production in late 1999 and will have a life of 20 years. It is expected to contribute over \$350 million annually to the Gross State Product.

During the life of its operations, the Pasminco Century Mine should continue to provide significant benefits and employment opportunities to the Gulf region, as well as to Queensland and Australia.

### ***Other Deposits***

The Gulf region contains other mineral deposits of major economic importance. For example, two large and significant mineralised areas have been identified at the Georgetown Inlier in the east and the Mount Isa Inlier in the west. The areas are separated by the Carpentaria Basin, which is also a possible source of petroleum products. The following minerals and gems are known to exist: gold, tin, uranium, diatomite, fluorite, copper, lead, zinc, silver, topaz, sapphires, agate, aquamarine and garnet.

Salt deposits also exist on the clay pans of the Western Gulf shoreline. Some oil and gas exploration has been completed in the Burketown-Doomadgee area of the Carpentaria Basin but there have been no reports of hydrocarbon discoveries to date.

### ***Non-Corporate Mining***

As well as the major mineral deposits, there are also areas of interest to small operations and independent miners. Non-corporate mining is almost exclusively undertaken in the Etheridge Shire where nine mines are currently operating. Croydon also has one non-corporate mining operation. Mining activity is focussed on gold production, mainly from alluvial operations.

These mines generally operate as family companies and are worked by no more than three or four people. This sector is also under pressure from external factors faced by the larger corporate mines. This includes issues such as being required to sell gold at current prices, borrow money at hire purchase rates (as banks won't accept leases as collateral) and dealing with native title issues.

## 8.4.2 Strategy

### *Desired Strategic Outcomes*

- Sustainable expansion of the mining sector in the region.
- Increased local and regional economic benefits from corporate and non-corporate mining.
- Maximised value-adding opportunities for the regional community from mining.
- Greater research into the potential of both corporate and non-corporate mining in the region.

- Encourage, facilitate and promote exploration and the development of mining projects in the region having regard to relevant economic, community, environmental and infrastructure considerations.
- Identify known petroleum, mineral and extractive resources to ensure appropriate and informed decision-making, particularly in terms of land use

### **8.4.3 Priority Actions**

- Monitor the progress of the Pasmenco Century local employment program and any other such programs with a view to improve regional economic benefits of mining.
- Lobby the State Government to maximise the benefits to the region from mining development and related activities.

## 8.5 SMALL BUSINESS

### 8.5.1 Issues

#### **Retail**

The small business sector in the region is dominated by retail activity providing goods of services to both the local population of tourists. The current level of small business varies substantially throughout the region.

In smaller centres such as Forsayth, Einasleigh and Gregory these are likely to be only one or two small retail businesses, while Normanton and Karumba may have a dozen or so. Raft Point on Bentinck Island and Gregory have limited retail services despite large local populations.

Doomadgee is presently seeking to substantially increase its retail capacity through the possible development of additional retail buildings. In many centres the dominant retail business is the local hotel. In comparison to many other regions of the State, the level of small business activity is low.

Increased tourism offers one of the best opportunities for the small business sector. The tourist industry continues to grow throughout the Gulf Region with increasing demand for goods, services, tours, entertainment and facilities. It is expected tourist activity will continue to increase particularly as the road network improves providing better access to a greater range of visitors throughout the year. The **Community Services Strategy** identified the need for chemist outlets in the region to ease pressure on local hospitals. This is a considerable problem during the tourist season.

Small business operators need to be alert to new opportunities to establish, expand or diversify retail activity within the tourist as well as the local sectors.

Research undertaken by KPMG for Mornington Shire indicates that a number of profitable retail and service businesses could be established in the larger Gulf communities. Identified retail and service enterprises which have potential in the Gulf, include:

- cafes
- laundromats
- clothing stores
- hardware/tackle stores
- bakeries
- butcheries
- hairdressers
- service stations
- private medical services including doctors and dentists
- pharmacies.

There is a need to stimulate small business activity in the Gulf towns. With the sealing of the road to Gregory, increased visitation to Lawn Hill and the Bidunggu housing development, Gregory is likely to see the emergence of a number of retail and service opportunities. All the Gulf centres need to facilitate the development of small business.

The advantage of small business is that profits and capital tend to remain within a region adding to the wealth base. Small business also has the greatest potential to generate employment and has good prospects for growth. Fewer barriers exist in establishing a small business as opposed to a larger enterprise. However, small business must give a high priority to proper business planning. As not all small businesses in the region are capable of doing this, governments and regional development organisations have an important role in assisting the development of small business activity.

Promoting local ownership of businesses is an important self-reliance strategy. Local ownership tends to contribute to higher rates of capital retention in regions and a stronger likelihood for local purchasing from other businesses. Absentee-owned businesses do not have the same sense of community allegiance to local purchasing. Local ownership also tends to reduce the mobility of employees and capital thereby helping to retain people and capital in the region.

The Department of State Development, Cairns, is further investigating ways to promote the development of tourism retail and other related retail enterprises in the Gulf region. In partnership with GSD and the Cairns Regional Economic Development Corporation, the Department of State Development will assist in small business planning, marketing and related activities for retail enterprises. However, there is also a need to consult with Gulf Indigenous corporations such as the GADC and Bynoe to ensure Aboriginal communities are serviced by small business and to promote Indigenous managed industries.

### **Local Construction and Maintenance**

Local Government works programs provide the largest source of employment in the Gulf. However, there is a heavy reliance on State Government support to undertake major capital works. The most notable areas of local government construction activity include housing and other community buildings, as well as the provision of basic infrastructure including roads, water and effluent treatment.

A substantial amount of residential construction is undertaken in Aboriginal communities in the Gulf.

Construction is comparatively expensive and this tends to deter private development. The high costs are primarily due to the cost of transporting materials and equipment and a shortage of skilled local labour.

Contractors from outside the region undertake most construction and as such the economic benefits of this construction or maintenance do not remain in the Gulf region.

Despite the best attempts by management to utilise resources efficiently, many Government and community organisations have plant of equipment that remains idle sometimes for considerable periods. The opportunity to lease or loan equipment between organisations, and with the private sector, should be explored. There is the potential to make better use of existing plant and resources thereby providing greater efficiencies to the organisations that own them. This will also reduce development costs, which can be passed back to the community and will also benefit local economic development.

## 8.5.2 Strategy

### *Desired Strategic Outcomes*

- The expansion of the small business sector in the Gulf region to meet the needs of the local communities and the tourism industry on a sustainable basis.

- Develop a consultative approach to the planning and assessment of retail and small business needs and opportunities in the region, including the Gulf Indigenous corporations.
- Ensure an adequate supply of retail and commercial space in the Gulf towns to accommodate small business development.
- Investigate opportunities to share construction resources amongst existing plant and construction operators including Government agencies.
- Develop and implement mechanisms that assist small businesses to establish, expand or diversify on a sound basis and in accordance with established economic and business principals.

### **8.5.3 Priority Actions**

- Review and develop Local Government, Aboriginal Community Council and relevant State Government agency plans and policies to promote the timely delivery of land, buildings, infrastructure and services for retail and commercial development in each of the Gulf towns.
- Undertake an assessment of the retail and small business needs of each of the Gulf communities and explore options to overcome existing shortfalls.

## 8.6 FISHING

### 8.6.1 Issues

Whilst commercial and non-commercial fisheries have been a significant resource in the Southern Gulf, it is claimed that fisheries resources are now approaching the point of being fully exploited. As a result, it is anticipated that fisheries management controls are likely to increase in the near future. This means that some of the current fishing activities in the Southern Gulf will either remain constant or decrease over time.

In Queensland as a whole, the best opportunities to increase fishery production are likely to come from a combination of better management and use of catches, improved use of under-utilised species, waste fish and fisheries products and by capitalising on value adding processes.

The Queensland Fisheries Service (QFS) manages the fishing industry in the Southern Gulf on behalf of the State with advice from the Tropical Finfish Management Advisory Committee (TropMAC). It is supported in the Southern Gulf region by a Zonal Advisory Committee (ZAC), which covers an area from the Torres Strait to the Northern Territory border.

The QFS is in the process of developing Fisheries Management Plans across the state's fisheries. The *Fisheries (Gulf of Carpentaria Inshore Fin Fish) Management Plan 1999* includes the following objectives:

- maintain inshore fin fish stocks at sustainable levels; and
- protect spawning target species, etc.

The plan also discusses a buy - back scheme to reduce the number of fishing licences. In the long term there will be fewer licences and each will be able to be operated in an ecologically and economically sustainable manner. In the short term, there will be a reduction in fishing operators, employees may become redundant and businesses, which currently rely on the fishing fleet, may suffer losses. However, the plan does not provide mechanisms to minimise those aspects in its restructuring program.

Native title claims over the Gulf of Carpentaria waters may also impact upon the Southern Gulf fishery in the future.

The Multiple Use Strategic Plan, presently under way, will address many of the issues relating to competing interests and environmental quality in the southern Gulf waters. These matters are also briefly addressed in the ***Environment and Natural Resources Strategy***.

#### ***Commercial Fishery***

Four commercial fisheries exist in the Southern Gulf:

Trawl Fishery: The Commonwealth Government administers the Northern Prawn Fishery. Whilst the prawning industry is worth more than \$ 40 million to the Gulf region, much of the processing and supplies are based around mother ships that work in the Gulf. Hence the dollar return coming directly from this industry into the Gulf is relatively low. In addition to this any environmental costs due to the depletion by the trawl fishery are likely to be borne by the Gulf community. However, Karumba is being used as a support centre for the prawning industry as it services a large proportion of the commercial fleet. The need to improve the Port of Karumba is addressed in the ***Integrated Transport Strategy***.

Estuarine and Inshore Net Fisheries: The Queensland multi-species fisheries operate in near shore tidal waters using set gill nets and targeting finfish. Regulations are in place which control the net dimensions and mesh size and require fishers to attend the net at all times.

Line Fisheries: There are two primary fishing methods used, baited handlines set close to the bottom for demersal species and trolling baits or lures for pelagic species.

Mud Crab Fisheries: Operators use pots (wire mesh traps) almost exclusively. However, crabs are also taken as incidental catch in the estuarine and inshore net fisheries.

Mornington Island Shire Council is currently assessing an application for *bech-de-mer* harvesting on the island. Part of the Council's consideration of the application involves ensuring a locally trained and employed work force is established. The QFS is also assessing the application that involves three potential fishing licences. The ability for the development of a local fishing industry is limited by the costs of acquiring and renewing licences. As the fishery is still being developed, the most local residents can expect to gain in the short term is employment, rather than owning and operating a business.

### **Aquaculture**

The aquaculture industry in Queensland is expanding rapidly. The value of the industry in 1996/97 was \$37.2 million (excluding pearls), which represented an increase of 6% from the previous year. Furthermore, the Queensland Government considers aquaculture industry development to be of a priority and has supported a number of major projects within the Aquaculture Sub-Program of the Department of Primary Industries.

Of the major aquaculture species currently farmed in Queensland it is the tiger prawn (*Penaeus monodon*), red claw (*Cherax quadricarinatus*) and barramundi (*Lates calcarifer*) that have the greatest potential within the Gulf Region.

- **Tiger Prawns:** Because of the warmer climate, farms located north of Townsville are generally able to produce more than 1 crop per year. There is very strong demand for prawns and markets are well established. However the rapid expansion of prawn farming in Asia has put a downward pressure on prawn prices. Prawn farming operations require significant economies of scale and are usually multi-million dollar investments. As prawn farming operations require large volumes of brackish water they need to be situated near to the coast. As such there are relatively few suitable sites that do not conflict with other industries, and are appropriate in terms of environmental regulations.
- **Red Claw Crayfish:** There appears to be a relatively small marketing niche for red claw on the domestic market.

However, export opportunities appear to be more significant with the industry currently lacking sufficient volume to meet the majority of export inquiries. A certain economy of scale is required for red claw farming operations to be viable. The minimum recommended farm size is 4 to 5 ha of pond area. If appropriately planned and located a red claw farming operation should not impact upon neighbouring industries or activities or discharge wastewater to the environment.

- **Barramundi:** Increased overseas and domestic production of farmed barramundi will maintain pressure on prices. Marketing strategies need to promote Queensland farmed barramundi as a fresh, farmed product as distinct from an imported (usually frozen) and wild-caught product. The profit margin per kg of barramundi produced is relatively low and thus the economies of scale are becoming increasingly important for the barramundi farming industry. The minimum recommended farm size is 5 ha of pond area. If appropriately planned and located, a barramundi farming operation should not impact upon neighbouring industries or activities and wastewater has the potential to be further utilised for irrigation.

There are also strong probabilities for the future development of sleepy cod (*Oxyeleotris sp*) and/or golden perch (*Macquaria ambigua*) industries. A "New Initiatives" research project is currently evaluating the potential of both these species.

Site selection is fundamental to the success of any aquaculture operation. In a tropical climate it is recommended that commercial prawn, red claw and barramundi farming should be undertaken in purpose-built earthen ponds. As such it is vital that the site has sufficient clay in the soil to construct and seal the ponds in a cost-effective manner. It is also important that there is a reliable supply of water of sufficient quality, salinity (prawns require brackish water, barramundi can utilise fresh or salt and red claw require fresh) and quantity. The climate of the site also has a direct bearing on growth rate and production. As prawns, red claw and

barramundi all achieve optimal growth rates when water temperatures are high (around 28°C) most of the Gulf Region will experience suitable temperatures. Soil type and water availability will be more limiting.

All aquaculture operations are affected by a number of the following inherent difficulties that have been identified as impeding the development of aquaculture in Queensland. Some of the difficulties are likely to be particularly problematic to many of the more remote Gulf sites.

Some of the major inherent difficulties to the further development of aquaculture in Queensland include:

- Limited number of sites that have the appropriate physical, geographic and climatic conditions;
- Conflict of interest with other activities and uses (particularly relevant to marine aquaculture being conducted in “waters of the state”;
- Perceived uncertainty relating to native title issues – *note: the Department of Premier and Cabinet advises that the development of aquaculture can be addressed under the future acts regime of the Commonwealth Native Title Act 1993 (subdivision G & H of the future acts regime);*
- Restricted availability of appropriate infrastructure (ie. power, transport and labour);
- High cost of production (ie. labour) reduces the competitiveness of Australian products on export markets (must compensate by producing highly valued products and by increasing the efficiency of production);
- Limited number of native species for which husbandry practises are well understood;
- Limited number of native species that have demonstrated large-scale commercial success.

As aquaculture is still a new and developing industry, there are many associated uncertainties. As such investment in aquaculture is still considered to be high risk.

### **Fishing for Traditional Purposes**

The majority of traditional fisheries are concentrated on coastal and estuarine fisheries in areas within 2-4 hours of travel by boat from the Aboriginal communities. The fishing includes line fishing, crabbing, hunting dugong and turtle, and collecting molluscs and crustaceans. The Wellesly Islands provide a traditional hunting ground for dugong and turtle. Dugong remains an important source of food with great cultural significance. Whilst dugong are protected under the Nature Conservation Act 1992, there is allowance for non-commercial traditional hunting. The traditional estuarine and inshore fishery comprises barramundi, threadfin salmon, fork-tailed catfish, eel-tailed catfish, mud crabs, shellfish, stingrays and mullet.

Maintenance of the traditional fishery is also important for Aboriginal cultural reasons as well as for health and community well being. The **Community Services Strategy** addresses community health issues.

There is a need to identify the extent and locations of the traditional fishery and to assess the impacts on and threats to the sustainability of this industry.

### **Recreational Fishing**

The major factor that affects the distribution and level of recreational fishing in the Southern Gulf is access to the fishery. Most recreational fishing occurs within 40-50 km of road access points to the Southern Gulf waters. Karumba is the key location for tourist recreational fishing as it has the easiest road access from centres outside the region.

However, recreational fishing throughout the region, including Karumba is limited in the wet season when road access is restricted. Available data on the recreational fishery is limited, however QFS has conducted recreational fishing surveys in 1996 and 1998 resulting in a much-improved knowledge of fishery.

Whilst recreational fishing is increasing, the average catch and value attributed to this sector is unknown, but would be expected to be significant. The Department of State Development and GSD have negotiated an extension to the "Lure of the Gulf" project to conduct market research into the recreational fishing industry in the region

Despite access constraints, control over the recreational fishery is difficult to achieve in most areas of the Southern Gulf. However, the Kowanyama Aboriginal Community Council has implemented the management of a controlled recreational fishery through the introduction of a system of camping and fishing permits. This could be a model for implementation in other areas, particularly in the Aboriginal communities.

## 8.6.2 Strategy

### *Desired Strategic Outcomes*

- The long-term economic and environmental sustainability of the Southern Gulf commercial, traditional recreational fisheries.
- Development of the aquaculture industry in the Gulf region.

- Further development of this strategy based on the outcomes of the regional plans currently in progress.
- Investigate opportunities for the development of an economically and environmentally sustainable aquaculture industry in the Southern Gulf region.

### **8.6.3 Priority Actions**

- Review this strategy as a result of the outcomes of the following investigations:
  - MUSP;
  - QFS Strategy Development;
  - Gulf recreational fishing study.

## 8.7 CROPPING AND HORTICULTURE

### 8.7.1 Issues

#### *Irrigation Schemes*

Only small areas within the Gulf are currently utilised for horticultural purposes. Outside of fodder production, notable mango and neem farms exist on the Gilbert River in Etheridge Shire. On an area basis, hay is the largest crop. Cropping and horticulture are presently minor activities in the Gulf. However given the availability of suitable soils and water, significant opportunities may exist for the expansion of these industries.

The region has an enormous water catchment area, which feeds into the Gulf of Carpentaria. The Gulf Regional Water Planning Advisory Committee (with funding from the Queensland Government's Water Infrastructure Taskforce) has undertaken an assessment of land suitable for horticultural purposes. The study has identified water availability and soil suitability in proximity to the Gilbert, Gregory, Einasleigh, Copperfield and Mitchell Rivers. (Refer to the Water Investigation Areas Map).

The forthcoming report by the Gulf Regional Water Planning Advisory Committee identifies significant opportunities to develop irrigation projects west of Georgetown on the Gilbert River and at the O'Connell Creek Storage at Richmond. The assessment indicates that the potential economic benefits of irrigation projects to the local populace could, with careful planning, be at least equivalent to other existing industries such as cattle and mining. There has been significant interest from grower bodies and private investors in these projects.

Issues related to potential irrigation projects are discussed further in the ***Environment and Natural Resources Strategy***, and the ***Infrastructure Strategy***.

Crops that have potential include sugarcane, cotton, maize, peanuts, tea tree, navy beans, mandarins, mangoes, soybeans, hay, sorghum, onions, tomatoes and capsicum. The Gulf is well situated to take advantage of an earlier cropping season than the areas on the east coast; enabling producers to place produce on the market earlier than competitors, thereby obtaining premium prices. However, there are a number of issues that will need to be addressed in order to achieve viable economic returns. These include:

- distance to markets;
- travel costs;
- availability of infrastructure;
- critical mass of volume produced;
- seasonal rainfall;
- soil suitability and fertility;
- downstream effects of dams and irrigation areas will need to be assessed and minimised; and
- impact of termites in the crops.



**Water Investigation Areas Map**



The outcomes of the Gulf Regional Water Planning Advisory Committee report need to be assessed in terms of the identification of locations for crops that are suitable and capable of being grown in, and marketed from the Gulf. Once identified these resources will need to be protected from other forms of land use.

The outcomes of this project should be monitored and if successful could be applied to other communities throughout the Gulf region.

Dependant on the type of cropping established there might be also be significant opportunities for local employment as key operatives on farms and any downstream industries. This would require the provision of appropriate training and support. (Refer to the **Employment, Education and Training Strategy**)

### **Market Gardens**

With the exception of some seafood, almost all foodstuffs are imported into the Gulf. This has implications for the nutrition and health of the Gulf communities, particularly during the wet season when freight imports to communities isolated by floodwaters must be flown in. The **Community Services Strategy** addresses health and nutrition matters in more detail.

At the turn of the century market gardens flourished and meat was sourced locally. Attempts have been made to re-establish market gardens in the Aboriginal communities on numerous occasions. These attempts have usually failed, primarily due to the initiative being imposed on the community by outside parties. As a local initiative Kowanyama Community recently established a small-scale market garden that is operating successfully.

Kowanyama Community Council is part of the Cape York Food Gardens Project that seeks to secure a three-year funding package to facilitate, support and promote food gardens in the remote Aboriginal and Torres Strait Islander communities of Cape York Peninsula and the Gulf. The project intends to:

- establish enterprises that achieve a significant level of import replacement in rural and remote communities relating to fresh produce;
- provide sustainable employment opportunities particularly people of Aboriginal and Torres Strait Islander descent; and
- retain expenditure within the region.

## 8.7.2 Strategy

### *Desired Outcomes*

- Development of an economically and environmentally sustainable cropping and horticultural industry in the Gulf region.
- Development of local production of foods to meet the Gulf community's needs.

- Incorporate the outcomes of the Gulf Regional Water Planning Advisory Committee report and ensure there is detailed cropping and horticultural land suitability and capability assessment in areas with proximity to water resources.
- Establish or work with existing programs to support the development of local food production and market gardens in the Gulf.
- Coordinate the timely delivery of services and infrastructure to facilitate the development and expansion of the cropping and horticultural industry, including market gardens.

### 8.7.3 Priority Actions

- Review the primary actions of this strategy as a result of the outcomes of the Gulf Regional Water Planning Advisory Committee report.
- Review and develop Local Government, Aboriginal community and relevant Government agency plans and policies to protect potential horticultural and cropping land resources and to provide the timely coordinated delivery of services and infrastructure to facilitate industry development and expansion.
- Monitor the outcomes for the Cape York Food Gardens Project for consideration for development of a similar model in the Gulf region.

## 8.8 INDIGENOUS MANAGED INDUSTRY

### 8.8.1 Issues

The Gulf Aboriginal Development Corporation (GADC) commenced operations in late 1997 as a regional organisation acting as a conduit for the implementation of the 1997 Century Mine Agreement. It comprises of representatives of the Waanyi, Minginda and Gkuthaan/Kurtjar tribal groups who were signatories to the Agreement.

GADC has only a small funding base; however a separate trust is to be established to administer a Business Development Fund, into which funding under the Century Mine Agreement will be placed. These funds will be available for Aboriginal business ventures or joint ventures between the signatory Aboriginal community groups and outside businesses, either for contracts associated with the mine or for other enterprises.

Bynoe Co-operative in Normanton operates a number of enterprises, including TNT and Flight West agencies, a service station, plant hire, construction, maintenance and the school tuckshop.

Muyinda Aboriginal Corporation on Mornington Island is the only established Indigenous arts and crafts business in the Gulf and produces a full range of products including spears, boomerangs, paintings, pandanus mats, string bags and shell necklaces. There is a retail outlet on the island and sales also occur through nine outlets in Sydney. Aboriginal and Torres Strait Islander art and culture is seen as having considerable potential for enterprise development, and the extent of Indigenous artistic talent available in the region should be recognised as an economic opportunity.

Through its Economic Development Officer, Croydon Shire is jointly investigating local Indigenous industry opportunities with the Tagalaka Aboriginal Corporation. In general, the level of enterprise development in most Indigenous communities is limited. The lack of appropriate skills and training, shortage of capital and the remote location of many Indigenous communities restrict the development of Indigenous industries and

work skills. This matter is addressed further in the ***Employment, Education and Training Strategy***.

There are opportunities for expansion of Indigenous enterprises and increased involvement in mainstream economic activities that assists in achieving economic independence. The region has the opportunity to be a focal point for Aboriginal art and culture. Market identification and development will be critical in fostering an industry based on cultural arts and crafts.

While the CDEP operational plans set out a range of proposed income generating activities at a local level, there is a need for a regional association to promote and facilitate Indigenous businesses. This organisation could undertake the following actions:

- represent Aboriginal interests in regional economic developments;
- investigate options for joint ventures;
- assist with local enterprise development schemes;
- facilitate enterprise involved in the development and presentation of products and services associated with art and cultural experiences.

## 8.8.2 Strategy

### *Desired Strategic Outcomes*

- Economic independence for Aboriginal communities through the development of sustainable Indigenous enterprises.

- Ensure Aboriginal communities are empowered to develop sustainable Indigenous enterprise.
- Promote the ongoing development of Indigenous cultural arts and crafts industry in the Gulf region.

## 8.8.3 Priority Actions

- Support the establishment of a regional body to facilitate Indigenous industry development.
- Encourage Aboriginal interests to be represented on an equal basis in the development of the regional economy.
- As a first step to exploring Indigenous arts, crafts and cultural industry, there should be a culture meeting of Indigenous communities in the Gulf. This meeting should explore regional cooperative arrangements, share traditional knowledge/skills in arts and crafts, and exchange experiences with resourcing, marketing and distribution.

## 8.9 OTHER NATURAL RESOURCE BASED INDUSTRIES

### 8.9.1 Issues

#### *Forestry*

Current timber species harvested in the region include:

- Gutta percha/northern brown birch (*Excoecaria dallachyana*) which occurs in large pure stands in areas across the region, primarily near river courses, but not in very wet areas;
- Cooktown ironwood (*Erythrophleum chlorostacys*), blue gum (*Eucalyptus tereticornis*) and bloodwood (*Corymbia polycarpa*) which are harvested in small amounts for railway sleepers in the Mt. Surprise area;
- Sandalwood (*Santalum lanceolatum*), which, in the Normanton-Karumba area, has been sold through timber sales permits issued by DPI Forestry since the 1980s. Whilst investigations into sandalwood resources have been initiated, it is noted that illegal harvest of sandalwood in the region is a significant issue for both the government and the community;
- Black tea tree swamps, which are occasionally harvested for fence posts by lessees.

The Department of Primary Industries has entered into a joint venture with Croydon Shire Council to trial the development of forestry in the shire. In addition, Carpentaria Shire Council has recently been funded by Greening Australia to trial forestry cropping using irrigation from the town sewerage effluent system. This trial includes Mt Isa, Cloncurry and Normanton and will commence late in 1999.

No comprehensive assessment of forestry resources has been completed in the region. Therefore the potential for the expansion of this industry is not yet known. The Department of Natural Resources advises that while it supports the need for such an investigation, no funds or resources are presently available to undertake any such assessment.

Silviculture practices need trials to determine species/provenances best suited to the climate and soils of different parts of the region. Sandalwood would require access to irrigated areas. Non-timber forest products would include native food plants for both Aboriginal subsistence and for the native food industry in Australia.

There is also potential for other value adding species such as neem used for oils and phyto-insecticides. Benefits could include:

- financial flexibility for farming sector by diversification;
- environmental benefits through the prevention of erosion etc;
- select species to add value to Aboriginal subsistence from the environment.

There is a need to establish sustainable harvest rates for the extraction of all forest products and to introduce appropriate management regimes to restrict the extraction of forest products. Compliance with forestry management regimes should be encouraged through education and training with enforcement through local policing and monitoring. In the longer term there is a need to monitor the effectiveness of forestry management regimes.

#### *Extractive Industries*

A deposit of ancient river-washed pebbles near Mt Surprise has been developed to a limited extent with the intention of extracting rose quartz. Sand extraction opportunities also exist in the Croydon Shire.

The current sources of hard rock material are limited and are not located so they can be readily and cost-effectively exploited. For example hard rock material required in the Normanton-Karumba area has to be trucked from Croydon. The result is long haulage distances and high costs.

The Gulf region extractive industry potential is difficult to fully determine until a detailed inventory is completed of the quarry resources.

Extractive resources need to be identified and protected for future exploitation. The use of inert waste rock dumps at abandoned mine sites should be considered as an option as blasting is not a requirement for extraction.

A draft Code of Practice for Extractive Industries in state forests and timber reserves is presently being developed in consultation with industry representatives. If successful it is hoped this code will be extended to apply to Extractive Industries on all state lands.

### **Subsistence Economy**

Subsistence refers to the production of a range of goods and services for use rather than sale. In the context of the Gulf, subsistence generally refers to the production of foodstuffs for domestic use. The subsistence economy is not limited to Indigenous communities and also occurs within non-Indigenous communities.

Indigenous people in the Gulf area depend on traditional food sources to a large extent, with this use being most apparent in the coastal and near-coastal communities of Normanton, Karumba, Kowanyama and Mornington Island. Existing state legislation determines land tenures where native wildlife can be taken legally and provides special arrangements for some native species. The main targeted animals include:

- macropods,
- fish (particularly barramundi and catfish),
- waterfowl,
- dugong,
- turtle,
- crustaceans and,
- molluscs.

Data on subsistence activities is limited, however researchers have estimated that subsistence foodstuff production may account for up to 23% of all foodstuffs consumed in Indigenous communities (Environment North 1998). This is important from a nutrition and community health aspect as reliance on subsistence foods supplements diets and decreases the reliance on food imports, particularly during the wet season when fresh foods are difficult to obtain. The **Community**

**Services Strategy** addresses health and nutritional issues.

The implications of Indigenous use of natural resources are:

- the economic value of subsistence (especially in terms of reducing food costs and contributing to health) should not be overlooked in any economic analysis,
- the maintenance of healthy environments that support targeted animals is essential, and
- the ecological sustainability of the current rates of extraction from various Gulf commercial fisheries needs to be scientifically determined and continually monitored to ensure that over-exploitation does not occur.

The extent subsistence economy, based on wild food harvesting should be investigated. An option to develop strategies for native species plantations that could enhance subsistence food options in Aboriginal communities (such as the Kakadu Plum) should also be explored.

### **Management**

The management of conservation areas is becoming a major issue, particularly given the current lack of adequate management resources. The EPA is focused on maintaining its existing national parks and is not actively seeking further acquisitions. In the Gulf very few rangers are employed. There has been little or no improvement in resources since the 1980's. In the future, the commercialisation of national parks and native wildlife could be a realistic economic opportunity. This could provide increased revenue for resource management and warrants further investigation.

The *Nature Conservation Act 1992* requires that National Parks be managed in accordance with Section 17 of the Act:

- to provide for the permanent preservation of the area's natural condition to the greatest possible extent;
- to protect and present the area's cultural and natural resource values; and
- to ensure the only use of the area is nature-based and ecologically sustainable.

The requirements may result, depending on the sensitivity and fragility of the park, in strict limits on activities and access. In these instances commercial opportunities may be limited.

There is already commercial use of National Parks by means of a permit system. Financial returns from Commercial Activity Permits and camping fees on parks are used for park management and provision of facilities.

In addition to national parks, the Gulf region contains many other areas with high natural and cultural values where suitably sited commercial development can occur providing a direct return to the landholder. Conservation Agreements, which establish Nature Refuges, and the existence of a listing on the Natural or Cultural Heritage Register, may be a means of assisting in the promotion of natural assets.

Commercial ventures within national parks and on other land could serve to provide increased funds for management of those resources. It would be expected that commercialisation would require the involvement of traditional landowners, preferably in joint ventures. This would provide an opportunity for Indigenous people to have greater control over resource use on traditional land and have a direct involvement in the financial benefits.

In Australia very few joint management agreements have been implemented due to either legislative restrictions or a lack of financial resources. Domestically, the more significant joint management arrangements are in Uluru-Kata Tjuta and Kakadu National Parks where management is undertaken jointly between the Commonwealth Government and traditional owners.

Carpentaria Shire Council, in partnership with Indigenous groups in Normanton, is developing a joint management plan for the Mutton Hole Wetland. It is hoped this plan will include provision for the employment of Indigenous rangers and guides to interpret the cultural and natural values of the wetland.

## **Utilisation**

There is an argument that the commercial use of native fauna and flora, within strict rules, can contribute to the regional economy. If properly managed, commercial use could effectively achieve conservation goals by reducing their capture value, encouraging the preservation of habitat and creating an incentive for landholders to improve the resources on which wild animals depend.

There is a need to investigate options to establish native fauna harvesting and farming on a sustainable and legal basis. The rural sector needs opportunities to diversify. New native animal industries could offer alternatives to domestic species. Development of these industries could generate significant economic, social and environmental benefits to the rural sector and to Aboriginal communities.

Native fauna harvesting, where there is an artificially high number of animals (due to increased watering point or improved pasture) is feasible. However, where there is little change to the natural system, or systems have been degraded by domestic animals, a sustainable take will be very low.

The Department of Primary Industries has been considering wildlife farming, where native species are bred and raised in a closed system. That is, once the initial stock is established no more stock is taken from the wild except for a small input for genetic purposes.

Captive breeding of high value species of birds and reptiles is a specialist task, requiring high-grade facilities, feeds and care. Once the initial collection from the wild is made there should be limited demand on the wild stock. At present, demand for snake venom is low and the numbers of existing producers is falling.

A similar situation exists for insects. Once a captive population is established, specialist keepers provide specimens from captive bred stock. Wild stocks cannot sustainably provide the numbers and specimens in good condition required for a viable trade.

An alternative view on commercial harvesting of wildlife is that a commercial demand for native species can lead to a depletion of local populations and may prove unsustainable in the long term.

Game hunting could be established as a boutique industry targeted at feral game and the sustainable harvesting of native fauna for conservation management purposes. With the lucrative international market in game hunting, by combining bird, kangaroo, buffalo, wild boar, dingoes, cats and possibly crocodiles, the Gulf is in a position to develop its own unique hunting experience.

The birds that could be hunted under the *Nature Conservation Act 1993*, mainly a few designated duck species, have a very restricted hunting season that varies annually both in time, species and bag limits.

Feral species such as pigs, goats, rabbits and cats can be hunted on private land with the landholders' permission at any time. Provision of visitor access and facilities could provide both an alternative income for the landholder and a means of controlling feral animals. However this also could lead to maintenance of feral populations with continuing environmental impacts.

Opportunities in this area will receive direction when a Federal Senate Committee releases the findings of its

inquiry into the Commercial Utilisation of Australian Native Wildlife. The major impediment to developing a native wildlife industry lies in the legislative framework restricting such trade. Once sustainability is established, classifications of endangered species within sites will need to be addressed, as will trade restrictions within importing countries. At a national level the Wildlife Protection (Regulation of Exports and Imports) Act 1982 will need to be reviewed.

### ***Bush Foods And Medicine***

There is currently no industry developed around bush foods and medicines industry in the Gulf, nor has there been any assessment of its potential. Bush food products have an annual Australian turnover estimated at \$14 million per annum. The Australian National Bush food Industry Committee believes that the annual turnover could reach \$100 million by the year 2000.

The potential for communities to grow and promote bush foods and medicines for exporting purposes is strong. In the current climate, natural foods and medicines are highly sought after. This presents an opportunity for the communities of the Gulf, particularly those with an Indigenous background, to capitalise on this demand.

## 8.9.2 Strategy

### *Desired Strategic Outcomes*

- A comprehensive assessment of forestry resources prior to formulating a strategy to ensure the economic and environmental sustainable development of a forestry industry in the region.
- A detailed inventory of quarry and extractive resources.
- The protection and sustainability of subsistence economy.
- Increased opportunities for commercialisation in the management of conservation areas.
- Increased opportunities for the commercial utilisation of native wildlife.
- Development of a bush foods and medicines industry.

- Increase knowledge and understanding of the forestry resources of the region including the identification of industry opportunities.
- Increase knowledge of the quarry and extractive resources of the Gulf region
- Ensure that Local Government Planning Schemes identify known quarry deposits and protect these areas for future exploitation.
- Ensure that all quarry operations comply with the proposed Code of Practice for Extractive Industries.
- Increase knowledge and understanding of the subsistence economy.
- Promote expansion of opportunities for:
  - native fauna and flora industries.
  - commercial ventures in conservation areas.
  - bush foods and medicine industry.

### 8.9.3 Priority Actions

- Undertake a comprehensive resource assessment of the forestry potential of the Gulf region.
- Carry out an inventory of quarry and extractive resources of the Gulf region.
- Develop and review Local Government and Aboriginal Community Council plans to protect quarry and extractive resources and to regulate the development of these resources consistent with the established codes of practice.
- Undertake an assessment of the significance of the Aboriginal subsistence economy and develop mechanisms to protect and manage the natural resources on which this economy relies.
- Undertake feasibility investigations to establish native fauna harvesting and farming on a sustainable and legal basis for export.
- Undertake feasibility investigations into the commercialisation of National Parks and leasehold management that will allow income to be used for resource management within the region from which it is sourced.
- Investigate opportunities for a bush foods and medicines industry in the Gulf region.



## **9 EMPLOYMENT, EDUCATION AND TRAINING STRATEGY**

### *Overview*

Unemployment in the Gulf region is very high compared to other parts of the State and job opportunities for local residents are also very limited. This is primarily due to a lack of diversity in the regional economy and a limited pool of locally based skilled labour. Most employment that requires a skills base is filled from outside the region.

There are opportunities for the Gulf communities to acquire the employment skills from the Gulf TAFE College at Normanton and a number of colleges external to the region, the Rural Extension Service, Distance Education, Open Learning Centres, the Community Development and Employment Programs (CDEP) and the regional high schools which offer schooling to year 10.

There is a need to improve and coordinate regional training and education systems and to integrate them with employment generating schemes.

The aims of this Strategy are to:

- maximise opportunities for employment generation;
- provide equitable access to a wider range of appropriate schooling opportunities within the region; and
- provide equitable access to regionally coordinated training programmes which are targeted at providing skills levels appropriate to regional employment opportunities as well as improving access to higher education opportunities external to the region.

## 9.1 EDUCATION

### 9.1.1 Issues

#### *Primary Schools*

There are primary schools at Georgetown, Croydon, Kowanyama, Normanton, Karumba, Mornington Island, Burketown and Doomadgee. Both Mt Surprise and Forsayth have one-teacher schools despite having small pupil bases. The Department of Education has an established threshold of 8 pupils, and a number of schools are already below this. There is a concern that student numbers will drop and schools will be closed. Difficulties have been experienced in these schools in obtaining relief staff, particularly when the lone teacher is required to participate in training courses and other duties outside the region.

Einaleigh, Raft Point and Gregory do not have primary schools. In these towns and in the balance of the Gulf region, each family provides home-based education through the distance education system. There is a need to provide access to primary schooling facilities in each of the Gulf towns.

Georgetown currently has a hostel for boarders. This provides increased access for school children from surrounding rural properties and could work effectively in other parts of the region.

A 'cluster school' arrangement exists for the Mt Surprise, Forsayth, Croydon and Georgetown schools whereby specialists (eg. music, physical education, remedial teachers) are based in Georgetown to service the specialist needs of these schools.

Given present student numbers, one-teacher schools may be required at Raft Point and Gregory and in the longer term at Einaleigh if student numbers increase. In addition, consideration should also be given to providing primary schooling to children at outstations. In this regard, a school located at Old Doomadgee could service the coastal outstations. In the event this is not feasible, options to improve access to schooling need to be explored. This may include offsetting costs involved in community bids to employ teachers or

governesses within these towns. This will enable the children to study via the distance education system in a classroom setting.

#### *High Schools*

High schools in Normanton, Mornington Island, Doomadgee and Kowanyama provide secondary education to Year 10. The remaining seven settlements in the Gulf region have no secondary schooling. Students either study through distance education or attend boarding school outside the region.

All students who wish to complete years 11 and 12 must either study through distance education or attend boarding schools. There is a need to improve access to year 11 and 12 schooling within the region. The Gulf high schools are not likely to be extended to include years 11 and 12 under the current Education Department threshold systems. Further, there is a perception within the community that the establishment of classes for Years 11 and 12 within the region would only result in education of a lower standard than can be accessed externally, and any such move would detrimentally affect eligibility for subsidies on external or remote education.

It is understood that the standard of distance education is considered to be excellent until years 11 and 12 when students transfer from the regional program to a Brisbane based system. However, there is some dissatisfaction with the program run from Brisbane. In addition, there is a need for improved transmission and reception technology in the School of the Air as radio reception in some locations is reported to be poor. This matter is dealt with in the **Regional Infrastructure Strategy**.

Doomadgee and Mornington Island are post compulsory schools which means they run a programs of literacy and numeracy classes for mature students beyond Grade 10. However, this program is not funded nor are additional staff provided. Vocational Education and alternative secondary schooling programs require

considerable organisation, time and effort as the part of education staff. The Gulf Education Cooperative is currently implementing a dedicated program of: vocational education (for Years 9 and 10); post-compulsory education strategies; structured workplace learning; career education; and school-industry links. Owing to resource allocations, this program is limited to Doomadgee, Mornington Island and Normanton.

Issues relating to low literacy and numeracy levels, lack of boarding school experience, low levels of personal development and self esteem all need to be addressed and overcome for students to successfully participate in these schemes. The need to explore options for a more formal support program designed with community input, and boarding schools to improve success rates at these schools is currently being pursued as a key element of implementing Education Queensland's *Partners for Success* strategy.

### **Curriculum**

There is a perception in the Gulf communities, particularly in Normanton, Mornington Island and Doomadgee, that the outcomes of secondary education in the Gulf region are below an acceptable standard. This is due to the belief that the schools provide below average literacy and numeracy levels, a limited range of subjects and that there is a lack of extra curricular activities available to secondary students. However, Normanton State School provides the same board subject that every school in the state up to year 10 provides.

Through the Connect-Ed initiative all schools in the Gulf region will have access to the Internet. The Gulf High Schools all have access to tele-learning services. Subject offering generally relies on the expertise of the staff unlike mainstream schools and alternative programs have to be designed and implemented on site. In this regard, teachers with skills in Information Technology (IT) are in short supply, staff are expected to install, operate and maintain IT systems as well as providing education in the use of information technology systems. There is an urgent need to improve information technology skills in the regions schools.

All state schools take opinion surveys. In the 1998 opinion survey held with parents of students at Normanton State School, nearly 90% of all parents surveyed were satisfied to very satisfied in their 'confidence in public education'. There is a need to assure community confidence in the range and standard of education offered in the Gulf region, particularly for those who do not wish to send their children to boarding school. This could be achieved through increased community involvement in and understanding of education.

Education Queensland's "*Partners For Success*" strategy explicitly recognises the importance of effective links between the school and the community. Gulf schools are represented amongst the schools currently trialing the establishment of school-community partnership arrangements, codified as Compacts. These Compacts will articulate a wide range of expectations including communication on standards; program planning; curriculum and pedagogy; student progress and performance.

This link between community and school can be initiated through community and school sports and recreation activities and events. This has been trialed in Kowanyama. School sports days are the most widely patronised events by parents and the community and are often the only opportunity teachers have to make contact with parents in relation to student progress and performance.

### **Student Welfare**

The provision of support and intervention programs needs to be designed for the local setting. Substantial time and effort is required on the part of the education staff to initiate, operate and monitor the success of such schemes. A greater emphasis on health, human studies and sport as part of the curriculum is essential. Human relations is as important as health education and sport in terms of community well being.

The **Community Services Strategy** addresses the health, sport and recreation needs of the Gulf communities.

Normanton State School has engaged a Student Care Coordinator. Guidance officers who visit the school regularly for five days at a time assist this coordinator. At Kowanyama State School travelling officers tend to visit the school for short and intensive periods but then there are long periods where no external support is provided. This is due in part to access particularly during the wet season and to the relative numbers of staff employed to cover large remote regions.

Normanton State Schools Student Care Coordinator and the locally based community liaison officers have a system in place to collect truant children and to educate parents regarding this issue.

At Kowanyama there is extensive liaison between the school, the Community Justice Group, the Health Action Group, the Aboriginal Community Council and the community police to develop collaborative initiatives to resolve levels of attendance, child welfare, health, community recreation and behaviour problems. The Community Council bus is used to collect students each day, however, this requires teaching staff, time and efforts, including the need to obtain the mini bus licences. It is understood that specialist community liaison staff and truancy officers are only allocated to schools which offer years 11 and 12, and as such none of the Gulf schools are eligible for these support staff.

One of the greatest impediments for children to study at home is often overcrowding in the home. The **Community Services Strategy** addresses this matter in more detail.

### **Teachers**

Education Queensland provides training for teachers to operate in cross-cultural environments. However, there is no preparation for staff to deal with living in remote and isolated communities. Some teachers experience difficulty adjusting to remote schools and as a result there is a high staff turnover.

The relatively high rate of turnover and the large numbers of graduate teachers in the Gulf schools places pressures on staff time management. Induction and familiarisations with both the school and the

community take time and effort. There are also difficulties in staffing levels for teachers who may be sick, or absent for ongoing professional development. There is a lack of access to Education Department Teacher Release Schemes in the Gulf schools.

A range of workplace reforms aimed at attracting and retaining highly qualified staff to remote schools with high numbers of Indigenous students is being developed by a working group involving Education Queensland, the Queensland Teachers Union and the Queensland Association of Secondary School Principals.

An acute shortage of teacher housing adds to the difficulties in attracting and retaining staff. There is a perception that teachers are appointed to fit the housing stock in remote communities. Education Queensland is completing an internal review of employee housing policy and provisions, in an attempt to better align housing stock with staffing requirements.

There is a lack of Indigenous teachers in the region. Indigenous staffing provides a great boost to the school community, but also brings issues including cultural ties, high turnover rates, and work pattern related issues. Support staff and structures to ensure they are adequately resourced are lacking. The Remote Area Teacher Education Program (RATEP) is aimed at supplying more Indigenous teachers. RATEP is a joint initiative between EQ, James Cook University (JCU) and the Tropical North Queensland Institute of TAFE. Other funding opportunities such as private sponsorship, for example, Pasminco Ltd, are accessed as they arise. RATEP allows students to undertake Certificate level courses and Diploma in Education (ATSI) through TNQTAFE leading to a Bachelor of Education at JCU and graduation as a fully qualified four year trained teacher. Students who complete TNQTAFE courses but do not proceed to JCU qualify as teacher's aides or community teachers, depending on the level of course completion. RATEP has difficulties in that students find it extremely hard on their own, however, there are few alternatives. Indigenous groups prefer teachers from their own region to those from other regions. Education Queensland is committed to continuing RATEP as a

means for the training and development of its Indigenous workforce, including the Gulf region, consistent with the Partners For Success policy objective of increasing the employment, career pathway and leadership role profiles of Indigenous peoples in Education Queensland.

Education Queensland, under the Partners For Success strategy, has established an Indigenous Education and Training Alliance (IETA) as a support mechanism to address the professional learning needs of schools and their communities, including those in the Gulf area. IETA will develop, provide and broker professional development and training services and programs to support continuous improvement in educational outcomes for Aboriginal and Torres Strait Islander students. IETA is also currently responsible for delivering post appointment induction program under the Remote Area Incentive Scheme. IETA is closely linked with the Learning and Development Foundation. Education Queensland funds IETA from State funds and it is proposed to use National Indigenous English Literacy and Numeracy Strategy funds to employ specialist staff.

Education Queensland is currently addressing literacy issues through the development of measurement tools known as *English as a Second Language Bandscales for Indigenous learners of English as a second language*. The "Bandscales" will enable teachers to make appropriate judgments about student achievements in learning Standard Australian English.

Training programs are being developed and implemented to ensure teachers have access to appropriate pedagogy for teaching Indigenous learners of English as a second language.

In 2001, Education Queensland intends to select a number of school cluster sites where mentoring and training of teachers on literacy approaches can be conducted. It is anticipated that several of these Literacy Education And Practice sites will have significant Indigenous student populations, and thereby be able to provide further assistance to schools in the Gulf region.

#### **School Resources**

Due to a lack of resources and the added costs of running schools in remote locations there is difficulty meeting the 'Parents and Citizens' (P&C) financial component of the "cool school" program to air-condition the classrooms. The policy that parents share the costs of air-conditioning schools has equity implications. The Gulf schools are further disadvantaged by the fact that installation costs are higher within the region than in other parts of the State. In this regard, the Cool Schools Programme was to be in place by February 1998 yet Doomadgee and other schools in the Gulf region are still waiting for installation. The cool schools programme does not extend to the home based education systems where children are often required to undertake studies in stifling heat.

The Queensland Government construction arm, Q Build does most of work in the Gulf schools. However, there is a perception that Q Build is often overpriced. While it operates competitively in the market place, quotes do not include on-costs. Under the National Competition Policy (NCP) the school should be able to select whichever contractors can best and most cost effectively undertake the work. However, it is understood the Government advised that Q Build is the preferred contractor. In the Gulf there is limited access to Q Build services.

Project Services (Department of Public Works), Education Queensland and Q Build are currently negotiating better practices with respect to school resources.

#### **Access to Training and Employment**

There is a need for secondary schooling to provide opportunities for students to access employment and training schemes. The transition from years 10 or 12 to an appropriate course at TAFE, higher education facility or directly to employment needs facilitation at the high school level. In this regard, Normanton State School provides training programs in rural studies, hospitality, business practice and music. These are all training TAFE modules provided by qualified staff. In addition, Normanton students in years 9 and 10 are provided with industry/work placement opportunities at Katherine in the Northern Territory and in Cairns.

### **Regional Committee on Education, Training and Employment**

Education and training facilities in the Gulf have not necessarily provided graduates with the skills required to obtain employment. A regional committee - the Gulf Education, Training and Employment Management (GETEM) committee - was established by the Education Department in September 1997. It has representation from the education and training sectors as well as from business and industry in the region.

The focus of GETEM has been on the western and central areas of the Gulf region. However, it is to be expanded to include the Croydon, Etheridge and Kowanyama communities. There are limited funds for to employ a project coordinator.

To date GETEM has identified opportunities for employment, education and training in heritage and tourism. However, possible future employers in these fields have yet to be identified. It is hoped to include training programs for specific work skills as well as enterprise skills sufficient for self-employment.

### **Subsidies**

Many Gulf families, both Indigenous and non-Indigenous, would prefer the opportunity to send their children to boarding school at the commencement of secondary level rather than utilising the local secondary schooling system. There is the perception that sending children to boarding school provides an opportunity for them to experience the world outside the Gulf region. For this experience alone there is a strong preference for education external to the Gulf region.

According to current Department of Education policy, where a secondary school is available locally, parents are not entitled to allowances for education away from home. Where families are eligible for boarding school allowances, many still experience financial difficulties, as the education allowances do not necessarily cover the full range of expenses. There is also difficulty for Aboriginal families in obtaining financial assistance to send their children to boarding school, even though Abstudy covers many situations. Paperwork for funding is a problem. It is understood

Abstudy is soon to be altered in the near future to address these problems. Youth Allowance for students under the age of 25 years and Austudy for students aged 25 years and over, are means tested and the eligibility criteria are not widely publicised or known or understood. The eligibility criteria take no account of isolation or remoteness of students in rural areas.

Apparent inequities exist between the Indigenous and mainstream students when Indigenous students are able, in a range of special circumstances, to obtain Abstudy support to board away for their secondary education while the remainder of the population cannot obtain similar support.

Inequities also exist between town students and rural students, in that rural students have access to financial assistance to go to boarding school through the 'Assistance for Isolated Children Scheme', whereas children living in the Gulf towns that have a secondary school are not eligible for the assistance. In addition the annual allowance from the Assistance for Isolated Children scheme, is considered insufficient to cover costs of remote area schooling and governesses.

There is a need for a review of the eligibility criteria and the adequacy of the various education subsidies and support programmes. This review should address the following apparent inequities:

- eligibility for and the adequacy of the Assistance for Isolated Children Schemes for town and rural students regardless of the location of high schools in town;
- subsidies comparable to Abstudy for non-Indigenous students;
- equity in financial support between students located in the Gulf towns and those on rural and remote properties.

Issues of financial assistance and subsidies are currently being considered by Education Queensland in the development of a discussion paper on supporting students to complete secondary education and in the overall Rural and Remote Education Strategy being developed for Education Queensland across 2001-05.

### ***The Education Dilemma in the Gulf***

The educational issues affecting the Gulf community - standard, resource allocation, eligibility for subsidies - whether perceived or real, present a difficult situation for parents and service providers alike. Whilst the community is united in its desire for improved access to high quality education, there is disparity in how this should be delivered.

Many Gulf residents prefer to send their children to educational facilities outside the region - to such centres as Cairns and Townsville. Any improvement to schooling within the Gulf is perceived to have the following effects:

- eligibility for subsidies is threatened, potentially forcing parents to send their children to schools within the region, which they perceive to be of poor standard;
- any improvements to the schooling within the Gulf would be gradual, with little short-term benefit.

This view is balanced against those residents who would prefer to see substantial improvements in the schools within the region, enabling their children to receive a high quality of education locally. Whilst these people accept that the remote nature of the region requires that their children may need to travel to receive quality schooling, they would prefer that this schooling be at the least provided within the region.

## 9.1.2 Strategy

### ***Desired Strategic Outcomes***

- Stability for existing schools and other remote education programs.
- Improved access to all levels of schooling throughout the region.
- Improved staffing and support for schools.
- Increased numbers of Indigenous teachers.
- Equity in the eligibility criteria for education assistance.
- Increased resourcing at schools.
- Coordinated approach to education, training and employment schemes.

- Ensure existing schools in the region are not threatened with closure due to low student numbers.
- Explore options to resolve the need for improved access to education to Year 12 and to post-compulsory education.
- Provide equitable access to the various education subsidies regardless of location in the region, income or background.
- Review eligibility criteria and the adequacy of the various education subsidies available to students throughout the Gulf.
- Increase support for the Gulf schools to provide a wide-ranging curriculum and to deal with the community and social issues experienced in each school.
- Implement strategies to prepare students for employment opportunities and training schemes, including investigating the applicability of the current program running for Normanton, Doomadgee and Mornington Island.
- Increase numbers of Aboriginal teachers through the Remote Area Teacher Education Program.
- Expand the role of the GETEM to better coordinate employment, education and training programs in the region.
- Facilitate the provision of sufficient funding to permit the GETEM to operate effectively.
- Investigate options to conduct adult education classes at community schools, particularly in Indigenous communities with a focus on literacy and numeracy skills.

### **9.1.3 Priority Actions**

- Explore options for addressing the different educational requirements of the gulf community - ie. the need for access to better schooling versus the need to retain eligibility for subsidies.
- As a priority the GETEM should address the following key issues, and linkages therein:
  - whether Kowanyama should be included within the Gulf region for employment, education and training programs;
  - an evaluation of job opportunities and the skills required to fill these jobs;
  - the development of education and training programs to provide work skills to fill current and future employment vacancies.
- Explore options for primary schools at Gregory, Bentinck Island and in the longer term at Einasleigh.
- Review eligibility criteria for education subsidies

- Explore options to provide a high school at a central location in the region that offers education to years 11 and 12.
- Improve school resources for:
  - Hard infrastructure
  - Parents and Friends and community-relations development
  - Increased curriculum
  - Provision and support services to address student social welfare issues
- Implement support programs for the employment and training of Indigenous teachers.
- Encourage schools to become more active in adult education classes, especially with literacy and numeracy skills.
- Explore options to integrate community sports and recreation activities with community schooling.
- Provide supervised homework centres for school children, particularly those from overcrowded housing arrangements. These homework centres could be integrated with sports and recreation activities.
- Explore options to improve pre-school/early age education to provide a good foundation of reading and writing skills
- Utilise community justice groups to address truancy and behavioural problems in schools.
- Investigate the establishment of school bus routes to link properties/communities without schools to existing schools in the region.

## 9.2 TRAINING AND HIGHER EDUCATION

### 9.2.1 Issues

#### *Tertiary Education*

Until recently all tertiary training was accessed outside the region. In line with the North West University Consultative Committee, established in July 1998, there is now available direct matriculation into University through some TAFE courses. This means that students can begin studying at TAFE to Diploma level and gain 1-2 years credit toward a university degree in areas such as business management, tourism, hospitality, and engineering.

Although the very low-income thresholds for Youth Allowance affect everyone, students in these remote regions have a disproportionate cost to bear to access tertiary education. Not only are the transport costs to reach universities or technical institutions high, but these students come from a vastly different background to the majority of other Queensland students, making it hard for them to find accommodation and to find supplementary work. There are no support structures to facilitate such moves.

Additional allowances should be allocated to assist remote students study at tertiary institutions with a weighting being given to regions according to availability of tertiary institutions and distance from nearest universities and technical institutions.

In many of these small communities there is no access to the Internet or library services, and obtaining a home-based higher education is difficult and costly.

#### **TAFE**

The regions population lacks many of the skills and expertise needed to support further development. Such skills, which include leadership, management, marketing and negotiating, are essential tools needed to build and manage a competitive regional economy. Capacity building in these specific core skills is necessary to support existing and new industries that have the potential to be internationally competitive

and are critical to the future development of the Gulf.

There are a number of people in the region who have trade licenses and certificates that are out of date. These people would benefit from programs to up date their skills and qualifications. Any training programmes should maximise opportunities for self-employment in fields where there is a need for such services but where there are currently no private operators based within the region.

The only tertiary institution in the Gulf region is the Lower Gulf College of TAFE. This College is located in Normanton and could potentially service the entire Gulf population, given appropriate resourcing and accessibility (owing to these factors, many Gulf residents look to TAFE colleges external to the region). There is a permanent staff base of 7 of which 4 are teachers. Casual staff are employed as need to deliver courses on specialist subject matter and to conduct courses in remote locations. Teachers are employed to take courses as funding becomes available. Such a limited human resource base means that the Gulf TAFE may not effectively service the large region placed under its care.

The FNQ Institute of TAFE in Cairns is hoping to deliver courses for a Diploma of Aboriginal and Torres Strait Islander Primary Health Care at centres in the Gulf (Croydon Shire has taken up this option and has employed a trainee Environmental Health Officer). In addition, TAFE Colleges from Townsville, Rockhampton, and south-east Queensland run periodic courses in the region, primarily in the Indigenous community. There is a need to ensure that all the Gulf community are adequately serviced with TAFE courses and are not required to travel for training.

There is a need to provide training of a high standard, in core skills supportive of the future economic development of the Gulf region. This will require a thorough understanding of the training needs of the

various employment bases throughout the Gulf and of the skills of the people most able to fill specific employment opportunities. In this regard, the curricula of future training programmes should be linked to employment generating initiatives and opportunities. In addition, training courses could be conducted during the wet season when work levels through the Gulf ease off. This will allow employers to free staff for training (consideration will need to be given to the fact that although the wet season reduces work levels, there will also be access difficulties for those wishing to participate in training).

The TAFE College provides a base from which the necessary training programmes can be delivered. The TAFE is also the provider base for vocational studies for schools in the Gulf. A combination of courses conducted throughout the region and TAFE classes in Normanton are now being provided. The TAFE has also recently undertaken an assessment of training needs throughout the region. However, this did not include Kowanyama even though it is a member of the Gulf Education, Training and Employment Management (GETEM) committee.

Many training courses in the region, fail to deliver outcomes. This may be due in part, to the fact that they have been developed for mainstream students. There is a need to tailor courses to Indigenous students and make them relevant to the environment in which the students will use the skills gained. There is also a need for the consolidation and extension of the Gulf TAFE so that more people have access to courses. This would require the provision of improved staff housing as well as the establishment of student housing facilities. It would also involve considerable investment. At present the College is facing funding cuts.

### **Training Needs**

The strategies in this plan have identified a number of areas in which local training is needed to fill existing and future potential employment opportunities. The strategies highlight:

- the importance of short-course training to meeting the needs of the region;
- specific disciplines for which training needs exist; and

- the value of the extension methodology in overcoming difficulties in the Gulf region in accessing core training services.

Specific training needs include:

- Environmental Management - The training and employment of local rangers by Local Government, Aboriginal Community Councils and Government land management agencies to regulate, fishing camping and compliance with environmental permits and approvals.
- Economic Development - training for employment in the tourism, cropping, horticultural, fishing, mining, pastoral, small business and retail sectors. This training should wherever possible be provided on the job. There should also be training for self-employment to enable local people to initiate business ventures in these fields.
- Employment, Education and Training - Most staff in this sector are transferred to the regions and there is a need to establish training schemes for increased employment of local people. Indigenous teachers are in short supply.
- Community Services - As with the employment, education and training sector. Most health, law and order, emergency services and sport and recreation staff are transferred to the region. There is an urgent need for training for Indigenous health workers, ambulance officers, sport and recreation development and community officers throughout the community. In addition, the housing sector, particularly social housing, critically lacks local construction and maintenance staff. Training courses are also required in this field.
- Infrastructure - The expansion of the communication network will only be successful with the development of community and business training courses in using information technology. Courses are required in this sector.

These training needs will be considered by the Department of Employment, Training and Industrial Relations as it progresses its 2001/2002 Resource Priorities.

## 9.2.2 Strategy

### *Desired Strategic Outcomes*

- A regional and coordinated approach to the provision of appropriate training programs.
- Increased and equitable access to training schemes.
- Training programs tailored to meeting the employment needs in the region.
- Equitable and affordable access to tertiary and other institutions external to the region.

- Increase knowledge and understanding of the training needs of the region, taking into account specific community issues.
- Provide coordinated and appropriate training courses throughout the region with a priority being given to employment generating opportunities.
- Provide training programs relevant to employment and on-going higher education courses.
- Ensure the eligibility criterion for tutoring and higher education institutions is equitable.
- Local environment and fisheries ranges;
- Tourism, small business and retail sectors;
- Agriculture, cattle, aquaculture, fishing and mining industries;
- Indigenous teachers;
- Indigenous health workers;
- Community development and sport and recreation officers;
- Community police and emergency services personnel;
- Housing construction and maintenance sector; and
- Communications and Information Technology.

## 9.2.3 Priority Actions

- Undertake a regional scale and coordinated assessment through the Department of Employment, Training and Industrial Relations (DETIR) of the Gulf communities training needs and review the roles of the TAFE and training schemes in the context of these identified needs.
- Review eligibility criteria for tertiary and other higher education institutions.
- Coordinate service delivery between DETIR, the Gulf TAFE, and other external bodies to ensure equitable access to training programs throughout the region.
- Develop training programs in consultation with the GETEM, employment agencies and the community to maximise local employment opportunities in the following fields:
  - Conduct training courses to be conducted during the wet season when employers are more able to release staff for training (with consideration given to those who may encounter access difficulties during the wet).
  - Develop training courses specific to the needs of Indigenous students.
  - Develop training courses that lead into higher education courses.

## 9.3 EMPLOYMENT

### 9.3.1 Issues

#### **Current Employment**

The total number of persons employed in the Gulf in 1996 was 3,503. Table 9.3.1 identifies the key employment sectors in the region. Over 32% of the work force, or 1131 persons, are employed in government administration. Local Government and Aboriginal Community Councils employ the largest proportion of workers in this category. A considerable amount of this employment is associated with road construction and maintenance works.

There is a perception in the region that the adoption of the National Competition Policy (NCP) could significantly impact on this source of local employment. For works on State-controlled roads (other than the National Highway), the Main Roads Departments employment matters are covered by the *Policy for the Delivery of Main Roads works by Local Government*. This policy has been developed subsequent

to the advent of the NCP and it is understood to be acceptable within that framework. Therefore it is unlikely the current Main Roads employment regimes will be altered under the NCP.

This Government administration sector also includes a number of land management agencies such as DPI Fisheries, the Queensland Parks and Wildlife Service and Local Government Rangers. The ***Environment and Natural Resources Strategy*** has identified the need for increased employment in this sector in order to properly enforce permits and approvals and to regulate camping and litter control.

Reference should be made to the ***Economic Development Strategy*** regarding the potential for job creation across several sectors, particularly cropping and horticulture, mining, and tourism.

**Table 9.3.1: Employment in the Gulf Region - 1996**

| <b>Industry</b>                     | <b>No. Employed</b> | <b>Percentage</b> |
|-------------------------------------|---------------------|-------------------|
| Agriculture, Forestry & Fishing     | 628                 | 17.93             |
| Mining                              | 206                 | 5.88              |
| Manufacturing                       | 79                  | 2.26              |
| Electricity, Gas & Water            | 7                   | 0.20              |
| Construction                        | 148                 | 4.22              |
| Wholesale Trade                     | 50                  | 1.43              |
| Retail Trade                        | 155                 | 4.42              |
| Accommodation, Cafes & Restaurants  | 133                 | 3.80              |
| Transport & Storage                 | 97                  | 2.77              |
| Communication Services              | 46                  | 1.31              |
| Finance & Insurance                 | 26                  | 0.74              |
| Property & Business Services        | 71                  | 2.03              |
| Government Administration & Defence | 1131                | 32.29             |
| Education                           | 225                 | 6.42              |
| Health & Community Services         | 191                 | 5.45              |
| Cultural & Recreational Services    | 63                  | 1.80              |
| Personal & Other Services           | 89                  | 2.54              |
| Non-classifiable economic units     | 39                  | 1.11              |
| Not stated                          | 119                 | 3.40              |
| <b>Total</b>                        | <b>3503</b>         | <b>100.00</b>     |

Source: ABS Census Data 1996

### 9.3.2 Strategy

#### *Desired Strategic Outcomes*

- Substantially increased local employment opportunities within the region.

- Develop detailed, long-term employment strategies for the region, integrating the strategies/actions from throughout the GRDP, particularly the ***Economic Development Strategy***, and those relating to ***Training*** and ***Education***.
- Encourage the establishment of labour market programs and mechanisms to advance employment strategies.
- Develop and implement initiatives to reduce the reliance on imported labour in the region through local training and employment incentives.

### 9.3.3 Priority Actions

- Coordinate Government sectors to explore options for training local labour to fill full-time, part-time and multi-skilled positions in:
  - Government administration and capital works programs;
  - Health;
  - Education
  - Community Services and policing; and
  - Land and resource management and enforcement officers.
- Undertake detailed investigations of prospects for job creation across the region, with a focus on self-employment schemes.
- Support ATSIC to improve the employment outcomes from the CDEP programme in terms of increasing the skills base of employees and generating longer-term employment.

## **10 COMMUNITY SERVICES STRATEGY**

### *Overview*

The Gulf communities lack access to a range of fundamental community facilities and welfare services. This is primarily due to the remote and scattered nature of the population, low population levels and the high costs involved in supplying community services.

A coordinated and equitable approach to the delivery of community services and infrastructure such as health care, housing, emergency services, law and order and sport and recreation is to be strived for in the Gulf region. These services should be provided on the basis of need. Service delivery should focus on key townships and the surrounding rural populations and outstations and seasonal tourist influxes.

The aims of this Strategy are to:

- coordinate the delivery of community services and facilities;
- meet community demand for a range and choice of housing in an equitable and affordable manner;
- provide equitable access to a full range of health services;
- provide equitable access to emergency services;
- reduce crime rates through prevention and improve law enforcement; and
- provide a range of sporting and recreational facilities and programs in a manner which meets community needs.

## 10.1 COMMUNITY SERVICE DELIVERY

### 10.1.1 Issues

In the Gulf, socio-economic indicators such as average income welfare dependency, education, qualifications and skills compare unfavourably with national figures. Household structure, birth and death rates are also significantly above national averages. Refer to Table 10.1.1 below.

There are a considerable number of agencies across all levels of Government involved in community service delivery throughout the region. Their respective roles and responsibilities are often not clear leading to inefficiencies and duplication of services in some circumstances. There are also considerable gaps in service delivery where there is no specific responsible agency. In addition, the services that are being provided are often not appropriate to the community needs. Service provision should be undertaken in consultation with the relevant communities.

There is a need to clarify the roles and responsibilities of service providers, in order to develop effective and efficient services to communities. In order to coordinate service delivery to Doomadgee the Aboriginal Community Council has called for a meeting of all service providers. If successful, this approach could be trialed in other communities throughout the region.

The level of strategic planning undertaken by social infrastructure providers varies. In general, emphasis is being placed on meeting immediate needs rather than planning for the medium to long term. In addition, social infrastructure delivery usually only receives minor consideration in

land use planning and development activities.

An emphasis needs to be placed on co-ordination and improving the cost-efficiency of delivering community infrastructure and services particularly as there is increasing competition for existing resources.

However, in some cases communities with special characteristics, such as high levels of social dysfunction, will require particular attention and may require high priority responses. This may be the case where substance abuse, youth suicide, juvenile offending, child protection and domestic violence issues are prominent. Some communities have higher demands for community services than others.

Government service delivery could be improved through the introduction of evaluation procedures to:

- establish minimum standards set for Government performance;
- coordinate of Government services to avoid duplication;
- fine tune existing services;
- investigate the need for more mobile service deliverers;
- provide programmes adjusted to local needs and circumstances;
- greater cooperation between existing services;
- extend Government functions; and
- increased community participation and involvement in service delivery programs

**Table 10.1.1: Socio-Economic Indicators**

| Socio-economic Indicator                          | Gulf | Qld  |
|---|------|------|
| Life Expectancy – Male                            | 56   | 74   |
| Life Expectancy - Female                          | 60   | 80   |
| Weekly Individual Income - Percentage below \$200 | 44.6 | 35.6 |

Source: ABS 1996

A key concern throughout the Gulf region relates to the level and operation of Government departments particularly in terms of a reduction or withdrawal of services. State and Commonwealth Government agencies generally have a low presence in the region. QGAP offices, which provide residents with access to and information on the full range of State Government services and programs, appear to be very successful.

There are currently QGAP offices located at Normanton, Croydon and Georgetown. The expansion of this service throughout the region could alleviate a number of the concerns relating to the lack of access to Government services.

There is a need for a QGAP facility in the western Gulf to service Burketown, Gregory and Doomadgee. This would enable residents to have simpler and faster access to a range of Government services. It could be developed as a "joint operation" between Burke Shire Council and Doomadgee Aboriginal Community Council.

## 10.1.2 Strategy

### *Desired Strategic Outcomes*

- Coordinated, efficient and effective delivery of a full range of community service, infrastructure and social welfare programs.
- Long term planning programs for community services by all service providers.
- Improved Government representation, service delivery and administrative arrangements in the Gulf.

- Develop medium and long term plans for the delivery of Government services based on the needs of the community.
- Clarify the roles and responsibilities of the community services providers and improve levels of cooperation and coordination between Government service providers in the region.
- Involve the community in the development and delivery of community services and social welfare.
- Improve access to Government information and services within the region.
- Develop mechanisms to regularly review, evaluate and report on Government service delivery.

### **10.1.3 Priority Actions**

- Host forums in each of the Gulf communities of all the Government community services and social welfare providers in order to coordinate service delivery, identify gaps and avoid duplication.
- Review and develop land use planning mechanisms for local Governments and Aboriginal Community Councils to incorporate provisions for the delivery of community services and related infrastructure.
- Establish a QGAP office to service the western Gulf communities of Gregory, Doomadgee and Burketown.

## 10.2 HEALTH

### 10.2.1 Issues

The Gulf region has access to a wide range of health services, including the RFDS, visiting specialists, mobile allied health teams, as well as local health staff and facilities. The number of specialist visits to a range of centres has increased in recent years via the RFDS. In addition a mobile allied health team drives to the eastern parts of the region and a mobile women's clinic visits a number of communities. More doctors are now employed in the Aboriginal communities, new hospitals have and are being built, and more environmental and primary health funding is also being allocated.

The nature of the size of the region and the scattered population means that health services are not equivalent to those in the cities and regional centres. There are considerable variations in the delivery of health services in the region. The range of services provided to any particular area is largely dependent on the size of the community. A high priority needs to be placed on further improving these services and increasing the number of resident doctors in the region.

#### **Doctors and Nursing Staff**

There is a critical shortage of doctors and trained medical staff throughout the region, with some existing medical positions remaining vacant for extended periods.

The larger communities of Normanton, Doomadgee and Mornington Island have hospitals with at least one full time doctor, 6-10 registered nurses and a number of nurses' aides. There are positions for two doctors in Doomadgee and Mornington Island but at present only Doomadgee has doctors in residence. Kowanyama has a health clinic, aides and a full time doctor who has recently been provided by the RFDS on a monthly rotational basis. All these communities have access to 24 hour medical care. Residents in the centres of Karumba, Georgetown, Croydon and Burketown have access to health care seven days a week through health clinics. Forsayth now only has access to a five-day

clinic after recently being downgraded from a clinic that operated seven days a week.

Mt Surprise, Einasleigh and Gregory have facilities in which clinics can be held, some of which operate only once a month when the RFDS visits. It is primarily the smaller communities that have comparatively low levels of access to medical care.

There is no health clinic at Raft Point on Bentinck Island, despite the local population being a similar size as Gregory. In the longer term, as outstations develop along the mainland coast from Doomadgee there will be a need to provide a health clinic at Old Doomadgee to service the coastal population.

Delivery of health services in remote regions may be under threat from a National policy to limit the number of doctors arriving from overseas. Few Australian doctors are willing to practice in remote communities, and for many years overseas doctors have filled doctor placements in the Gulf.

Without local doctors, the daily burden of community health care falls entirely on nurses. In some locations, one registered nurse can be responsible for 24-hour care, seven days a week. It is increasingly difficult to obtain nursing staff and even more difficult to keep them for any length of time in remote areas. It is also proving very difficult to release nurses for in-service training due to staff shortages.

Tourists are placing an increasing burden on health services in the Gulf region, particularly in towns like Karumba where the population can double in the peak season. As an example, over 80,000 tourists visited Karumba in 1998 (Northage and Associates, 1998).

The Normanton hospital operates at capacity in the tourist season with the workload trebling between April and September. There are insufficient beds and staff to meet the health needs of the older tourists, who represent around half the tourist numbers. As there are no chemists

in the Gulf, prescriptions need to be filled by the hospitals and health clinics.

There is a need for a second doctor and increased hospital staff to serve Normanton and Karumba. Increased medical staff are also required during the tourist season. This additional support could be provided on a rotational basis during the peak season.

There is also a longer-term need for a doctor in the eastern Gulf to service, Georgetown, Croydon, Forsyth, Einasleigh and Mt Surprise. However, there is concern that a doctor located in the region will result in the loss of monthly RFDS clinics. With high turnover rates for doctors, there is concern the eastern Gulf community will be more often without a doctor in residence than is presently provided by the RFDS service.

### ***Specialists and Allied Health Services***

There is a lack of consistency in the visitation levels of specialists and allied health services throughout the Gulf region. The allied health mobile team from Atherton is a significant improvement in health service delivery.

Few communities are able to obtain visits from psychiatrists or psychologists; however, social workers travel to a number of the communities. With improvements in technology, teleconference link-ups are now being trialed in some parts of the state. This allows a specialist consultation without the need for travel.

There is an acute shortage of dentists servicing the region. The North West dental district based at Mt Isa has recently been expanded to include Normanton, which used to be serviced from Cairns. There are only 3 dentists to cover the North West region of Queensland.

Difficulty in obtaining specialist referrals is an issue in the locations without regular access to doctors. The cost for travel and accommodation to attend specialist appointments is a considerable health inequity. Current funding support does not fully cover travel costs and only partly covers accommodation expenses. There is a need to review the subsidies available for patient travel.

### ***Primary Health Care***

The level of primary health care in the region is still low, although the Aboriginal and Torres Strait Islander Health Services in Normanton, Mornington Island and Doomadgee provide a range of functions from their health clinics. Home visiting is not widespread and tends to deal with immunisation and monitoring of existing health problems. There is an urgent need for Indigenous environmental health workers. The National policy is one Aboriginal health worker for every 150 Indigenous people and this has not yet been achieved in the Gulf region.

Croydon Shire Council recently became the first non-Indigenous Local Government to employ an Indigenous health officer. There are some difficulties in the training and retention of Aboriginal health workers, as trainees often leave town once qualified. This means that resources are constantly being spent on training but the centre ends up with few fulltime trained workers.

Primary health efforts focusing on children are urgently required. Young children suffer respiratory, eye and ear infections and well as malnutrition in addition to other ailments.

### ***Aged Care***

The number of aged units available in the Gulf region has increased over the last decade. However, more self-contained units are required. The aged care facilities in the region are as follows:

- Normanton has an Aged Care Hostel with 15 beds, run by Bynoe Aboriginal Corporation, but stage 2 of the nursing home has not been funded. Normanton also has 8 self-contained units for the aged.
- Karumba has 13 self-contained units.
- Croydon has 4 self-contained units and has purchased land alongside the hospital for an aged care facility.
- Doomadgee has an aged care hostel with 10 units, providing three meals a day and other support services.
- Mornington Island currently has an 18 bed aged care hostel and a new 20 bed centre is currently being constructed.

- Kowanyama has a 16 bed aged care centre. Three meals a day are provided and meals to needy people in the community are also distributed from this centre.
- There are no aged care facilities in the Burke and Etheridge Shires.

Home and Community Care (HACC) funding supports some of the programs run by the Aboriginal aged care hostels. Croydon is reported to have a very good HACC service in contrast to its absence in some of the smaller communities elsewhere in the region.

There are no nursing homes in the Gulf, requiring residents to leave the region to access nursing homes facilities in Mt Isa or elsewhere. To avoid the need for the elderly to leave communities, some hospitals allocate beds for nursing home patients for between 4 to 6 days at a time. There is a longer-term need for nursing homes to be established in conjunction with existing hospitals. In this regard, Croydon Shire Council has already purchased land in proximity to the hospital for use as an aged care facility.

#### ***Support for People with Disabilities and their Families***

There are no disabled care services provided in the region. There is generally a shortage of funding for the disabled as well as a lack of information about how to obtain resources and access support systems. There needs to be allowance for the provision of disability services to remote communities. The Department of Families, Youth and Community Care is piloting a local area co-ordination model of service which will provide locally based services to people with disabilities and assist communities with information and training to provide appropriate services. This model will be trialed in 1999-2000 in five locations throughout Queensland with an expectation that it will be extended to other communities over time.

#### ***Substance Abuse***

Indigenous people in the region suffer high mortality rates with life expectancies 15 to 20 years less than that found in the mainstream. A critical factor to this poor health status is alcohol and substance abuse, which is especially implicated with health problems, suicide and injuries.

There are few existing programs in the Gulf and these tend to concentrate on rehabilitation and treatment rather than causes.

The Management of Public Intoxication Program (MPIP) is ongoing in Mornington Island and Doomadgee. The success of this pilot project is still to be evaluated and ongoing recurrent funding is yet to be decided.

The timing of income payments should be coordinated with the opening hours of stores to encourage increased household expenditure on food and other household items. This is especially important for family allowance payments that are generally the first money to come into the household each week.

The group most implicated with alcohol and injuries are men in the age group of 16 to 44. There is a need to develop specific interventions that provide support to this group, such as men's groups and other activities.

There is a need to promote alternatives to substance abuse, including culture, religion, sports, recreation, and income generating activities.

#### ***Environmental Health***

Environmental health is another area of considerable need. This applies in particular to housing, water supply, sanitation and waste disposal. The ***Infrastructure Strategy*** addresses water supply, sanitation issues and waste disposal. The housing section of this strategy addresses community-housing needs.

There are also potential significant environmental health problems associated with cyclones, storm surges and flooding which are regular events throughout the Gulf region. The Emergency Services section of this strategy addresses the need for counter disaster strategies. In addition, the Communications section of the **Infrastructure Strategy** addresses the need for improved communications within and beyond to the region for health, emergency and other essential purposes.

A long-term health issue that has not been addressed to date is the number of domestic dogs. In some instances the population of dogs is reported to outnumber residents. Many dogs are diseased and represent a particular health hazard to children. A full time dog ranger now services the Karumba and Normanton areas.

Dust from unsealed residential roads in the towns is also a problem in terms of eye and throat illnesses. There is currently a strategy in place for the sealing of all local roads within the Gulf townships. This should remain a high priority on community health grounds until all residential roads are sealed.

#### ***“Model of Care” approach to Health Care***

Queensland Health’s Northern Zonal Management Unit, through the appointment of a clinical coordinator, will be progressing a ‘model of care’ approach to service provision in Indigenous communities, commencing with Cape York Peninsula. This would be achieved in partnership with Indigenous communities, trialed and if appropriate, extended to the Indigenous communities within the GRDP region. The key aspects of this model of care include:

- implementation of a primary health model of care based on contemporary best practice;
- enhancement of the role of Indigenous health workers in program management and outreach services;
- improved and enhanced clinical coordination;
- increased GP services;
- development of a remote workforce strategy;
- implementation of a health information system;

- increasing of local employment in mainstream health jobs;
- development of a community led alcohol and drug strategy; and
- active participation with other agencies to address upstream determinants of health problems.

#### ***Coordination of Health Services***

While Queensland Health is the lead agency for health services, there are also a number of other agencies involved in the delivery of health care. For example, Education Queensland employs allied health specialist to deal with disabled children in schools. In addition the Department of Families Youth & Community Care are responsible for community substance abuse schemes. Local Governments and Aboriginal Community Councils are responsible for a number of community controlled health initiatives and health related issues including control of domestic pets, water supplies, waste disposal and the sealing of residential streets.

There is evidence that most of these health programs operate in isolation and there is little coordination between agencies. As a result there has been duplication of services in some areas and a total lack of service in others. In two instances, regional Education Queensland health workers have been flown into remote communities to deal with disabled children only to discover Queensland Health had flown out the children in question for treatment. Similarly, regional staff are aware of children who have slipped through all health services undetected and have not been treated.

At the local level there is good will and significant efforts between staff to coordinate service delivery, however, there are no formal arrangements or agreements in place. There is a need to ensure health service delivery is coordinated. Joint ventures should also be encouraged. This will foster acceptance that health issues are a whole of community problem and not just the responsibility of a single Government agency.

## 10.2.2 Strategy

### *Desired Strategic Outcomes*

- Coordinated and cost efficient delivery of health programs and services.
  - Improved and equitable community and tourist access to health care services, specialists, and allied health services.
  - Aged care facilities throughout the region.
  - Programs of support for people with disabilities and their families.
  - Primary health care programs.
  - Substance abuse programs.
  - Environmental health strategies in each of the Gulf communities.
- 
- Establish mechanisms and arrangements to improve the co-ordinated delivery of health care services and avoid duplication of effort.
  - Ensure the delivery of health services is based on accurate assessments of community need including existing and potential tourist demands.
  - Increase the number of doctors and medical staff in established townships and ensure all areas of the Gulf have access to medical services within their district.
  - Improve access to a range of specialist and allied health services by:
    - Increasing specialist visits, and mobile health team activity.
    - Teleconference consultations between patients and specialists.
  - Review, Government travel subsidies for referrals to special medical services outside the region to ensure their adequacy in terms of actual costs.
  - Develop and implement a strategy for the delivery of aged care services and infrastructure in each of the Gulf communities.
  - Develop and implement programs of support for people with disabilities and their families.
  - Develop and implement a strategy for the delivery of primary health services.
- Increase the numbers of Indigenous Health workers consistent with National policy.
  - Develop and implement substance abuse programs in co-operation with communities and with emphasis on Aboriginal communities and centres with a large Indigenous population.
  - Ensure substance abuse programs are adequately resourced and that such programs have facilities, such as rehabilitation centres, and are supported by educational initiatives.
  - Coordinate family allowance payments with store opening hours to encourage increased household expenditure on food and other household items.
  - Promote other alternatives to compete with substance abuse, including men's groups, culture, religion, sports, recreation and income generating activities.
  - Develop and implement strategies and programs to improve environmental health in communities.

### 10.2.3 Priority Actions

- Provide additional doctors in Normanton/Karumba and ensure all existing vacancies are filled.

- Raise awareness of the implications of National policies to limit the number of overseas doctors with Federal Government in terms of the difficulties in recruiting and retaining medical personnel in remote locations such as the Gulf.
- Undertake a detailed assessment of disabled care requirements across the region and develop and implement strategies to meet existing and future demand.
- Undertake an education program to ensure residents are able to access assistance and advice in relation to disabled care services.
- Undertake an assessment of the aged care needs of each of the Gulf communities and develop strategies to coordinate delivery of aged care services and infrastructure including Home and Community Care schemes, increased provision of aged care accommodation, nursing home facilities and existing health services.
- Promote the establishment of Indigenous health worker training and employment programs to meet the National standard of one worker for 150 Aboriginal persons in the population. This should be progressed in consultation between Queensland Health, Local Governments and Aboriginal Community Councils.
- Develop local laws for Local Governments and Aboriginal Community Councils to control dog populations in each of the Gulf towns. This should include a community health awareness strategy in relation to dogs.
- Ensure the current strategy to seal all residential streets in Gulf towns is progressed to its completion.
- Promote the potential health benefits resulting from strategies to improve community water supplies, waste disposal, counter disaster plans, emergency services and communications.
- Investigate provision of small health clinics at Raft Point on Bentinck Island, and in the longer term at Old Doomadgee, and progress their establishment if justified.
- Promote the establishment of men's groups in Indigenous communities to target men in the age group of 16 to 44.

## 10.3 HOUSING

### 10.3.1 Issues

#### ***Private Housing***

Housing construction costs are high in comparison to most other regions in the State. Freight for building materials and skilled labour costs add considerably to the cost of housing. To contain costs the size and finish of houses are frequently reduced.

Banks and building societies are reluctant to provide finance for building in remote areas. This is because the cost of construction can often exceed resale value. Other financing alternatives need to be found. Special Housing Loans, insurance arrangements or concessions for housing in remote areas could be considered.

The Department of Housing undertakes policy and analysis work on housing needs and affordable housing issues. The Department's Affordable Housing Unit is exploring many of the actions suggested in these sections. The Department would be the most appropriate agency to provide leadership across government in the development of policies and programs relevant to housing, including impacts on the private housing market.

Most private housing in the Gulf is occupied on a permanent basis. Rental accommodation in the region is extremely scarce, restricting accommodation options in the region – particularly for the disadvantaged sections of the community who are unable to “compete” with other more “desirable” rental applicants.

Public service accommodation is in short supply in the region. Some Government departments have invested little in housing for staff, creating an acute shortage of adequate or appropriate accommodation. Share accommodation and communal quarters are often the only form of housing provided, limiting opportunities for families to live and work in the Gulf region.

Due to the lack of rental accommodation in the Gulf towns, it is important that the few private rental properties that become available are not occupied by Government

employees inadequately housed by their respective departments. In this regard, Government departments need to increase investment in housing in the Gulf region. Government employees should be provided with sufficient quality and choice of housing to compensate for the remote location.

There is also a lack of accommodation for employees other than Government agencies. This is due in part to the high building costs, but is also a result of the Fringe Benefits Tax. The tax essentially creates a disincentive for employers to invest in worker's accommodation. At present, there is a critical shortage of housing in Karumba, as a result of the construction workforce for the Century Mine pipeline and part facilities. While Century Mine employees have been provided with company housing, there are a number of subcontractors who require accommodation in the town. This has pushed local private rental fees out of the range of most tenants.

Provision of employee housing by employers may require action by other State agencies and by the private sector (such as mining and infrastructure development companies) whose activities increase demand for housing in the region.

#### ***Social Housing***

Government has the major responsibility for assisting low income and disadvantaged households through housing assistance and public housing programmes.

The Department of Housing is responsible for the delivery of a range of housing assistance to the Queensland public including:

- Public rental housing;
- Community housing;
- Aboriginal and Torres Strait Islander rental housing program (ATSIHP);
- Capital works grants to DOGIT communities for housing;
- Bond loans;
- Housing loans; and
- Advice and advocacy for tenants in the private rental market.

In addition, a housing project, providing accommodation for up to 30 Indigenous students from communities attending TAFE at Normanton, was completed under the Department's Housing Infrastructure program.

The Aboriginal and Torres Strait Islander Housing Program (ATSIHP) only serves Indigenous people.

The ATSIHP rental program is not an income-based program, but instead focuses on increasing access to appropriate housing for Indigenous people. This has significant benefits in terms of community health and well being.

The ATSIHP provides capital funds for construction and major upgrades to Doomadgee, Kowanyama and Mornington Island communities, and has a five-year capital works plan to address housing needs on all DOGIT communities.

In addition, ATSIC administers several Indigenous housing programs. These are also only open to Indigenous Australians, and include:

- Community Housing and Infrastructure Program (CHIP);
- Health Infrastructure Priority Project (HIPP);
- Home Ownership Assistance.

There is also specialist accommodation provided by Aboriginal Hostels, Aged Care Programs, the Supported Accommodation Assistance Program and Crisis Accommodation Program.

Most of these existing programs are targeted at Indigenous people in order to address the serious problems of overcrowding and poor environment living conditions. Despite considerable investment, there is still a critical need for improved housing.

There are also limited public housing options for non-Indigenous people to access.

Few houses have been constructed in the Gulf region for mainstream public rental. Recent and planned construction of public housing in the region includes:

- *Normanton*: 2 x 3br detached houses (planned construction of 2 x 2br duplex in 1999 - 2000 draft Capital Works Program);
- *Burketown*: 1 x 2br and 1 x 3br dual occupancy dwellings (separate dwellings on one site) and constructing 2 x 3br detached houses and 3 x 1br youth units in this financial year;
- *Karumba*: 5 x senior's units (planned construction of 2 x 2br dual occupancy dwellings in 1999 - 2000 draft Capital Works Program);
- *Georgetown*: 1 x 3br detached house and 2 x 2br duplex;
- *Croydon*: constructing 1 x 3br detached house and 2 x 2br dual occupancy dwellings in this financial year (planned construction of 1 x 3br detached house in 2001 - 2002 draft Capital Works Program).

It should be noted that this public housing is available for all sections of the community including Indigenous people.

The Department of Housing is aware that the disproportionately small amount of public housing accommodation compared to ATSIHP, and other housing programs targeting Indigenous people has resulted in a feeling of "reverse discrimination" for some sections of the community.

The Department of Housing has "fast-tracked" some construction projects in the region (e.g., public housing in Burketown), in recognition of the need for more public housing accommodation. However, more housing is required.

It is suspected many people in the Gulf are aware of the limited available housing stock, or unaware of public housing and assistance programmes, and have not registered for inclusion on the wait list. An accurate assessment of the public housing shortage needs to be undertaken. However, ABS data should be used with caution, as there is evidence of widespread non-participation in the Census particularly in some Gulf Aboriginal communities. (The **Community Planning and Development Strategy** addresses this matter further.)

Information in relation to mainstream public housing schemes should be more widely distributed. Criteria should include a weighting system for locations where there is little or no private rental accommodation, distance from nearest town with available accommodation, and the income of the local population.

The Department of Housing does not currently campaign for people to list for public housing or promote its services such as bond loans or public housing due to the limited availability of housing, both public housing and private.

Anecdotal evidence suggests there is demand for public housing, although this is difficult to quantify. The Department's current need indicators for public housing include wait list information, although other data such as Department of Social Security data are also being used to determine broader housing need.

There are a number of targeted housing programs in the Gulf region, which are not centrally coordinated by one body. These programs have their own target groups, funds and management arrangements. Attempts have been made to better coordinate public housing with other agencies although there have been difficulties due to differing roles and priorities of housing providers.

The Department of Housing has signed a bilateral agreement with the Torres Strait Regional Authority for the provision of housing and infrastructure services to the Torres Strait. Other parties to the agreement are the Department of Aboriginal and Torres Strait Islander Policy and Development, and the Commonwealth Department of Family and Community Care. The Department of Housing is also negotiating a similar housing and infrastructure bilateral agreement for the balance of the state with ATSIC. These agreements require notional pooling of all State and commonwealth housing and infrastructure funds targeted to Indigenous people, in both the public and community housing sectors, and joint planning to deliver improved housing outcome to Indigenous people.

### **Social Housing Maintenance**

Social housing in the Gulf often has problems associated with maintenance, particularly in Aboriginal communities. In many instances a considerable proportion of the public housing stock is uninhabitable. When a dwelling is no longer habitable, tenants move in with family, which exacerbates already high levels of overcrowding. These conditions are often coupled with inappropriately designed or poorly constructed housing that lacks regular maintenance.

Community Councils do not receive recurrent funding for housing maintenance and must rely on rent collection to pay for all maintenance and management costs. Problems with rent collection are common and rent arrears are substantial. Evictions are difficult to enforce due to family and kinship obligations. Councils will often elect to not do maintenance unless rent is paid, which exacerbates maintenance problems and significantly shortens the life of housing.

It is well accepted in the community-housing sector that recurrent funding is essential for special "crisis" and "transitional" housing programs. The ATSIC supported housing cooperatives in non-Indigenous towns, such as Mounjibi in Burketown, receive recurrent funding assistance. In Community Councils, housing management must compete for resources with other pressing Council activities. Repairs, maintenance and tenant relations are often neglected.

Lack of skills, resources and knowledge has contributed to the critical housing situation in many communities. This applies in particular to:

- tenancy management policies and procedures for to improve rent collection;
- equitable allocation policy;
- improved information systems for recording and managing tenancy and property information;
- routine asset management procedures; and
- tenant consultation and support.

The ATSIH Program (Program Development Unit) is implementing a *Community Housing Management Strategy*. The strategy aims, over five years (1999-2004), to assist Aboriginal and Torres Strait Islander Community Councils to develop, establish and implement long-term tenancy and asset management capacity within their communities in order to increase the viability of housing programs.

The ATSIH Home Living Skills Assistance (Homemaker) Program provides funding training in home making skills, education (health), minor repairs and household budgeting. Community housing organisations can access funding from this program and undertake training as needed.

Kowanyama Community Council is in a position where its housing stock in 85 leases is held in private lease arrangements and the Council is unable to actively repair or maintain the housing stock. The housing in this community is in considerable disrepair and a mechanism to allow the Community Council to intervene needs to be developed. If this can be achieved then the Council can re-develop in the existing town area. If not, then new areas of the town that currently have no infrastructure or services will need to be developed, at considerable cost.

### ***Social Housing Design***

The design of Department of Housing's mainstream and targeted public rental stock has significantly improved as a result of consultation with communities and tenants.

There is however room for considerable improvement with the design of Indigenous housing.

The critical issue in Indigenous housing design is accommodating the fluctuation in household occupancy levels due to high levels of inter- and intra- community mobility. This applies in particular to the design of toilets and wet areas, and in the provision of ample verandah space to accommodate visitors. It also requires higher standards of detailing for items that are subject to extraordinary wear and tear.

There is no model or prototype "Aboriginal" house, and individual housing designs should proceed on a case-by-case basis.

The Department of Housing has developed Minimum Construction Standards, which should be adhered to in the construction of all housing funded by the department. The department also provides Councils with a range of designs to choose from, and there is always the option of engaging architects.

Design should accommodate the particular needs of the proposed residents through a design consultation process. The common standard enclosed concrete block style housing is often not appropriate to Aboriginal communities and lifestyles.

Until relatively recently, Aboriginal people have been given little choice in housing design and standards. Today, Aboriginal communities are given more choice during design but this has come at a price which has resulted in less housing units being constructed for the same allocation. Housing design has also in some instance focussed too much on the architectural form, rather than more pragmatic and ergonomic factors.

An architect design tropical style of housing has recently been constructed in Kowanyama that arose from a community consultation program. However, these homes were not trialed before a number were built, and the community is not satisfied with the new designs. The construction of these houses should have been accompanied with a post-occupancy evaluation.

The challenge for house design is to balance community preferences with reasonable budget limitations. The benchmark for cost comparison should be the number of people accommodated in the house, rather than unit costs per houses. It is not appropriate to compare the costs between a two and four bedroom house.

A broader range of types of housing is required - housing for singles, couples, disabled people, large families, and older people.

The ATSIHP "*Appropriate Housing - Vision 2000*" project is nearing completion and has gathered a lot of data from councils and residents to inform the development of appropriate housing on Indigenous communities funded by the Department.

Appropriate design for climate is being progressed by the advent of an energy efficient housing program as well as the installation of evaporative air-conditioning in public housing in the western areas of the state. This evaporative cooling area incorporates Croydon and Georgetown (Government is reviewing this policy on advice that evaporative cooling units are inappropriate).

Research has shown that neighbourhood overcrowding is perhaps as equally health determinant as housing overcrowding. Housing should be sited to provide more space between neighbours and to accommodate different social groupings.

The Tropical Public Health Unit's (TPHU) team of environmental health officers should be consulted in terms of a "coordinated approach to public housing". Past input from the TPHU into housing designs proposed by the Department of Housing has seen numerous improvements incorporated into these designs and their construction.

### ***Crisis Housing***

The ***Community Services Strategy*** identifies serious issues in relation to the lack of an accommodation safety net. There is only limited crisis accommodation available in the Gulf, which includes a women's safe house on Mornington Island and a new safe house in Doomadgee that is currently under construction.

There is also a need to transitional housing for homeless or transient people. Families also need short term housing relief during housing refurbishment programs.

Given the high level of domestic violence and abuse in some communities, there is a need for additional funding for crisis housing, especially for women and children.

## 10.3.2 Strategy

### *Desired Strategic Outcomes*

- An affordable range of private housing stock in each of the Gulf townships.
- Banking and financial institution confidence in the housing construction industry in the region.
- Adequate and appropriate housing for employees.
- Coordination of the housing agencies, cooperatives and stakeholder groups in the delivery of public housing.
- Increased access to a range of social housing options based on an accurate assessment of demand.
- Improved maintenance of public housing stock.
- Crisis housing in each of the Gulf communities.

- Develop and implement mechanisms to improve housing affordability throughout the region.
- Explore options to enhance support from financial institutions to improve access to the means with which private housing can be developed in the Gulf region.
- Develop and implement mechanism to increase the private rental housing stock to meet demand in each of the Gulf communities.
- Ensure employee housing is appropriate and adequate.
- Initiate a holistic and coordinated approach to the provision of social housing with participation by all Government agencies and non-Government stakeholders.
- Develop and implement mechanisms to provide social housing to meet community need.
- Extend recurrent funding, resources and training to assist with housing management.
- Homemaker training programs should be made available to tenants who are experiencing difficulties with managing a rental house.
- Ensure a high quality of housing construction is maintained through improved housing inspection.
- Ensure that residents are consulted during housing design. Design should also address the fluctuations in household occupancy levels, high levels of wear and tear and still stay within reasonable budget limitations. The success of new designs should be measured through post-occupancy evaluations.
- Housing should be sited to provide more space between neighbours and to accommodate different neighbourhood social grouping.
- Explore options to ensure Kowanyama Community Council has appropriate jurisdiction over housing maintenance in the community.
- Review the design of public housing, within reasonable costs, in terms of culture, climate and lifestyles and ensure construction of prototypes with any new or innovative designs.
- Allocate funding to provide crisis accommodation in each town.

### **10.3.3 Priority Actions**

- Undertake an assessment of housing affordability in the region and in each of the Gulf towns, with a priority being given to Karumba.
- Develop a housing affordability strategy for the Gulf region addressing:
  - construction costs;

- lack of support from financial institutions; and
  - the impact of a lack of employee housing on the private rental market.
- Provide crisis housing in each of the Gulf communities.
  - Undertake a thorough assessment of the shortage of mainstream public housing in the Gulf townships based on an accurate assessment of need.
  - Facilitate the proposed Bilateral Indigenous Housing Agreement currently under development.
  - Facilitate the ongoing ATSIHP *“appropriate housing - Vision 2000”* project. Explore the feasibility of extending recurrent finding to Indigenous Community Councils to resource housing maintenance.
  - Promote community access to existing programs which fund homemaker training in Indigenous communities.
  - Instigate a review of housing inspection procedures during construction of public housing.
  - Institutionalise a process whereby tenants are consulted during design, including post occupancy evaluations.
  - Institutionalise a process whereby new subdivisions provide adequate space and separation between adjacent houses, especially in Indigenous communities.
  - Facilitate the ongoing efforts of Kowanyama Community Council to obtain jurisdiction over the private leases in the community.

## 10.4 EMERGENCY SERVICES

### 10.4.1 Issues

The Gulf communities are subject to a number of potentially catastrophic threats including wild fire, cyclones, floods and storm surges. The settlement pattern makes it difficult to develop a regional scale and coordinated strategy to deal with disasters or to provide an adequate level of emergency services. One scheme that could benefit the entire region is the facility for early cyclone warnings in the Gulf. This is the responsibility of the bureau of meteorology.

As mentioned in the Health section of this strategy some of the larger Gulf towns have hospitals and access to medical services. Some have daily RFDS health clinic. For those clinics that do not operate daily it is essential they be provided with RFDS emergency kits.

The remaining towns and the entire rural population are dependent on the RFDS for medical emergencies. Therefore, individual airstrips need to be maintained at a standard suitable for RFDS aircraft. This includes appropriate lighting for emergencies through the night; however, the new RFDS aircraft are not able to land on shorter airstrips. The minimum required strip length is 900m. The RFDS aircraft have been modified with heavy-duty tyres and strengthened undercarriages to cope with rougher conditions. The **Integrated Transport Strategy** addresses this matter.

In circumstances where the RFDS cannot land, particularly where the airstrip is not suitable or where the patient cannot be transported to an airstrip, medical evacuations need to be performed by helicopter. (In order to meet the costs of such an emergency, Burke Shire has established an Emergency Response Helicopter Fund)

The Queensland Government Helicopter Rescue Service (Queensland Rescue) provides a range of aeromedical and air rescue services to Queensland communities. Queensland Rescue's 3 twin-engine multi-role Bell 412 helicopters and

one Squirrel helicopter play an essential role in counter disaster operations in Queensland. Queensland Rescue Air Units are strategically based in Brisbane, Townsville and Cairns. The helicopters are capable of deploying to anywhere in the State to undertake such tasks as the resupply of townships and properties, transport of medical teams and patients, evacuations and inspections of disaster affected areas.

It should be noted that, the Queensland Ambulance Service is able to charter aircraft (either fixed wing or rotary wing) for the transport of patients or to transport QAS/medical staff to the patient.

It is understood there is a strong lobby for the establishment of a helicopter base at Mt Isa. This would significantly reduce the response time to emergencies in the western part of the region and in the Gulf waters.

The Department of Emergency Services (DES) advises of a number of proposals to establish an emergency helicopter service in North-West Queensland. To date, DES has not received a formal proposal for the establishment of an emergency helicopter service in Mt Isa.

The newly established interdepartmental Government Aviation Committee will consider all new proposals forwarded to Government for the establishment of aeromedical/air rescue helicopter services on a whole-of-Government basis.

With the number of people fishing in the Gulf, both commercially and for recreation, a local form of air rescue will increasingly become a necessity. Burketown and Karumba have volunteer marine rescue services and Mornington Island has an SES boat as well as two additional boats fitted with HF Radios. Queensland Transport has established a marine operations base at Karumba that enhances marine safety in the Gulf of Carpentaria. However, there is no dedicated search and rescue aircraft in the area, the nearest being in Cairns.

Only Normanton, Karumba and Mornington Island have permanent ambulance officers. Burketown has a part time ambulance officer, while the remaining towns and communities must rely on arrangements with Queensland Health for health staff, volunteers or police to drive ambulances. A number of ambulances are not 4WD and are limited in the area they can service, particularly during the wet season when unsealed road conditions are poor. 4WD ambulance vehicles are based in Mornington Island, Karumba, Normanton, Burketown and Doomadgee.

Volunteers run a considerable number of emergency services and organisations, in the region, especially in the smaller towns where there is a far greater reliance on informal services. Normanton has a fully trained road accident rescue group in the SES with appropriate vehicle and equipment. However, in other areas equipment is lacking or is not maintained. The Doomadgee SES vehicle is no longer operational. These groups rely heavily on the Police and Local government support.

Gulf Local Governments and Aboriginal Community Councils each have counter disaster plans in the event of catastrophe. These plans have been coordinated with the SES, RFDS, Bureau of Meteorology and the Australian Defence Force. There is a need for coordination between local Governments and Aboriginal Community Councils in terms of counter disaster strategies. For example the out station at Old Doomadgee may be serviced by facilities at Mornington Island when access to Doomadgee is cut off.

Carpentaria and Etheridge Councils have been granted Interim Disaster Mitigation Plan status resulting in a lower trigger point for Natural Disaster Relief Arrangement funding of \$50 000 and they have given an undertaking to carryout a full disaster risk assessment by 31 March 2002

Pompuraaw Aboriginal Community Council was granted funding under the Natural Disaster Risk management Studies program to carryout a full disaster risk assessment however they subsequently withdrew the application due to lack of Council supporting funds.

Funding and support assistance at State level to carryout full disaster risk assessments in all Aboriginal Community Council areas should be investigated.

The extent to which any regional scale and coordinated emergency service strategy can be affected is also limited by the quality and reliability of existing communication systems. If, in the time of need, communication cannot be made, then even the best counter disaster plans and emergency services will fail to respond. There is a need for improved HF radio services for use during emergencies. This is particularly important during the intervening time between the emergency and when assistance arrives. Some properties and outstations have HF radio, as do some Local Governments (Croydon Shire has provided a UHF repeater station which allows coverage for the whole shire and some areas beyond), however, there is a need to implement a comprehensive network of radio links for emergency services. The **Infrastructure Strategy** addresses communication in more detail.

It is important to note that in contrast to other emergency service networks, disaster management communication networks are not structured around communication centres but are organised around local authorities. This means that network architecture is different and that linking paths suitable for other emergency services may not be appropriate.

Design of the structure and capabilities of disaster networks requires a clear understanding of the operational requirements – the Department of Emergency Services stresses that specialist advice must be sought about disaster communication network design.

There are considerable potential health hazards resulting from emergencies such as cyclones, storm surges and flooding. Mechanisms need to be in place to minimise health hazards in these eventualities.

Local Government and Aboriginal Community Council Counter Disaster Plans should form the basis of emergency services strategies for the Gulf region. These plans should include the following features:

- Coordination between Local Governments and Aboriginal Community Councils for emergencies
- Coordination with key Government services including SES, RFDS, local hospitals and ambulance services
- Inclusion of volunteer services and organisations such as the army reserve, coast watch, SES and rural fire brigades in counter disaster plans
- A strategy for improved local volunteer services including the rural fire brigades, SES and first aid offices. Appropriate training and equipment for all local volunteer services
- A network of public and private airstrips capable of accommodating RFDS flights day and night
- A strategy for improved communications for emergency services throughout the region, including communities in remote locations.
- A strategy to deal with the resultant health hazards of cyclones, storm surges and flood events.

## 10.4.2 Strategy

### *Desired Strategic Outcomes*

- Improved access to emergency services throughout the Gulf region.
- Coordinated, resourced and equipped delivery of emergency services.

- Improve levels of support and resourcing for emergency services and their related volunteer organisations across all levels of Government to ensure such services are capable and reliable with adequate training, facilities and equipment.
- Improve access to local emergency support facilities including:
  - early warning system for cyclones;
  - HF Radio systems and satellite phones;
  - RFDS emergency kits;
  - emergency helicopter to be based in Mt Isa;
  - mail planes to carry passengers for medical transfers;
  - increased ambulance staff in the Gulf communities; and
  - 4WD ambulances.
- Develop and implement Counter Disaster plans and programs at the regional level to ensure coordination of emergency service activity, training and use of facilities.
- Develop Karumba as the primary base for air-sea rescue operations with secondary facilities at Burketown and Mornington Island.
- Develop and implement a long-term strategy to provide a dedicated marine search and rescue aircraft in the Gulf and to manage air-sea rescue activities in the interim.

### 10.4.3 Priority Actions

- Undertake an audit of existing emergency services in the region and develop a strategy for the improvements to training and resources where services are found to be lacking.
- Provide 4WD ambulance vehicles where community access is via unsealed roads, and emergency boats in all communities for use in wet season.
- Provide RFDS kits to Health Clinics that do not operate seven days a week.
- Review and develop Counter disaster plans for the Gulf Local Governments and Aboriginal Community Councils to address:
  - regional coordination of emergency services;
  - inclusion of volunteer services;
  - improved volunteer services;
  - a network of public and private RFDS airstrips;
  - communications during emergencies; and
  - health hazards during emergencies.
- Consult with the Department of Emergency Services with regard to a review of disaster management networks across the region.
- Lobby for the location of an emergency helicopter in Mt Isa.
- Initiate training and employment schemes to increase ambulance staff in the Gulf communities.
- Lobby for an early warning system for cyclones in the Gulf.

## 10.5 LAW AND ORDER

### 10.5.1 Issues

Law and order is a major issue for a number of remote settlements in the Gulf region. Alcohol related crime is high and offences against persons or property are often very serious. Additionally, an emerging community safety issue is associated with the increasing number of tourists traversing the region and the influx of visitors for special events.

“Sly grog” dealing is a major problem in the “dry” Indigenous communities. In response, the Queensland Police Service and the Department of Tourism and Racing (Liquor Licensing Division) have established a Sly Grog Steering Committee, aimed at overseeing a crackdown on sly grogging activities in Indigenous communities. The Police Service continues to facilitate projects in isolated communities addressing drug and alcohol issues and juvenile crime. The Liquor Licensing Division is also creating Indigenous Liquor Licensing Officer positions to be located at Cairns, Townsville, and Mt Isa.

In Aboriginal communities there are community police programs in place to assist the Queensland Police and these are primarily the responsibility of the respective Aboriginal Community Councils. The Regional Education and Training staff of the Queensland Police Service endeavour to provide training for Community Police, however the provision of this training is dependant on funding through the Department of Aboriginal and Torres Strait Islander Policy and Development. The effectiveness of Community Police is substantially reduced by a lack of resources including vehicles, uniforms and equipment, and a turnover in Community Police Officers.

An assessment is being made of the feasibility of transferring the responsibility of this service to the Police Service. The Queensland Aboriginal and Torres Strait Islander Police (QATSIP) project is being trialed in some aboriginal communities outside the Gulf, with an evaluation of the project to be made in mid 2001. The success of this program may see services extended to other communities, including those in the Gulf.

Some communities, such as Gregory, have no permanent police presence. The Queensland Police Service will continue to monitor crime trends across the region, including Gregory, as part of ongoing operational reviews.

Police staff introduced to the region are often young and inexperienced. Few have the preparation and skills to deal with a cross cultural and remote environment. The Queensland Police Service’s Cultural Advisory Unit and Police Service Academy are currently devising training programs to address Aboriginal and Torres Strait Islander cultures and protocols. This training, in conjunction with the required cultural awareness training, should enable police staff to be better prepared for dealing with life in remote and isolated communities.

Members of the Police force are active in the Gulf community, running such community programmes as blue light discos, sporting events and the like.

The Department of Justice and Attorney-General is currently running a program to train members of remote Aboriginal and Torres Strait Islander communities as Justices of the Peace (Magistrates Court) with the aim of establishing Magistrates Courts constituted by these local JP’s.

The objectives of the program are to increase the participation of Indigenous people in the administration of justice and to establish guidelines for the operation of courts convened by Aboriginal and Torres Strait Islander Justices of the Peace which are acceptable to all the stakeholders in the justice process.

The Local Justice Initiatives Program provides funding to form and resource community justice groups. This has proved to be a particularly effective initiative in Kowanyama where the Justice Group works closely with the State School to address truancy. The Justice Group bus is used by the school to collect students. Problem children are referred to the Group who then involve the parents. The group also has initiatives relating to domestic violence, child abuse and alcohol. There is an active women's group in the community that has established a women's shelter and a mother baby centre at Kowanyama. A 'Kiddies Cop Program' was initiated using local youth and children as part of community policing.

The Department of Families, Youth and Community Care provide a 008 state wide Domestic Violence crisis phone line. This service provides assistance to women and children in remote areas in accessing information and practical and financial help in escaping domestic violence. Kowanyama has introduced a "Best Practice" prevention process in order to reduce domestic violence.

The communities of Normanton and Croydon have formed consultative committees from the community and police to discuss local law and order issues. In addition, there are formal and informal crime prevention programs being conducted in Croydon and Kowanyama.

When people are sent away for incarceration they are not provided with any means to return to the community when they have completed their sentences. Most watch houses in the region are only used for temporary incarceration. Many of the Aboriginal communities are keen to follow up periods of incarceration with rehabilitation time spent at an outstation or homeland. In this regard, the individuals are kept away from trouble and are able to better integrate back into the community.

## 10.5.2 Strategy

### *Desired Strategic Outcomes*

- Equitable access to law enforcement throughout the Gulf region.
- Introduction of crime prevention strategies.
- Improved police support.
- Improved police and community relations.

- Develop programs and strategies to meet existing and future law and order demands including those presented by tourists and visitors to the region.
- Support ongoing police and Liquor Licensing Division programs to discourage the sly grog trade.
- Establish agreed strategies and procedures between police, the Liquor Licensing Division and Aboriginal Community Councils to control substance abuse in communities.
- Investigate the option to employ community police within the Queensland Police Service rather than through Community Councils.
- Provide continued support, resources and training for community justice groups.
- Increase use of diversion from custody programs, including the use of appropriate outstations.
- Support training for police officers being transferred to the region to develop the skills to manage and understand different cultures and the impacts associated with remote locations.
- Investigate and develop programs to improve police/community relations, and crime prevention strategies. This includes improved consultation with the Police Service in the lead up to special events, in order to better address crime prevention.

### **10.5.3 Priority Actions**

- Initiate discussions with the Queensland Police Service to address community expectations regarding Policing in Gregory.
- Lobby for the extension of community policing and crime prevention programs.
- Provide and resource Aboriginal community policing and community justice programmes.

## 10.6 SPORT AND RECREATION

### 10.6.1 Issues

The lack of sport and recreational opportunities in the Gulf is a major impediment to the quality of life in communities. Considerable research has shown the link between good health, both physical and mental, and participation in sport. In a region such as the Gulf, with poor health indicators, there is a strong need for affirmative action in increasing the provision of sport and recreation opportunities. Factors such as the provision of quality facilities, transport, access, costs and skill development need to be considered for this task.

#### **Facilities**

A Regional Sport and Recreation Plan has recently been completed. This plan includes:

- A review of existing sport and recreation facilities, services and programs, both local and regional;
- An assessment of current and future needs for regional scale sport and recreation facilities;
- The identification of appropriate locations for future regional sport and recreation facilities to best service the entire Gulf region;
- A prioritised action plan for the individual local councils and communities and a prioritised regional action plan for GSD for sport and recreation facility development, service and provision;
- The development of strategies to address the issues of distance, cost and travel for sport and recreation participation;
- The development of a plan for ongoing regional management of sport and recreation that considers programming, resources and future planning; and
- The investigation of the concept of a regional sport and recreation budget and an appropriate management structure for its distribution.

Development of sporting facilities is primarily the responsibility of Local Governments and Aboriginal Community Councils. Provision of adequate and accessible facilities is difficult to achieve because of the scattered nature of the population and the isolation of townships. Duplication of large sporting facilities is generally beyond the resources of Local Government. Over the last few years, some Shires in the region have benefited from additional revenue from the Grants Commission process, due to weighting's for relative disadvantage.

The larger Gulf communities generally have one or two tennis courts, an oval, rodeo/race ground, and a swimming pool. None of the coastal communities have swimming enclosures or tidal swimming pools. The smaller communities have little in the way of facilities with possibly, a racecourse, tennis court or cricket pitch.

The Education Department has provided school sporting facilities in most towns but maintenance of these facilities in some locations is a problem. Opportunities exist for better coordination between the community and the school to enable shared resources in the planning, construction and maintenance of facilities and to avoid duplication of expenditure in remote locations. The Sport and Recreation Division of DCILGPS has attempted to address this issue by introducing a new funding program allowing partial financial assistance to be given to education institutions in the construction of sport and recreation facilities for the community (Community Sport and Recreation Facility Program).

While the allocation of funds for the construction of facilities will in some way support the community use of schools, the most significant barriers to success are:

- the willingness of the Education Department to encourage and provide resources to assist in the management of facilities and/or programs; and
- the community's willingness to pay market prices for the use of the facilities or assist in the maintenance and management of them.

The climate is a considerable impediment to sport and recreation opportunities in the Gulf region. With high temperatures and humidity levels in summer, as well as the long wet season, consideration needs to be given to the construction of suitable indoor/covered facilities. Local Governments and Aboriginal Community Councils need to recognise that whilst the construction of these facilities is more expensive, especially comparative with the cost of construction the same facility further south, the use and effectiveness of these facilities will be assured. An alternative is to provide lights for outdoor facilities to encourage participation at night.

Local Governments, Community Councils and sport and recreation organisations are encouraged to apply to the Sport and Recreation Division of DCILGPS for financial assistance under the Minor Facilities Program to assist in the construction of sporting facilities or their amenities such as lighting.

Major indoor facilities in the Gulf region include the recently opened Indoor Recreation Centre at Doomadgee and Karumba.

The availability of swimming pools throughout the Gulf is limited and those, which are available, are sometimes located in Council run caravan parks or in the local school and are not readily accessible. There are also concerns with the management of the existing facilities ensuring maximum use. Swimming pools require strict management and supervision. Most Council pools run at a substantial loss and therefore sound planning should occur before proceeding with the construction of a new facility.

### **Programming**

While it is acknowledged that there is a lack of sporting and recreational facilities in the Gulf region concern was raised over the management of existing facilities. There is a lack of skilled people, available resources and commitment to maintaining the facility to the highest possible standard and to coordinate the use to the optimum. The Sport and Recreation Division of DCILGPS has identified a need for skilled people to program activities and in response two programs have been developed to assist

communities to employ a local sport and recreation officer. The Local Indigenous Recreation Program provides funding for a recreation officer whose objective is to organise activities to promote spiritual, cultural and physical well being of their Indigenous community. Officers have been appointed in Normanton, Doomadgee and Mornington Island. The Sport and Recreation Division is working with communities to establish further positions.

The second program, the Local Government Recreation Officer Pilot Program, has appointed a position to GSD. The position will be responsible for coordinating the implementation of the sport and recreation plan and will work with existing recreation officers, as well as other sport and recreation duties within the GSD Councils. Local Governments have been hard pressed to supply financial resources to cover the construction, maintenance and management of facilities, as well as resources for the employment of staff to coordinate these.

An emphasis on the provision and promotion of programs, and the strategies put in place to train the necessary people to provide these programs, has implications not only on the sport and recreation components of the Gulf region resident's lifestyle but also in the areas of education, employment and the economy. There is a growing appreciation that communities in the region need committed sport and recreation officers. The success of any such initiative will depend on the skills and energy of the individual employed, as well as the available facilities.

### **Organised Sports**

Barriers to participation in organised sports are transport, access, distance, finance and skills. Few people in the remote Gulf Aboriginal communities have access to private vehicles. In addition, towns and communities have no local public transport system and there are few regional transport links at affordable prices. This makes it difficult for residents to participate in regular sporting activities, particularly outside the local settlement.

Access to other settlements is not only hindered by the lack of vehicles, but also the climate. The long wet season isolates communities completely with roads being impassable for lengths of time. Kowanyama residents, for example, can only participate in sporting events during the dry season, and road repairs often do not occur until late in the dry season. There are no air links between Normanton and Kowanyama, except through Cairns. (This issue is addressed in the ***Integrated Transport Strategy***)

Few residents in the isolated communities have the income to be able to afford the training and travel for them or their children to participate in competitive sport. Residents rely on Local Governments to subsidise many activities. Currently, use of sporting facilities is largely free in the Gulf region due to the support provided by local councils and voluntary workers.

For many children in the Gulf, the only opportunity for sport and recreation is presented at school. After school activities are limited by transport, costs, skill and the availability. Many activities are reliant on volunteers from within the community. Schoolteachers are relied heavily on to fill some of the gaps.

The Sport and Recreation Plan has investigated the concept and scope of a regional sport and recreation budget that considers external funding opportunities and sources. Associated with this is a management structure and distribution policy for the delivery of the budget.

Sporting talent is not adequately encouraged, with the barriers of cost, access, and travel, inhibiting or discouraging many participants. There is a lack of skilled people to provide more sophisticated levels of training to achieve sporting potential. With the placement of recreation officers, in both Local Governments and Aboriginal Councils, the overall skill of participants, coaches, and administrators is predicted to increase. Funding is available through a number of agencies towards training and education.

### ***Passive Recreation***

The Gulf possesses an abundance of natural cultural and heritage assets. Its emerging tourism industry is built largely on nature-based activities such as camping, bird watching, fishing, fossicking, and both Indigenous and non-Indigenous culture and heritage. Passive recreational facilities, such as picnic facilities and walking tracks, are available in many locations but often there is a shortage of trees and shade.

There is need for extensive work in each community in the development of parks, tree planting, provision of shaded areas, picnic tables, barbecue equipment, children's play equipment, camping facilities and walking trails.

The lack of opportunities for people to come together in a sport, recreational or social setting has a major impact on the community's well being. Activities and programs need to be designed to cater for all ages. Boredom, particularly among young people can lead to social and health problems. The GSD sport and recreation plan, involving extensive community consultation, is aiming to provide a prioritised list of activities, programs and services that the community would like to see happen.

### ***Events and Entertainment***

All the Gulf towns have community halls for social functions, meetings, and other activities and Local Government maintains these facilities. Dances and discos are held occasionally but they are dependent upon organisation and supervision by volunteers.

The Doomadgee Aboriginal Community Centre has recently opened its community hall for use for indoor entertainment. At Mornington Island the community/recreation hall is located in an area that has a liquor license and so its use is currently limited to people over 18 years of age.

Carpentaria Shire has recently purchased cinema quality film equipment for public screenings of movies in its community halls. Each of the Gulf towns would benefit from improved entertainment facilities, in particular films, dances and discos. Increased visits by touring theatrical performance groups as well as increased Aboriginal cultural activities would improve the range of entertainment available to the Gulf communities.

The ***Economic Development Strategy*** identifies enterprise opportunities for the expansion of cultural and arts and crafts industries, particularly aimed at the tourist market. This could be achieved through the development of a *Regional Cultural Group* (see also the ***Community Development and Planning Strategy***).

This Group could:

- promote, coordinate and manage events and entertainment in the region;
- organise film screenings and development of a film society in each location and the provision of (mobile) projector equipment;
- Liaise with travelling theatre and other performance companies, the Qld Arts council, to include performances in the towns in the Gulf region;
- Undertake transport initiatives to enable as many people as possible to travel to these performances;
- Apply for funding from the relevant government agencies; and
- Develop a plan to hold a cultural Festival in the western region, drawing on the Barunga or Laura experience.

Carpentaria, Croydon and Mornington Shires have each employed a Community Development Officer who will assist in improving cultural activities.

Most communities have rodeo grounds, racecourses and showgrounds, however the resources to maintain these facilities are decreasing. Some rodeos have stopped because the number of ringers has decreased. Once again the distance between settlements and the access between them is a major factor in any event management. The GSD Sport and Recreation Plan will provide a regional inventory of annual sport and recreation events to increase and encourage communities to coordinate their events to the best advantage.

The ***Economic Development Strategy*** also identifies the need to further develop regional events and entertainment from a tourist perspective. Co-ordination of events and entertainment during the dry season to coincide with the tourist season would serve to raise the profile of these events. However, there will be a need to provide year round activities in order to meet the needs of the community.

## 10.6.2 Strategy

### *Desired Strategic Outcomes*

- Improved sporting and recreational facilities and programs with organised sporting events at both the local and regional level.
- Greater participation by residents, particularly young people, in sporting, recreational, cultural and entertainment activities.
- Improved access to sporting, recreational and cultural events.

- Assist with the coordination of the implementation of the *Gulf Regional Sport and Recreation Plan*.
- Support the Regional Recreation Officer.
- Develop and implement a program of expansion and improvement of school and community sporting facilities and investigate means to share the use, operation, construction and maintenance of such facilities with the broader community. Priority should be given to the provision of covered or night-lit facilities in each community.
- Ensure Local Government and Community Council Planning allocate adequate supplies of serviced land in appropriate locations for sporting, recreation and entertainment facilities.
- Encourage and support entertainment facilities and activities including the formation of a Regional Cultural Group.

### 10.6.3 Priority Actions

- Implement the relevant priority actions from the *Gulf Regional Sport and Recreation Plan*.
- Improve local parks and gardens with shade trees.
- Initiate a training and employment program for local recreation officers in the Gulf communities.
- Review and develop Local government and Community Council plans to address sporting, recreation and entertainment land use requirements.
- Establish a *Gulf Regional Sporting Group* to:
  - Co-ordinate intra regional sporting activities and facilities including those offered in schools;
  - Include Kowanyama within Gulf region sporting events.
- Develop programs which link school sporting programs. This should include the smaller schools, such as Karumba, Croydon, Georgetown, Forsyth and Mt Surprise, Burketown and the School of the Air.



# **11 COMMUNITY DEVELOPMENT AND PLANNING STRATEGY**

## *Overview*

Improvements to the urban amenity and character of the Gulf towns and a focus on the cultural values and identity of the communities will substantially improve the quality of life for the Gulf residents.

Supplies of appropriately located and serviced land for urban development are also lacking in each of the Gulf communities. This has led to ad hoc development that is often characterised by a lack of permanency in building form and designs. This 'temporary' form and design of development is accentuated by the high costs of construction with all building materials being imported into the region.

Land to accommodate community services, infrastructure and housing needs to be allocated, serviced and made available for development in each of the Gulf towns. Retail and business space also needs to be made available to facilitate small business and enterprise developments. However, the growth of these towns should not compromise the unique lifestyles, cultural values and character of these communities.

The aims of this Strategy are to:

- develop urban forms that are functional, cost-effective and which promote a high quality of living environment; and
- promote and facilitate the maintenance and development of the lifestyle and culture of the region in a manner that ensures the needs and aspirations of the community are met.

## 11.1 COMMUNITY DEVELOPMENT

### 11.1.1 Issues

#### **Local Government Planning**

The five Local Governments of Burke, Carpentaria, Etheridge, Mornington and Croydon cover a vast area, including offshore islands. Local Government provides the key mechanism for local service and infrastructure delivery.

Local Government is the primary focus for the preparation of Planning Schemes to guide and regulate future development. Under the new planning legislation, the *Integrated Planning Act*, (IPA) there is a strong shift in focus from regulatory control to a partnership between Local and State Government with respect to planning and development.

Only two of the Gulf shires currently have planning schemes in place. Under the IPA all Local Governments in the State will be required to prepare planning schemes which are consistent with the Act within five years of the commencement of the act, (20 March 1998). This provides an opportunity to the Gulf Local Governments to initiate planning schemes in partnership with the State.

#### **Aboriginal Community Development Planning**

There are two Aboriginal Community Councils in the Gulf region. They are Doomadgee and Kowanyama. The majority of policy decisions with respect to Indigenous issues are made at a National and State level. Within the region there is a need to facilitate the implementation of these policies and to develop regional level mechanisms that assist recognition and advancements of Indigenous peoples rights and aspirations.

Mechanisms should be put in place to enable the achievement by the Gulf Aboriginal Communities of the recommendations of the Royal Commission into Aboriginal Deaths in Custody. A number of recommendations are particularly pertinent to the issue of regional planning and service delivery:

Recommendation 188:

“That governments negotiate with appropriate Aboriginal organisations and communities to determine guidelines as to the procedures and processes which should be followed to ensure that the self-determination principle is applied in the design and implementation of any policy or program or the substantial modification of any policy or program which will particularly affect Aboriginal people.”

Recommendation 203:

“that the highest priority be accorded to the facilitation of social, economic and cultural development plans by Aboriginal communities, and on a regional basis as a basis for future planning of:

- Economic Development Goals;
- the provision of services and infrastructure; and
- such other social and cultural needs as are identified.”

Recommendation 204 reads in part, “...the preparation of community development plans should be a participative process involving all members of the community and should draw upon the knowledge and expertise of a wide range of professionals as well as upon the views and aspirations of Aboriginal people in the local area. It is critical that the processes by which plans are developed are culturally sensitive unhurried and holistic in approach and that adequate information is made available to participants.”

The preparation of community development plans should be a participatory process involving all members of the community and should draw upon the knowledge and expertise of a wide range of professionals as well as upon the views and aspirations of Aboriginal people in the local area. The processes of consultation for the preparation of these plans should be culturally sensitive, unhurried, holistic in approach and adequate information should be made available to all participants.

#### **Community Values**

Despite a lack of access to infrastructure, services and basic commodities the Gulf offers a distinctive and very unique lifestyle.

As development pressures increase, the Gulf communities are likely to be ill prepared for the potential impacts on lifestyles and cultural values. They may also not be in a position to maximise the opportunities afforded by the positive impacts of development.

Development impacts can be adverse but they can also be beneficial. Perspectives will vary in the receiving community. There are also likely to be instances where the same impact will be considered by some sections of the community to be adverse where others may consider it to be beneficial. There will always be a range of community values about the same issue.

For example, some Aboriginal individuals and groups in the region have a range of community development aspirations. These aspirations include outstation development, developing land use agreements, progressing native title determination applications, negotiating mining agreements and so on. From an Indigenous perspective these could be regarded as community development opportunities. Others may see these strategies as constraints to development.

There is a need to identify the plurality (or the range) of values held by Gulf communities and residents as well as external interests in order that areas of conflict and compatibility can be recognised. Differing community values became very evident in the development and assessment process of the Century Mine.

Identifying where there are conflicting and compatible community values will be particularly important if a mutually agreed process for undertaking social impact assessment is to be developed. This process would need to include recognition of what kind of activity "triggered" a social impact assessment. If different groups of people see the same activity as an opportunity and as a threat then clearly they will also differ about whether a social impact assessment for the project is required.

It appears the Gulf communities have little knowledge or understanding of their rights and opportunities to participate in and contribute to land use planning programs. There is a need to plan for growth in a

manner which improves the urban form and character of the Gulf townships and which preserves community values. This can only be achieved when planning is based on a thorough understanding of the community needs and values.

Social planning provides the means by which community needs and aspirations are identified, articulated, formulated and implemented. Historically, land use planners, service providers and the development industry have ignored social planning. This relates in part to a lack of access to data and information as well as lack of attention to appropriate mechanisms to assess and quantify community attitudes and values. Social planning issues need to be given equitable consideration in planning and development approval processes.

Social planning impact assessments should be incorporated into Government planning and development assessment processes in order to avoid potential adverse social impacts. Monitoring is also required, with a view to minimising unforeseen impacts.

Local Government and the Aboriginal Community Councils are the closest level of Government to the community and need to be resourced to ensure social planning issues are addressed.

In recent times the State Government has given greater weight to the need for social planning in the assessment of impacts of major developments. In particular, the Social Impact Assessment for the North West Mineral Province was an initiative to address the impacts of mining in the northwest remote communities. Arising out of this initiative and the Century Mine Agreement is the North West Queensland Community Benefits Strategy. Funds will be allocated to communities most impacted by developments in the mining sector. In this regard, the communities of Gregory, Doomadgee, Burketown and Karumba are the most likely to be impacted by the Century Mine development, and resources should be considered as a priority in these communities to deal with the relevant impacts and to provide opportunities to benefit from the development of the mine.

## **Culture**

The cultural attachment of Aboriginal people to the region has great significance for their identity and well being. The right of Indigenous people to maintain their cultural attachment to their heritage and to maintain their cultural practices and identity needs to be recognised and supported by the Gulf community.

Culture is also important to non-Indigenous communities. There is a need to give recognition to the needs and aspirations of the different cultural groups within the region and facilitate expression of their cultural values.

Culture is the sum of all customs, beliefs, values, knowledge, heritage and activities that constitute the lifestyle of a particular region or community group. Cultural expression is important in fulfilling social and lifestyle needs of the community. Access to and expression of culture are essential for the well being of individuals and the community as a whole.

Access to culture is not always well recognised in planning and management processes. There is a need to increase understanding of culture and the values it carries. The regional communities need to have the opportunity to express their cultural identity, particularly through art, and access cultural activities, sites and places.

The development and presentation of the unique culture of the region has been identified in the **Community Services Strategy** as providing considerable benefit in terms of community health and well being. In particular, development of a Gulf Cultural Group is recommended with a view to promoting the arts, cultural events and entertainment throughout the region.

This can also have some strong benefits in terms of economic development relating to cultural arts, crafts and tourist industries. In this regard, the **Economic Development Strategy** also strongly recommends the promotion of the unique cultures of the region.

The region's culture can also be important in terms of the tourism industry. The Tourism Section of the **Economic Development Strategy** addresses this matter in more detail. The cultural values of landscapes, natural resources and other environmental assets are addressed in the **Regional Environment Strategy**.

A review of community requirements for art and culture should be undertaken with a view to develop key infrastructure to meet this demand. Cultural development considerations should be integrated into planning and development assessment processes. Local Government should be encouraged to incorporate art and cultural images and functions into the design of community areas.

The Aboriginal Community Councils, Aboriginal Land Council and ATSIC provide the first line of consultation for an assessment of Aboriginal cultural needs and should be resourced to ensure access to culture and the relevant infrastructure is addressed.

## 11.1.2 Strategy

### ***Desired Strategic Outcomes***

- Preservation of unique lifestyles in the Gulf communities.
- Enhanced cultural identity and improved access to arts and cultural infrastructure.
- Social impact assessment for future development in the region

- Ensure impacts of development on the values and lifestyle of the Gulf communities are identified, assessed and negative impacts minimised, and opportunities for positive impacts maximised.
- The preparation of community development plans in Indigenous communities should be a participatory process involving all members of the community and should draw upon the knowledge and expertise of a wide range of professionals. The processes of consultation for the preparation of these plans should be culturally sensitive, unhurried, holistic in approach and adequate information should be made available to all participants.
- Incorporate social planning impact assessment mechanisms into planning and development processes.
- Social impact assessments should identify the range and plurality of values held by Gulf communities and residents as well as external interests in order that areas of conflict and compatibility can be recognised.
- Assess the Gulf community's requirements for art and cultural infrastructure.
- Preserve and develop Indigenous and non-Indigenous cultural.

### **11.1.3 Priority Actions**

- Each Shire to complete a planning scheme in accordance with the *Integrated Planning Act 1997*.
- Aboriginal Community Councils should complete a comprehensive and participatory community development plan.
- All future development plans to incorporate social planning and impact assessment mechanism for development.

## 11.2 POPULATION GROWTH

### 11.2.1 Issues

Table 11.2.1 shows that the total estimated resident population of the Gulf region as 6886 persons in 1996. While census figures are available for individual Local Governments and Aboriginal Community Council Areas, the ABS does not produce 'estimated resident population' figures for Aboriginal Community Councils. Instead the figures have been included in the nearest Local Government area. For this reason the estimated resident population figures for Doomadgee have been included in the calculations for Burke Shire and the figures for Kowanyama have been included in Carpentaria Shire. This makes the assessment of demographics in Indigenous communities difficult. It is understood the ABS is seeking to rectify this situation at the next census. The figures in Table 11.2.1 show that the Gulf region has grown by only 1.8% in the 5 years between 1991 and 1996 census. However, there have been

quite varied changes in population levels between the Gulf Shires. Croydon, Carpentaria and Mornington Shire have experienced population increases while Etheridge and Burke Shires have decreased in population.

The 1991 census has the population of Doomadgee at 1006 persons, but the 1996 census reported only 754 persons, it is highly unlikely the population in Doomadgee has declined by 25% over the past 5 years. The Doomadgee Hospital administration, from an estimate of patient record cards, places the figure for the Doomadgee community at nearer 1400 to 1500, the State Police estimate is 1400, the Doomadgee Store at 1300 to 1400 persons. It is possible that the same level of inaccuracy applies to the other key Indigenous population centres.

**Table 11.2.1: Gulf Population**

| Local Government  | 1991         |      | 1996         |      |
|-------------------|--------------|------|--------------|------|
|                   | Census Count | ERP  | Census Count | ERP  |
| Croydon           | 361          | 236  | 316          | 287  |
| Etheridge         | 1377         | 1037 | 1280         | 951  |
| Burke             | 513          | 1385 | 677          | 1170 |
| Doomadgee         | 1006         | N/A  | 754          | N/A  |
| Carpentaria       | 2789         | 3376 | 3359         | 3550 |
| Kowanyama         | 1018         | N/A  | 912          | N/A  |
| Mornington Island | 703          | 729  | 1114         | 1128 |
| Total             | 7767         | 6763 | 8412         | 6886 |

\* ERP: Estimated Resident Population

Source: Department Local Government and Planning, incorporating Rural Communities - 1998.

Recent trends include the construction of 70 new homes in Normanton and Karumba since 1994 and an additional 10 scheduled for construction. The reasons for the decline could include any or a combination of the following:

- the decline may be centred around the Kowanyama Community and not Normanton or Karumba;
- the decline may be in the rural areas of Carpentaria Shire and not Normanton or Karumba;
- the construction for housing may only be meeting demand and easing overcrowding in existing housing stock.

The population projections should be used with caution, as the total population levels are so small that it is extremely difficult to make projections with any degree of certainty. In addition, there is evidence of widespread non-participation in the census in at least one Gulf Aboriginal community.

There is also anecdotal evidence of a considerable transient population moving in and out of the region as well as internally. This population includes Indigenous peoples and seasonal workers.

The inaccuracy of the ABS data presents considerable difficulties for future planning. The population of Doomadgee and perhaps the other Aboriginal Communities would appear to be under represented by approximately 50%. This places the communities at a disadvantage when competing for funding for social or economic development, welfare grants and other funding if population is taken as a yardstick for measuring the level of funding required/allowable.

The Australian Bureau of Statistics is the lead agency for census information. It should be made aware of the apparent and seemingly wide spread non-participation in the 1996 census, particularly in the Aboriginal communities. There is also an urgent need for this information to be revised for use by Government and service providers in capital works programs and funding allocations relevant to the Gulf region.

There is a need for improved data and performance indicators with respect to monitoring demographics within the Gulf for all future planning and development assessment. There is an urgent need to update the census data for these communities.

## 11.2.2 Strategy

### *Desired Strategic outcomes*

- An accurate assessment of the Gulf population, demographics and projections for growth.

- Undertake a review of the population statistics, projections and demographic information for the Gulf Aboriginal community of Doomadgee.
- If the evidence of non-participants in the census proves to be correct then there should be a complete reassessment of population statistics for all the Gulf Aboriginal communities.
- Mechanisms need to be put in place to increase the rate of participation by the Aboriginal communities in future censuses.
- Desegregate the population figures for Aboriginal Community Councils from respective Local Government Areas in the next census, as these are Local Government areas in their own right.

### 11.2.3 Priority Actions

- Inform the Australian Bureau of Statistics of suspected wide spread non-participation in the census in some Aboriginal communities.
- Develop a community based education program about the importance of participation in the census.
- Notify the Australian Bureau of Statistics of the need for Aboriginal Community Councils to be treated as Local Government areas for the purposes of the census.

## 11.3 SETTLEMENT PLANNING

### 11.3.1 Issues

#### *Hierarchy of Centres*

The large distances between centres and the need to service the rural and remote populations of the Gulf has resulted in the need for each town to develop its own administration, business, commercial and

retail areas. Table 11.3.1 identifies the existing hierarchy of service centres throughout the region. The Settlement Pattern Map identifies the considerable rural populations which these centres service.

**Table 11.3.1: Hierarchy of Townships**

| DISTRICT CENTRE (also provides local services) |  |
|--|--|
| Town   | Community Services   |
| Normanton                                      | <ul style="list-style-type: none"> <li>Local Government</li> <li>High school (Year 10)</li> <li>TAFE &amp; training</li> <li>Tourist destination</li> <li>Transportation node</li> <li>Freight transfer</li> <li>Retail goods &amp; services</li> <li>Health centre</li> <li>QGAP Office</li> <li>Aged care</li> <li>Indigenous Corporation</li> </ul> |
| Karumba  | <ul style="list-style-type: none"> <li>Tourist destination</li> <li>Port - export industry</li> <li>Fishing industry</li> <li>Transportation node</li> <li>Retail outlets</li> <li>Aged care</li> <li>Health clinic</li> <li>Primary education</li> </ul>  |
| Doomadgee                                      | <ul style="list-style-type: none"> <li>Community Council</li> <li>High school (Year 10)</li> <li>Retail outlets</li> <li>Health centre</li> <li>Aged care</li> </ul>   |
| Burketown                                      | <ul style="list-style-type: none"> <li>Local Government</li> <li>Primary education</li> <li>Tourist attraction</li> <li>Fishing</li> <li>Retail goods &amp; services</li> <li>Health centre</li> <li>Housing co-operative</li> <li>Indigenous Corporation</li> </ul>   |
| Gununa   | <ul style="list-style-type: none"> <li>Local Government</li> <li>High school (Year 10)</li> <li>Retail outlets</li> <li>Health centre</li> <li>Aged care</li> </ul>  |
| Croydon  | <ul style="list-style-type: none"> <li>Local Government</li> <li>Primary education</li> <li>Tourist attraction</li> <li>Retail outlets</li> <li>QGAP office</li> <li>Health centre</li> <li>Aged care</li> </ul>   |
| Kowanyama                                      | <ul style="list-style-type: none"> <li>Community Council</li> <li>High school (Year 10)</li> <li>Retail outlets</li> <li>Health centre</li> <li>Aged care</li> </ul>   |
| Georgetown                                     | <ul style="list-style-type: none"> <li>Local Government</li> <li>Primary education</li> <li>Tourist attraction</li> <li>Retail outlets</li> <li>Health centre</li> <li>QGAP and other Government offices</li> </ul>  |

| LOCAL CENTRE    |  |
|-----------------|--|
| Town            | Community Services   |
| Einisleigh      | <ul style="list-style-type: none"> <li>Retail outlet</li> <li>Tourist attraction</li> <li>Health clinic</li> </ul>                                       |
| Forsayth        | <ul style="list-style-type: none"> <li>Primary education</li> <li>Retail outlet</li> <li>Health clinic</li> <li>Tourist attraction</li> </ul>            |
| Mt Surprise     | <ul style="list-style-type: none"> <li>Primary education</li> <li>Retail outlet</li> <li>Tourist attraction</li> <li>Bush Nurse health clinic</li> </ul> |
| Gregory         | <ul style="list-style-type: none"> <li>Retail outlet</li> <li>Tourist attraction</li> <li>Health clinic</li> <li>Indigenous Corporation</li> </ul>       |
| Bentinck Island | <ul style="list-style-type: none"> <li>Indigenous Corporation</li> </ul>   |



**Settlement Pattern Map**



The majority of the Gulf towns can be categorised as District Centres. One of the primary functions of these towns is to accommodate Local Government offices & functions. While they provide services to the local community and the surrounding rural and remote populations some of these towns also provide services to the travelling public and tourists. Georgetown and Croydon are located on a primary tourist route offering opportunities for expansion in the tourist service sector.

While not located on a tourist thoroughfare, Burketown is a tourist and fishing destination in its own right. In the longer term Burketown's tourist role will increase with the upgrade of the link between Cairns to Darwin.

Doomadgee, Mornington and Kowanyama service large Aboriginal populations along with an increasing number of outstations and homelands.

The remaining Gulf towns can be categorised as Local Centres. These include: Einasleigh, Forsayth, Mt Surprise, Gregory and Bentinck Island. There are currently only minimal services on Bentinck Island. Both Mt Surprise and Gregory are situated on primary tourist thoroughfares and are well positioned to expand their respective tourist service roles. Gregory is also situated in proximity to the Pasminco Century Mine and may expand as a result.

In addition to the District and Local Centres, settlement throughout the Gulf is characterised by multiple remote dwelling sites. This includes both pastoral stations and outstations. The locations of these sites are shown on the settlement pattern map.

### ***Outstations and Homelands***

Outstations are a high priority in each of the Gulf Aboriginal communities, yet there has been no coordinated approach to their planning and development, or to the issues of enterprise development and the achievement of sustainable settlements. The locations of present and proposed outstations are shown in the settlement pattern map.

There is a significant shortage of basic infrastructure at many outstations including water, housing, transport, communications, education, health and emergency medical services. This is due predominantly to their remoteness and small resident populations.

Due to the difficulty of access during the wet, some outstations are not utilised all year round. There are also a multitude of reasons that require outstation residents to travel into town, including schooling for their children, filling a prescription, posting a letter, and buying supplies. High levels of mobility are inherent to outstation living.

Outstations share many of the logistical problems experienced by remote cattle stations. This applies in particular to road/air access, education, health and power generation. There are also high costs associated with outstation living, especially with respect to road/air access and power generation.

The economic base of communities at existing outstations is however very limited, with almost all income being derived from CDEP or pension entitlements. The sustainability of outstations could be improved through enterprise development. Following the example of the Delta Downs property near Karumba, some outstations could re-establish or commence pastoral activities. However, this industry has been in decline and the future is too uncertain to justify major capital expenditure.

Tourism poses an opportunity at outstations through farm stays, nature and culture based tourism. However, considerable investment in infrastructure and service delivery would be required for tourism facilities at outstations to meet the demands of visitors and to comply with building standards.

Another possible economic opportunity for outstation communities may be in the development of cultural arts and crafts.

ATSIC has developed a policy for "Outstations, Homelands and Emerging Communities". In this policy, communities wishing to develop an outstation must have secure land tenure, and must also demonstrate that the outstations will be the principal residence for the group. The policy states that there must be potable water supply to sustain the maximum number of residents who will dwell at the outstation.

The policy develops a mechanism of eligibility criteria for funding for outstations as well as prescribing minimum standards for all necessary infrastructure and services. It also requires a community development plan is to be prepared for each outstation. However, it does not address economic independence or development matters.

ATSIC is in the process of commissioning a Homeland Plan for the Gulf and West Queensland region. This study is intended to assess the existing outstation stock, and assess demand and support for improvements to these outstations as well as the need for new outstations. The study will also investigate funding and planning arrangement for outstations including the identification of opportunities for coordination of the delivery of outstations and the services they require through homeland resource organisations.

The Queensland Government at present has no formal policy on outstations. The Department of Aboriginal and Torres Strait Islander Policy and Development (DATSIPD) should probably develop such a policy.

An outstations policy needs to consider the sustainability of infrastructure and services on the homelands, as well as looking at the economic validity of homelands.

Actions should include provision of emergency access to the outstations. During the monsoon season, outstations residents return to the main community. This exacerbates problems of overcrowding.

### **Land Supply for Urban Development**

Throughout the Gulf region, there is often a lack of land adjacent to the towns available for future urban expansion. Private individuals hold most of the land in the Gulf in leasehold tenure that specifically limits the use of the land to grazing. Consequently there is inadequate land in each of the Gulf communities for a range of public and private developments for uses such as commercial, retail, industry, housing, community services, public infrastructure and transportation.

To facilitate the growth of towns and to plan for the future allocation of land, it is important that current and likely future demands for urban land are assessed in each Gulf Township. To assist in this assessment it is important that Local Government Planning Schemes and Aboriginal Community Plans identify preferred areas for future development based on land suitability and other planning protocols.

It should be kept in mind that any land held as tenure under the *Lands Act 1994* must be managed for the benefit of the people of Queensland. The assessment of public need is a major consideration when the Department of Natural Resources is considering renewing a lease.

This planning is seen to be a way to help alleviate the delays that presently are an impediment to making land available for development. At present, one of the main perceived reasons for delays in land dealings is the assessment of native title.

### **Construction**

In addition to the shortage of land available for development there is also a short of buildings available for use, particularly for commercial purposes throughout the region. Investors are therefore forced to acquire land and construct buildings for each particular use. This serves to delay establishment times and to considerably increase costs.

Where suitable and appropriately zoned and services land has been allocated, there can be considerable difficulties in obtaining building supplies. It is extremely costly to transport building materials and in some locations the freight carrier will not carry certain building items. It is also often difficult to obtain the services of qualified tradespeople. As a result there is little incentive to buy land for any form of development.

Anecdotal evidence suggests construction costs are up to three times costs in less remote areas of the state. There are a number of factors that influence constructor's costs, including:

- building material cannot be sourced in the region and freight costs to import building materials are high;

- works need to be undertaken by contractors from outside the region, adding travel and living away from home costs for contractors;
- Government building requirements are stringent and usually involve engaging of soil testers (for waste disposal) and other experts from outside the region; and
- delays can be experienced during the wet season and the construction industry is limited to the winter months.

The cheapest option is to import 'donga' style relocatable buildings and modify them for particular purposes. This tends to give the gulf towns the appearance of being "semi-permanent", rather than established and flourishing communities.

### **Urban Character**

Urban character relates to the relationship between building, public and private spaces, local streets, neighbourhoods and natural landscapes and to the general aesthetics of urban environment. Urban character impacts upon liveability, aesthetics and social cohesion and can facilitate community, social and cultural development.

The individual style and character of each of the Gulf towns should be promoted through public works in gardens and community buildings. This is primarily the responsibility of Local Government and the Aboriginal Community Councils however, there is scope for community input in terms of town beautification, tree planting and other schemes.

Etheridge Shire Council has constructed coloured stamped concrete footpaths in the main street of Georgetown. A tree-planting scheme has been established in Georgetown, with the assistance of the FNQEB, to minimise annual tree pruning costs under powerlines and beautify the town streets at the same time. Croydon Shire's ongoing commitment to the preservation of the character of its historical district is evidenced by plans to relocate power lines underground, as well as to install heritage-style replica-gas street lighting.

Urban development can be better regulated, through design guidelines and appropriate planning and building controls. The Queensland Residential Design Guidelines can be implemented, where relevant, making allowances for the remote nature and extreme climatic conditions of the Gulf region. These mechanisms need not force additional costs onto developers but should serve to improve the amenity of the Gulf communities. This is the responsibility of Local Government and the Aboriginal Community Councils.

A key issue for urban character and amenity is the location of heavy vehicle transport routes around rather than through urban centres. Locations of freight transport hubs and industrial sites should be buffered from residential and commercial uses.

### 11.3.2 Strategy

#### ***Desired Strategic Outcomes***

- The coordinated and sustainable development and use of outstations in appropriate locations throughout the Gulf.
  - A supply of serviced land in each of the Gulf centres to meet demand for urban development.
  - An adequate supply of affordable commercial and retail space in each of the Gulf centres.
  - Improved urban amenity and character in each of the Gulf communities.
- 
- Support the District and Local Centre roles played by each of the Gulf townships.
  - Initiate a holistic and coordinated approach to the development of outstations by all levels of Government and the key Aboriginal stakeholder groups, aimed at securing a sustainable future for these settlements.
  - Investigate opportunities for the economic enterprises to improve the sustainability of outstations.
  - Investigate options to improve service delivery to outstations, especially with respect to health, education and emergency services.
  - Incorporate outstation requirements in to Local Government planning schemes and Aboriginal Community Council plans.
  - Local Government and Aboriginal Community Councils to consider the initiation of native title clearances processes for lands earmarked for urban development.
  - Ensure compliance with the Commonwealth *Native Title Act 1993* and use of State Government Native Title Work Procedures.
  - Explore options for the provision of retail and commercial buildings in each of the Gulf towns.
  - Initiate community based programs to improve the amenity of the Gulf towns, consistent with the character of each centre.
  - Implement planning and design guidelines and controls to improve the quality of urban development in the Gulf towns.
  - Ensure Local Government and Aboriginal Community Councils implement comprehensive forward planning and development regulations.
  - Co-ordinate the planning responsibilities of the Gulf Aboriginal Community Councils and stakeholder organisations to improve outcomes and avoid duplication.

#### **11.3.3 Priority Actions**

- Facilitate the completion of the ATSIC Gulf and West Queensland Indigenous Regional Council Homeland Plan.
- Encourage State Government involvement in the development and implementation of sustainable outstation programs.
- Review and develop Local Government and Aboriginal Community Council Plans to ensure they adequately address the land use planning requirements of outstations and homelands.
- Ensure work commences into developing opportunities for economic sustainability in new and existing outstations within the next five years.

- Establish community based tree planting and town improvement activities in each of the Gulf centres.
- Review and develop local Government Planning Schemes and Aboriginal Community Council Plans to ensure they address the following:
  - an assessment of the current land availability and needs within the Gulf towns for housing, economic development, community infrastructure and services; identification of appropriate areas of land within and adjoining these communities required to accommodate projected growth and demand; and
  - ensure the land can be serviced and made available for development in a cost-efficient and timely manner.



## **12 INFRASTRUCTURE STRATEGY**

### *Overview*

The Gulf region lacks access to basic infrastructure and related services. This is primarily due to the low population levels, the remote nature of the communities and the high costs involved in supplying infrastructure to these communities.

Improvements to existing infrastructure and the equitable provision of new infrastructure for communications, energy supplies, water supply and waste disposal will substantially improve the quality of life for the Gulf communities. It will also improve community health, particularly in communities where water supplies, adequate waste disposal and communications for emergency services are currently lacking. Improved infrastructure will facilitate future economic development of the region if the relevant infrastructure is provided in a timely and cost-effective manner.

The Queensland Government is preparing a State Infrastructure Plan (SIP) focussing on the infrastructure required for Queensland's economic growth. The first stage of the process to prepare the SIP is the finalisation of a "Strategic Directions" document. This document outlines the major issues and challenges relating to the provision of economic infrastructure across the State. The document also sets the framework for undertaking the remaining two elements of the SIP – resolution of statewide issues, and development of regional level infrastructure strategies. As the SIP is developed there will be a need to ensure consistency between it and the GRDP in terms of strategic direction, strategy recommendations and priority activities.

The aims of this Strategy are to:

- provide equitable and cost-effective access to communications and information technology to meet business, industry and community needs;
- meet the regions energy needs for business, industry and community purposes in a cost effective, equitable, timely and ecologically sustainable manner;
- ensure the timely cost-effective and ecologically sustainable provision of water supply infrastructure to meet the regions future water needs in terms of domestic needs as well as demands from tourism, business and industry developments; and
- ensure the timely, cost effective and environmentally appropriate disposal of effluent, solid and regulated waste products

## 12.1 COMMUNICATIONS

### 12.1.1 Issues

Communication infrastructure and services are one of the key ways to improve the well being of Gulf communities.

Communications are an essential element of community access to a range of services from emergency services and the RFDS to education through the School of the Air.

Improved communications can reduce isolation and enabling the region to operate on a more competitive footing with commerce and industry in other areas.

Business operations and development are impeded by high cost and unreliable communications services. With the lack of direct access to banking facilities throughout the Gulf region there is heavy reliance on the telephone to undertake banking and all business transactions.

#### **Access to Existing Telecommunications Services**

Through the last decade the Gulf region has experienced significant improvement to its telecommunications services. However, as technology improves and the cost of infrastructure increases, the Gulf region is lagging behind other regions of the State.

Telstra is gradually extending the ISDN network throughout the region. This will provide:

- Detailed billing on all calls;
- Full easy call facilities;
- Support for data services, video conferencing, FAX, telecommunication via remote Local Area Network (LAN) access and Internet access.

The timing of this digital network rollout is not known. However, the State Government intends to pursue the installation of digital transmission capacity to service the entire state within 5 years. This should be supported.

The State Government has identified Local Government and Aboriginal Community Councils as a key agent for change in relation to communication and information technology in the community. In this regard, the State Government intends to encourage Local Government and Aboriginal Community Councils to incorporate communications and information technology into their business, corporate and land use planning regimes.

Ahead of this new direction, Croydon Shire has already installed a communication network in Croydon that has enabled cheaper Internet access and has also provided Pay TV to all Croydon households at a lower rate than metropolitan consumers. Every house can be connected via underground cabling and this will allow local calls (those connected to the cable) to be at a much lower cost.

The State Government also intends to coordinate and integrate its own use of communication and information technology. All Departments and agencies will be required to actively participate in the coordinated delivery of Government services and public transactions on-line. Therefore, for the Gulf Community to access government services, they will require state of the art telecommunications technology.

#### **Quality of Existing Services**

The Commonwealth Government's proposed legislation to sell further shares in Telstra will allow up to 16 % of shares to be sold, so that 51 % remain in the Governments control. Any further sale would not take place apparently until Telstra adequately meets quality of service targets for its customers in each of the metropolitan, rural and remote areas.

The State Government intends to negotiate with the Commonwealth Government in relation to this matter and to ensure that Queensland is not disadvantaged by new or amended legislation. In particular, the State intends to lobby for fair access and pricing regimes and to improve existing telecommunications infrastructure.

The Universal Service Obligation (USO) that is enshrined in the Telecommunication Act dictates that all people should have reasonable and equitable access to the standard telephone service, payphones and prescribed carrier services. The State Government intends to consult with the community in relation to the appropriateness of the present USO arrangements and lobby the Commonwealth government to renew the adequacy of the USO to meet the needs of Queenslanders. It is intended to increase the quality of services provided under the USO as part of the competitive tendering process.

Some parts of the region have already experienced a decline in services with long delays to affect repairs. Telephone technicians are no longer based in the region. Break down, maintenance and repair services are difficult to provide and during the wet season some isolated areas must wait several weeks for telephone repairs. Reliable power supplies to repeater stations is a necessity for reliable telephone access, particularly during the wet season.

There are additional concerns in the Gulf communities that, as service providers become privatised, the quality of service may decline further. This is considered to be a critical situation particularly where the only access to the Royal Flying Doctor Service (RFDS) is via the telephone system.

### ***Pricing and Tariffs for Tele Services Communications***

There are apparent inequities in concessional tariffs of telephone services throughout the Gulf region. Some areas have access to untimed local calls while others do not. Some areas have 'local call' access to the nearest major service centre, while others do not. Some parts of the Gulf are more isolated than others, however, the entire region is disadvantaged by distance and the lack of services. In this regard, there is a need to explore options for improving equity of supply and service throughout the region, irrespective of location.

The State Government approach to promoting accessible and affordable telecommunications is to promote the development of cost models for the

provision of telecommunications services and infrastructure and to understand carrier cost and charging regimes. The State Government intends to promote the development of alternative and more appropriate charging regimes in the regional areas of the State. Accordingly, rural and remote regions will need to define their telecommunications needs in order for appropriate models to be developed.

### ***Internet***

The State Government intends to use its own Internet requirements as a catalyst for development of Internet services in the region. The Connect-ED project established a private network for Education Queensland to interconnect schools throughout the State. A secondary benefit of Connect-ED was that Telstra increased its number of 'Dial Connect' Internet points of presence from 12 to 39 in Queensland. The establishment of this infrastructure has the potential to significantly reduce the high hourly telecommunications costs associated with Internet access by all regional and rural Queenslanders.

Despite the good intentions of the Connect-ED project it has failed to provide a 'whole of government' response to Internet access in remote areas. A coordinated approach would have considered the need for the establishment of base infrastructure in communities to service much more than the requirements of schools. There is also a need to establish Internet Service Providers in smaller communities so that a number of government agencies (including local government) and the schools could utilise one data line rather than have each agency pay separate charges. Connect-ED also failed to recognise the difficulties faced by small rural school communities in raising the community contribution for fibre-optic cabling required on school premises to allow the project to be implemented.

### ***Pricing and Tariffs for the Internet***

Two pricing zones are applicable to the Gulf region for Internet services; metropolitan and "rural". With the exception of Burketown and Doomadgee, which fall into the metropolitan zone, the Gulf region falls within the rural zone. This zone provides local call Internet access between \$4 and \$12.50 per hour depending upon the usage plan purchased. By comparison the metropolitan zone provides local call

Internet access between \$1.70 and \$4.50 per hour. The State Government intends to improve access to Internet services in terms of equitable cost structure and high quality of service based on the provision of adequate bandwidths to ensure it results in equitable and affordable access to Internet concessional tariffs in the Gulf region.

### **Access to Future Telecommunications Services**

As new technologies are developed, the extension of improved services to the Gulf will have to overcome the remote and scattered nature of the Gulf population. However, for the Gulf communities to access improved services there is a need for installation and operational costs to be reasonably priced.

Competition is the preferred option of Government, but this is not always successful, particularly in rural and remote locations. Service providers can be required by Government to implement the universal service obligation.

The Commonwealth Government has recently established a five-year, \$250 million funding program titled 'Networking the Nation' - under the Regional Telecommunications Infrastructure Fund (RTIF). Queensland is to receive \$53.1 million to fund projects which:

- enhance telecommunications infrastructure and services in regional, rural and remote areas;
- increase access to, and promote use of, services available through telecommunications networks in regional, rural and remote areas; or
- reduce disparities in access to such services and facilities between regional, rural and remote areas and urban areas.

Attempts to access RTIF funding by Gulf communities to improve communications have been unsuccessful despite similar schemes in southern parts of the state obtaining substantial funding. This raises the issue of equity given the scarce resources available in the region to prepare such submissions and successfully attract funding.

In recognition of the need to improve and coordinate communication and information technology, the State Government has recently created a Government portfolio for Communications and Information. A key task of that portfolio is to prepare a State Communication and Information Strategic Plan. The first stage of that planning process has seen the release of a Discussion Paper - "Towards a State Communication and Information Strategic Plan."

The discussion paper proposes a partnership between Government, business and the community to achieve the following:

- delivery of world-standard communication and information services, regardless of location in the State;
- effective use of new technologies by business; and
- innovation in communications technologies.

The discussion paper also seeks collaboration between State and Local Governments and peak community bodies to ensure that there are immediate benefits to the community. The State Government intends to identify "community" representatives on communications and information technology issues to participate in a community communications forum. It is essential the Gulf region seeks representation at that forum and that the needs of both the Indigenous and Non-Indigenous sectors on the region are identified.

### **Uptake of Communications Technology**

For existing and future developments in communications technology in the region, there is also a need to build community awareness and understanding of the opportunities provided by these services. This could be achieved through training programs for use of the Internet, strategies for the use of e-commerce and increasing the number of communication and information professionals in Government industry and the Gulf community. The potential benefits of improved telecommunications access and technology will then be realised by Government, business and the community. There may also be an opportunity for new information-based businesses to establish in the region.

In order for this to occur there is a need for support and training in two key areas:

- the employment of IT specialists to install, operate and maintain communications systems;
- the education of the community, Local Government Aboriginal Community Councils and business on how to access and use existing improved communications technologies.

There is currently a national shortfall in appropriately skilled information technology professionals. In order for the Gulf communities to ensure its communications systems can be managed, multi-skilling of personnel will be needed. The Education Section has identified the need for teachers to be appropriately skilled in information technology. This is in addition to their role in providing education in relation to using communications packages and systems. There is a potential for employment for staff in the region that possess multi-skills in information technology (Croydon Shire has recently employed a trainee Information Technology Officer).

In recognition of the need for an increase in information technology skills in the community the State Government intends to cooperatively develop communication and information technology training, educational and awareness courses. In the Gulf region this is best achieved through the school, the Gulf TAFE and the Rural Extension Service.

### **Other Communications Systems**

Many rural students rely on the Distance Education service as the sole access to schooling. It is understood that radio reception for this service can be unreliable. While the **Employment, Education and Training Strategy** addresses education systems there is a need to investigate the quality of radio reception for distance education and devise options to overcome these difficulties in the short term. The adoption of alternative technology may be a more viable solution and should be investigated.

A number of remote settlements and cattle properties have a heavy reliance on UHF radios for day-to-day communication purposes and for emergency calls. This form of communications is also used by many Council work crews and emergency services. It is an affordable and efficient means of communication that requires the installation of repeater stations for full coverage.

The region has no mobile phone service apart from satellite phones that are expensive to purchase and operate. It is unlikely that any service provider (including Telstra, Vodaphone or Optus) will provide mobile phone services in the short term for remote areas because of the cost and low population base.

Low orbiting satellite mobile systems will be the next generation mobile phones for remote areas. These are likely to be lower in initial cost than the present satellite phones. However, the feasibility of a local mobile phone network in the key Gulf centres should be investigated.

### **A Regional Approach**

It is also intended to promote regional alliances among Local Governments and Aboriginal Community Councils to develop communication and information strategic plans under the umbrella of the State Communications and Information Strategic Plan.

The development of a regional communication and information strategic plan for the Gulf needs to include an assessment of:

- the existing asset base in the region;
- shortcomings of the current communications infrastructure and what is required to overcome these shortcomings in terms of increased band widths;
- annual revenue from services;
- annual spending to maintain /offer services;
- an assessment of the differences which could be expected to business and the community should there be an upgrade to infrastructure;
- alternatives communications technology;

- the existing pricing zones throughout the region with a view to pricing on a more equitable basis; and
- the current installations, maintenance and repair services.

In addition, the Infrastructure Development Unit of the Communication and Information Services Division of the Department of Communication and Information, Local Government, Planning and Sport formed a working group to consider communication issues in the Gulf and Cape York area. The Group is comprised of a number of representatives of Queensland Government agencies.

The aim is to work with the telecommunications industry to seek roll out of high-grade communications facilities for communities in the area. Consideration is being given to a range of technologies that have the potential to provide residents of the area with facilities and services that are at least equal to those available in the more populous areas of the State. The findings and recommendations of this working group must be integrated into the implementation process of the GRDP.

## 12.1.2 Strategy

### *Desired Strategic Outcomes*

- Affordable and equitable access to all communications services currently in existence in the region;
- Improved installation, maintenance and repair of communications services; and
- Affordable and equitable access to new communications technology in the future.

- Develop and implement a Regional Communication and Information Strategic Plan in line with the proposed State Communication and Information Strategic Plan.
- Review the GRDP in regard to the forthcoming findings and recommendations of the working group considering communication issues in the Gulf and Cape York area (overseen by DCILGPS' Infrastructure Development Unit).
- Ensure adequate representation from the Indigenous and non-Indigenous sectors of the Gulf region on the proposed State Government community communications forum.
- Ensure Government initiatives, such as Connect-ED, achieve the aim of using Government requirements for telecommunications infrastructure as a catalyst for improved community access to telecommunications services.
- Ensure changes in policy an/or legislation by the Commonwealth Government does not disadvantage the Gulf region in terms of affordability of access to existing and future communications technology and in terms of achieving a high quality of existing services.
- Increase community and business awareness, understanding and utilisation of communications and information technology.

### 12.1.3 Priority Actions

- Support applications for funding through the Regional Telecommunications Infrastructure Fund to develop a Regional Communication and Information Strategic Plan in accordance with the proposed State Communication and Information Strategic Plan.
- Nominate representatives from the Gulf's Indigenous and Non-Indigenous sectors for inclusion on the State Government Community Communications Forum.
- In collaboration with the State Government, prepare a submission to the Commonwealth Government inquiring into the further sale of Telstra to ensure the region is not disadvantaged through changes in communication policy or legislation, particularly in relation to the universal service obligation under the competitive tendering regimes.
- Develop and implement training, education and awareness courses, in consultation with the State Government to be conducted through the regions schools the Gulf TAFE and the Rural Extension Service.
- Lobby to secure a commitment for reliable power to all Telstra repeater towers for improved reliability during the wet season.

## 12.2 ENERGY

### 12.2.1 Issues

Only a proportion of the Gulf is served by electricity generated outside the region and transmitted through a grid system. Refer to the Electricity Supply Map. The balance of the region relies on package power plants or individual generation systems utilising petroleum, gas or solar energy.

Structural reforms of the electricity industry are being undertaken at both State and National levels. This has resulted in a major deregulation of the industry. The Queensland Government has been undertaking a substantial review of the State electricity industry and it's involvement in the National Electricity Market.

Under the previous non-competitive market regime, Queensland has benefited from a State wide equalised tariff arrangement. However, cross subsidies are not in keeping with the National Competition Policy and this led to the current reform of the electrical industry. Under the new competitive market regime, the market determines prices.

However, the Government guarantees there will be no prices increased as a result of the industry reforms. This is to be achieved through community service obligations placed on energy providers by the Government. There is a need to ensure that the guarantees of the existing community service obligations will also be met in the future. Government subsidies may be required to ensure that rural prices will not rise, particularly in view of the fact that the cost of transmission to remote community is high when compared to the cost of supply to the eastern section centres. This is due to the number of reasons including infrastructure requirements, transmission losses of up to 45% in energy supply and the frequency and cost of maintenance and repair.

### *Petroleum Products*

The primary energy source in the region comes from petroleum products that are imported through road freight to fuel vehicles, machinery, and generation for Remote Area Power Supplies (RAPS) as well as individual diesel power generation systems.

Transport is the major user of petroleum products and a significant contributor to greenhouse gas emissions. Improved transportation efficiency and a decrease in the use of private vehicles are generally regarded as the primary mechanisms for reducing green house gas emissions and reliance on petroleum products. Given the extent of the region and the scattered population, it is highly unlikely that any meaningful reduction in the reliance on private vehicles or, indeed, reliance on petroleum products for energy could be achieved in the short to medium term.

Energy efficiency leading to reduced energy consumption can be achieved through building design, construction and maintenance. However, the cost of construction in the Gulf is considerably higher than in other regions. This limits the widespread implementation of energy efficiency in building construction and design.

Alternative energy supplies are limited in the region. Solar is a suitable alternative but often costly to the consumer. Solar power is mainly used only for domestic water heating by individual consumers or as a component of RAPS. Conventional solar hot water systems tend to suffer from corrosion and as such, more expensive systems are required, adding to the overall cost of implementing alternative energy supplies.

**Electricity Supply Map**



The remote population on rural properties and at stations relies on individual power generation systems. Most use diesel generators and some use Remote Area Power Supplies (RAPS). The RAPS system uses a combination of solar and diesel energy source and are the most effective and reliable source of power. However, they are costly to purchase, install and maintain. A household RAPS rebate is in place. In addition, the Queensland Government is in the process of developing a new Working Property Rebate Scheme, specifically targeting isolated family run properties and stations. Additional rebate schemes and other incentives are also under development, including initiatives aimed specifically at assisting Indigenous communities.

The high cost of operating individual generators places limits on the periods in which power can be economically supplied. This impacts on the quality of life for residents in the harsh climatic environment of the Gulf.

Gas energy is used for cooking and other household purposes. Liquefied Petroleum Gas (LPG) is imported to the region through freight. There is potential in the long term for gas supplies through the Mt Isa and Chevron natural gas pipelines. This would need to be addressed at the State level and should be considered for incorporation in the State Strategic Plan.

Unless the cost of installing solar, gas or RAPS systems can be considerably decreased it is unlikely that these systems will be widely used by consumers in the region. There is a need to provide incentives for the use of alternative power supplies.

### **External Power Generation**

Ergon services a significant proportion of the Gulf region via a 132kv line that runs through the Kidston mine to Georgetown. There is a substation at Georgetown that reduces the voltage from 132kv to 66kv for a line that services Croydon and Normanton. There is a substation at Normanton that reduces the voltage from 66kv to a town supply level. Two lines - one to Karumba and one to Floraville in the Western Gulf region - run out from

Normanton (refer to the Electricity Supply Map).

Ergon services the western part of the region but currently has not provided reticulated grid supply. Ergon is currently examining possible 220kV line routes to an area north of Century Mine, known as Elizabeth Creek. A potential mine site has been identified in this area (refer to the **Economic Development Strategy**). Ergon has undertaken a full planning study of the options for electricity supply to the Burke Shire. This report investigated supply options to Burketown, Doomadgee, Gregory and outlying properties. The report indicated that it would be most feasible to extend the grid network to Doomadgee and Burketown via a 66kv transmission line after the completion of the 220kv line to Elizabeth Creek. Ergon advises this is likely to be a long term option on the basis that:

- the provision of the 220kv line to Elizabeth Creek is not yet assured.
- the CSO to develop the line would be \$17.4M over the next 20 years; and
- Doomadgee and Burketown currently have adequate town diesel generation systems.

Gregory is the only town within the Gulf without some form of reticulated power supply. Gregory is likely to grow in size as the Bidunggu community is developed. The town also has a popular camping area and increasing tourist numbers are expected. The provision of town power supply would facilitate the development of a town water supply and effluent disposal to accommodate the increasing development pressures and to minimise the current health and environmental problems due to poor water supply and waste disposal. It could also provide greater opportunities for the establishment of businesses and would significantly improve quality of life in the town.

In the short term, the provision of power to Gregory is considered an essential service and should be given a high priority.

The Ergon study indicated the extension of supply to areas surrounding the Century Mine should be undertaken in the following stages:

- Stage 1: Lawn Hill, Riversleigh, New Herbert Vale and Calton Hills can be supplied from Century and Gunpowder. This entails constructing 185km of 19.05kV SWER (single wire earth return) line from the Century and Gunpowder mines and installing associated SWER isolators and transformers. The cost of this stage is \$3,380,000 in 1998 dollars.
- Stage 2: Gregory Township and selected properties east of the Pasmaico Century Mine, including Gregory Downs and other properties in the locality will be supplied with the completion of this stage. This entails constructing 190 km of 19.05 kV SWER line from the Century mine and installing associated SWER isolators and transformers. The additional cost of this stage to Stage 1 above is \$1,403,000 in 1998 dollars.

Burke Shire Council disagrees with the order of these stages, preferring that power supply to Gregory should be given priority.

The existing power transmission lines present considerable difficulties with both the reliability and quality of supply. Long transmission lines are subject to frequent lightning strikes and failure. This causes serious disruption to computers, EFTPOS machines and stop /starting of electrical motors which can result in expensive repair costs incurred. This is particularly a problem at Normanton and Karumba.

Devices to reduce the impact of electrical surges and stoppages on household appliances and commercial machinery are widely available but are costly to acquire. Options need to be explored to make such devices affordable for both private and business use in areas of the region connected to mains power.

### **Town Power Plants**

Town diesel electric generation plants are located at Doomadgee, Mornington Island, Kowanyama and Burketown. Each plant maintains a three to five month supply of diesel at the start of the wet season to cover the period when roads are closed. In the event that wet season floods result in extended road closures then supply of diesel for the electrical generators becomes a major concern. The diesel generator power plants are also subject to power surges and fluctuations causing damage to electrical motors.

In Doomadgee the power station and its large fuel storage area is located in the town area surrounded by housing. From a safety aspect it is not desirable to have power generation plants in close proximity to housing. It would be costly to relocate the plant, however options need to be investigated to improve safety in relation to this facility.

### **Non-Urban Power Supplies**

Future electricity generation or transmission related to the mining industry is difficult to assess and quantify. The location of any future mines will depend on the location of deposits and this information is not readily available. Accordingly, the future power requirements of the mining industry must be realistically assessed on a case-by-case basis.

Several irrigation schemes are currently under investigation by the Water Infrastructure Task Force. Refer to Chapter 8.0 for the Water Investigation Areas Map. The future power requirements of these irrigation schemes will not be determined until the Water Infrastructure Task force has finalised its investigations at that point in time the priority actions for power supplies in the Gulf will have to be rectified.

## 12.2.2 Strategy

### *Desired Strategic Outcomes*

- Access to reliable, affordable and appropriate power supplies.

- Ensure the community service obligations and the existing electricity supply subsidies will be retained following the restructure and deregulation of the electricity industry.
- Minimise damage from power surges on electrical appliances as well as the operation of sewerage treatment plants and other industrial and commercial activities.
- Promote the use of alternative and appropriate power supplies including solar, gas and RAPS
- Ensure each of the Gulf towns has a reticulated and affordable power supply, with a priority being given to the provision of a town power supply for Gregory.
- Ensure all residents of the Gulf have access to appropriate and affordable power supplies regardless of location.
- Consider the energy requirements of future irrigation cropping and horticultural industries and the mining sector, as they become known.
- Ensure the gas pipeline proposal is incorporated into the State Strategic Plan, with a long-term view to providing a gas pipeline to the Gulf region.

## 12.2.3 Priority Actions

- Provide Gregory with an affordable reticulated power supply
- Investigate options for the extension of reliable power to all properties, including lobbying for the extension of either the Rural Electrification Scheme or Remote Area Power Supplies (RAPS) as appropriate.
- Monitor the restructuring and deregulation of the electricity industry with a view to ensuring community service obligations are retained.
- Encourage the State Government to initiate a range of subsidies for the following:
  - devices to minimise damage to industrial, commercial and domestic electrical goods as a result of power loss and surges;
  - use of alternative power supplies including solar, gas and RAPS;
  - cost of connections to grid supplies for rural and remote customers.
- Review of the priority actions in this strategy as a result of the recommendations relating to power supplies for any future irrigation schemes identified by the Gulf Regional Water Planning Advisory Committee.

## 12.3 WATER SUPPLY

### 12.3.1 Issues

#### *Town Water Supply*

The majority of the Gulf communities have some form of reticulated water supply. However, poor water quality and limited quantities are a problem for a number of communities. Table 12.3.1 (*over*) summarises the quality and quantity of water supplies within the Gulf towns.

The town of Forsyth's water supply is subject to toxic algae blooms during certain times of the year. This results in the water being unfit for human consumption. Wide scale monitoring of other water supplies is needed to ascertain the extent of this problem in the Gulf region.

At Georgetown, where the water supply is sourced from the Etheridge River, problems with the quantity of supply during the dry season as well as with water quality. Augmentation works undertaken in late 1998 are expected to alleviate the quantity issue whilst there are ongoing investigations into quality variation.

Einaleigh residents do not have a town supply and individual pumps are used to extract water from the river. During the dry season flows are extremely low and water needs to be released from the Copperfield Dam to maintain the town supply. The town is reliant on the quality of the water from the dam being of a standard fit for human consumption.

Gregory has no town supply and relies on individual pumps to extract water from the Gregory River. Water quality deteriorates during the dry season particularly as a result of unregulated camping along the riverbanks. A town supply is needed as Gregory has potential growth prospects.

Normanton and Karumba are supplied from Glenor Weir. Augmentation of the supply will be required to meet future demand, particularly as the Normanton - Karumba area is likely to experience growth generated by increasing tourism, as well as mining and cattle exports through the Karumba Port. Options include the possible augmentation of supply by treatment of water from the slurry pipeline from the Century Zinc Mine. However, it may not be a simple process to treat the water to bring it up to acceptable standard.

Croydon has sufficient water supply, however the township is in need of a replacement reticulation network with an estimated cost of \$2 million.

Water quality and reliability is a key consideration in terms of community health throughout the region. A priority needs to be given to ensuring potential water supplies to the Gulf Towns. However, the costs of supply are considerable and subsidies or grants will need to be considered. Potable water supplies are needed at Gregory, Einaleigh and Forsyth.

#### *Non-Urban Water Supply*

The Gulf Regional Water Planning Advisory Committee, established under the Queensland Government's Water Infrastructure Taskforce and led by the Department of Natural Resources, is undertaking an assessment of land for irrigated agriculture purposes in the Gulf. The report focuses on the lower Mitchell, Flinders, Lynd, Gilbert and Einaleigh Rivers as well as the McBride Plateau. Refer to the ***Economic Development Strategy*** for the Water Investigation Areas Map.

The assessment report is now in preparation, and identifies a significant opportunity to develop an irrigation project west of Georgetown on the Gilbert River linked to a major storage at Greenhills. An irrigation area of some 20 -30,000 hectares is identified as potentially suitable for horticulture and cotton. This assessment will need to be confirmed by a pre-feasibility study to examine in more detail the economic, environmental and social opportunities and constraints.

In addition, any proposed dam would be a major development, and would likely require completion of a Water Resource Plan (WRP) for the catchment prior to Government consideration of the project. A WRP would establish the priority for and availability of water from the catchment after providing for environmental flow objectives and existing entitlements including beneficial flooding of downstream properties.

Once a WRP is undertaken, and water allocation determined, it would be possible to assess overall feasibility of an irrigation project on the Gilbert River.

Another project identified as having potential is the O'Connell Creek Storage at Richmond. This project is dependant on definition of the priority for and availability of water in competition with other water consumers. There is also a need to describe an area where long-term irrigation can be undertaken.

Establishment of major irrigation schemes in the region over the long-term will require reconsideration of infrastructure and service provision, particularly transport infrastructure.

There will be a need to establish sustainable yield rates for the extraction of water for future irrigation schemes. This should include assessment of the need to maintain environmental flows as well as an assessment of the potential impacts on down stream users. A system of education and training of water users should be implemented to encourage compliance with water extraction management regimes with enforcement through local policing and monitoring.

**Table 12.3.1: Quality of Gulf Town Water Supplies**

| Town (Shire)               | Quality                 | Quantity                                    | Comments   |
|----------------------------|-------------------------|---|--|
| Burketown (Burke)          | acceptable chlorinated  | acceptable                                  | Treatment lagoons need repair. Town supply requires upgrading and expansion to accommodate growth. There is a need to replace the Nicholson River intake to ensure adequate supply and make it safer from flood damage. Temporary repairs have been made to the broken water supply mains, need to urgently make major modifications to ensure that it does not get damaged in the next flood. Require upgraded elevated storage.  |
| Croydon (Croydon)          | acceptable chlorinated  | acceptable                                  | New dam recently completed. Town mains need upgrading (replacement cost \$2 million). Supply needs upgrading to give adequate pressure. Reservoir is to be moved to a higher location and \$15,000 has been funded for investigation of a new water scheme.  |
| Doomadgee                  | acceptable chlorinated  | acceptable                                  | Town drainage discharges into water supply. Town supply needs upgrading. Treated water supply is adequate. Needs duplication of water treatment plant security of supply - approx \$700,000 to be used for this.   |
| Einasleigh (Etheridge)     | variable                | runs low in dry season                      | Potential to use Copperfield Dam when Kidston Mine closes. Any intention to use this dam for future water supply purposes should include monitoring for algae to ensure there are no problems at the time the water supply is made available for human consumption. Dissolved air flotation and granular activated carbon filters may not remove some algal toxins from this water supply. This has been shown to be the case in Coen where a much more sophisticated treatment does not remove the water-soluble toxins in the water. |
| Forsyth (Etheridge)        | variable to poor        | meets existing demand                       | The Forsyth supply is subject to toxic blue green algae blooms and current testing is also indicating levels of mercury in the supply that comes from the Big Reef Dam. The water supply is not a potable supply and is used for domestic purposes only (not drinking). Ongoing investigations into the supply and treatment options are underway.   |
| Georgetown (Etheridge)     | variable                | runs low in dry season                      | New bores have been installed upstream away from possible town contamination to augment the existing supply points. Ongoing testing and investigation of the source of intermittent contamination and possible treatment options are also being examined.  |
| Karumba (Carpentaria)      | fair                    | struggles to meet peak demand in dry season | Possibility of treating 2 ML/day from Century Zinc Mine for reuse. Carpentaria Shire submitted a planning report for the use of the recovered water from the Pasminco Century zinc slurry for use as potable water supply. Further information is sought before the feasibility of this option can be assessed.  |
| Kowanyama                  | acceptable chlorinated  | acceptable                                  | Additional aboveground water storage has been recently provided.   |
| Mount Surprise (Etheridge) | bores from railway yard | meets current demand                        | May need upgrading if tourism increases.   |
| Normanton (Carpentaria)    | acceptable              | struggles to meet peak demand in dry season | Upgrade supply. Town supply needs upgrading. SCAP application for \$3.9M to upgrade the water supplies for both Normanton and Karumba.   |
| Mornington Island          | acceptable chlorinated  | acceptable                                  | Require new pressure tank. Conversion from chlorinated disinfection system required. Approx \$100,000 in works planned in the short term for extensions and upgrading the telemetry systems.   |
| Gregory (Burke)            | variable                | acceptable                                  | Requires town supply. It appears there is adequate water available but the quality may need further investigation.   |

## 12.3.2 Strategy

### *Desired Strategic Outcomes*

- Safe, acceptable and affordable water supplies for each of the Gulf towns.
- Sustainably meet demands likely to be generated from existing and future developments.

- Ensure town water supplies are a safe and acceptable standard throughout the Gulf region.
- Provide affordable town water supplies where individual arrangements are presently unacceptable.
- Investigate options to augment town water supplies where those supplies are nearing capacity, including consideration of the use of the Pasmenco Century mine water by-product to supply Karumba and Normanton.
- Ensure the water supply requirements of the possible future irrigation schemes can be sustainable and affordability accommodated, when these requirements become known.

### 12.3.3 Priority Actions

- *Forsyth* - toxic blooms to be treated by the installation of a dissolved air flotation and granular activated carbon filter.
- *Normanton/Karumba* - Augment supply from Glenore Weir.
- *Burketown* - Stabilise batters of lagoons and investigate options to upgrade supply.
- *Gregory* - Provide town supply.
- *Doomadgee* - Investigate options for prevention/minimisation of stormwater runoff emanating from the community entering the water supply; investigate options to upgrade supply.
- *Einasleigh* - Install an affordable town supply.
- *Mornington Island* - Replace gas chlorination plant and provide overhead storage tank and investigate options to increase the water supply.
- *Croydon* - Upgrade town reticulation system.
- Review the priority actions of this strategy as a result of the recommendations relating to water infrastructure requirements for any future irrigation schemes identified by the Gulf Regional Water Planning Advisory Committee.

## 12.4 WASTE DISPOSAL

### 12.4.1 Issues

#### **Waste Water**

Very few of the Gulf communities have reliable effluent treatment and disposal systems. Most rely on individual septic systems that due to the nature of the soils and the impact of the wet season do not operate effectively. This increases the potential for serious health risks through direct contact with effluent and through potential contamination of water supplies in

some locations. Table 12.4.1 summarises the problems associated with the various waste disposal systems in the Gulf communities.

Careful consideration needs to be given to the technologies installed in small remote communities with unreliable power supplies, high water tables and a lack of maintenance for plumbing fixtures.

**Table 12.4.1: Effluent Waste Disposal Systems**

| Town                       | System  | Comments  |
|----------------------------|---------|---|
| Burketown (Burke)          | Sewered | Various improvements plan to provide additional ponds to improve the effluent quality. Longer term plans to replace the remaining CED scheme with a conventional sewerage system. |
| Gregory (Burke)            | Septic  | Provide common effluent drainage system   |
| Croydon (Croydon)          | Septic  | Provide common effluent drainage system Council received \$15,000 SCAP funding for sewerage investigations and planning report.   |
| Doomadgee                  | Sewered | The CED scheme is in good condition but will need to be added to as the population increases.   |
| Einasleigh (Etheridge)     | Septic  | -   |
| Forsayth (Etheridge)       | Septic  | -   |
| Georgetown (Etheridge)     | Septic  | May require common effluent drainage system Council has no plans to develop a sewage system.  |
| Karumba (Carpentaria)      | Septic  | Requires upgrading and a planning report to sewer the town is currently being prepared.   |
| Kowanyama                  | Sewered | Replace pond batters with a suitable erosion resistant geo-fabric material.   |
| Mornington Island          | Sewered | Sewerage extension - Approx \$500,000 pump station upgrade works and possibly new oxidation ditches planned for the medium term.  |
| Mount Surprise (Etheridge) | Septic  | -   |
| Normanton (Carpentaria)    | Septic  | Provide full sewerage scheme. A subsidy of \$3.1M has been approved for this project.   |

Having regard to the issues raised in the Table of Effluent Waste Disposal Systems a high priority should be given to improving effluent and sewerage disposal facilities at Karumba, Normanton, Burketown, Croydon and Gregory.

In some Gulf towns, including Forsayth, Einasleigh and Mt Surprise the septic systems do not work effectively. Therefore, they require regular pump out and disposal at the nearest waste treatment facility which is located at Georgetown. Outside the town areas, septic systems also require regular pump out, but because they are located in rural

areas there is no requirement for the effluent to be carted to the nearest waste disposal facility. The effluent can be disposed of on-site.

Consideration needs to be given to alternative effluent waste treatment and disposal systems for domestic purposes as well as for public facilities, such as those currently provided in most National Parks. In a region where water is scarce for prolonged periods of time, a priority should be given to the use of 'dry' and 'composting' toilets.

In many locations frequented by tourists there is an increasing demand for facilities to accommodate effluent disposal from caravan toilet systems. Collection points in key locations will need to be established. The onus will then be placed on the individual Local Governments and Aboriginal Community Councils to dispose of the effluent from each of the collection points.

There is a need for public toilets with associated effluent disposal at Gregory due to the impact of unregulated bush camping along the river banks resulting in adverse impacts on water quality from effluent and litter. This should be viewed in light of the fact that many downstream landholders obtain their domestic supply direct from the river without treatment. This is not likely to be an isolated example and there will be a need to provide public amenities in a number of locations frequented by tourists in order to effectively regulate waste disposal.

### **Solid Waste Disposal**

Solid waste disposal throughout the Gulf is via landfill facilities adjacent to most of the Gulf towns as well as individual systems in remote areas. This method of disposal is likely to continue into the future. However, improvements to operations are required at a number of locations. The following deficiencies with existing solid waste disposal systems have been identified:

- Mornington Island dump is inappropriately located and is near capacity;
- generally all waste is dumped in the land fill including oil and tyres, particularly at Karumba with wastes generated from the port activities.
- Burketown and Doomadgee dumps have poor control of surface water and are often subject to flooding.
- fencing of sites is not always provided to prevent rubbish blowing away.
- in some communities rubbish is not regularly covered.

Due to flooding problems with the land fill facility at Burketown it is a priority that this facility be relocated to a suitable alternative location. Flood prevention measures are also required at the Doomadgee landfill facility. Mornington Island's landfill facility is almost at capacity and a new site is required.

Karumba has a town dump and the Carpentaria Shire Council is investigating options to improve this facility. There is a need for a transfer station to deal with waste oils from the Port of Karumba as well as providing for appropriate disposal of car tyres.

Landfill sites need to be closely monitored to ensure compliance with legislative, safety, health and environmental requirements. There is a need to implement post closure management and monitoring strategies for the Gulf landfills.

It is understood that funds have recently been made available to produce a Gulf Regional Waste Management Strategy. This strategy should focus on the need to produce a uniform approach to solid waste management in the Gulf region. It should also produce guidelines to:

- improve dump operations by regular covering, fencing and control of stormwater runoff;
- provide improved maintenance of Council's dumps by fencing all sites and ensuring stormwater runoff does not flow through the dump; and
- investigate options for disposal of oil and recyclable items.

The Queensland Government has a waste management strategy that intends to initiate reforms to waste generation and disposal. However, given the nature of the Gulf region it is unlikely that waste reduction measures, such as recycling, are likely to be feasible.

## 12.4.2 Strategy

### *Desired Strategic Outcomes*

- Adequate and safe effluent waste disposal facilities in each of the Gulf towns.
- Disposal of solid waste undertaken and managed in an appropriate manner.

- Upgrade effluent waste disposal systems in the Gulf towns to ensure appropriate and cost effective waste disposal.
- Promote the use of alternative waste disposal systems such as composting toilets for domestic purposes where septic tanks are in effective and in areas of high tourist usage.
- Ensure appropriate disposal facilities are located in key tourist area to service caravan effluent storage systems, and to regulate waste disposal.
- Develop and implement a Gulf Regional Solid Waste Management Strategy, including investigating the use of abandoned mine sites for waste disposal.
- Improve the standard of existing land fill facilities consistent with legislation and standards.
- *Kowanyama* (sewered) - Improvements to sewerage system;
- *Mornington Island* (sewered) - Sewerage extension;
- *Georgetown* - investigate the need for a common effluent drainage system.
- Promote use of alternative effluent waste disposal systems for domestic purposes.
- Provide disposal facilities for caravan effluent systems at key tourist locations.
- Review the priority actions of this strategy as a result of the recommendations of the Gulf Regional Waste Management Strategy.
- Undertake the following improvements to the various solid waste disposal facilities throughout the Gulf region:
  - *Burketown* - Relocate or improve the landfill facility;
  - *Karumba* - Improve town dump and investigate options for disposal of oil via a waste transfer station;
  - *Mornington Island* - Relocate pit
  - *Doomadgee* - Prevent flooding of pit;
  - *Croydon* - investigate and establish a suitable waste disposal system;
  - *Gregory* - improve and prevent flooding of pits.

## 12.4.3 Priority Actions

- Undertake the following improvements to effluent waste disposal systems:
  - *Karumba* (septic) – Upgrade;
  - *Normanton* (septic) - Provide full sewerage system;
  - *Croydon* (septic) - Provide sewerage or common effluent drainage system;
  - *Gregory* - (septic) - Provide common effluent drainage system;
  - *Burketown* (sewered) - Provide additional lagoons and undertake other upgrading work;
  - *Doomadgee* (sewered) - Improve the sewerage system;
  - *Einasleigh* (septic) - Provide common effluent drainage system;

# 13 INTEGRATED TRANSPORT STRATEGY

## *Overview*

The Gulf regional transport network consists of four transport systems: road, rail, sea and air. The Gulf region's road network forms the principal transport links within the region for cattle, mining, tourism, freight, and passenger travel and for servicing the Gulf communities. The road network also provides connections to the southern and eastern centres of Mt Isa, Central Queensland, Townsville, the Atherton Tablelands and Cairns as well as a link to the Northern Territory and Darwin. The Major Transport Linkages Map shows the major internal and external transport linkages relevant to the Gulf region.

During the wet season and in the case of emergencies there is almost total reliance on air access throughout the Gulf. However, The regional air transport network is limited in terms of commercial passenger services.

The sea transport network is focused on the Port of Karumba, which provides barge services regularly to Mornington Island and Weipa. The port is also an export facility and houses a fishing fleet.

The slurry pipeline linking Century Mine to the Port of Karumba can also be considered a regional freight corridor. This pipeline will be one of the most significant components of the transport system in the Gulf region, carrying hundreds of thousands of tonnes of zinc concentrate to the Port of Karumba each year. Although the pipeline is specific to the operations of the mine, the Miscellaneous Transport Infrastructure Corridor may be utilised for other non-road or rail based transport purposes.

The aims of this strategy are to:

- improve and maintain the regional road transportation network, including linkages to centres external to the region for use for trade, freight passenger, emergency and community access as well as for providing key linkages with other modes of transportation;
- improve the air transportation network in terms of access for emergency services, freight and trade, air passenger transport as well as linkages with other modes of transportation;
- improve sea transportation facilities and services in terms of trade, economic development, freight, barge passenger services as well as linkages with other modes of transportation;
- explore options to improve rail transportation and linkages with other modes of transportation; and
- provide an integrated transport system that supports the social and economic development needs of the community in an ecologically sustainable manner.



**Major Transport Linkages Map**



## 13.1 ROADS

### 13.1.1 Issues

Few regional roads in the Gulf region are sealed. Traffic volumes are low, in the range of 100 to 200 vehicles per day for sealed roads. For unsealed roads volumes are generally about 50-60 vehicles per day for State roads and fewer again for Local Government roads. A high proportion of the traffic is heavy vehicles and typically comprises 20% to 30% of total traffic. No designated National Highways pass through the Gulf region. However there are a number of key routes, which are of regional significance. Refer to the Gulf Regional Road Network Map.

The Matilda Highway is sealed along the Burke Developmental Road from south of the Gulf region to Normanton and Karumba. This provides the following linkages to external centres:

- Townsville to Normanton via Julia Creek - 1020km.
- Townsville to Normanton via Cloncurry 1140km.
- Townsville to Normanton via Richmond Croydon Road - 1138km.
- Townsville to Normanton via Georgetown/Forsyth/Einasleigh/Lynd Junction (Harvey's Range Road) - 770km.

While the road between Normanton and Karumba is sealed it is subject to extensive and regular flooding.

The road from Cairns to Normanton - which includes the Gulf Developmental Road - is predominantly single lane but is completely sealed from Cairns to Normanton (700km). The upgrading of the Gulf Development Road also provides improved access between Normanton and Townsville (770km) via the Georgetown / Forsyth / Einasleigh / the Lynd road system and the Harvey's Range Road.

Etheridge Shire Council has proceeded to seal significant sections of the Forsyth to Einasleigh part of this linkage to ensure better access for cattle trucks along this route. Whilst it is not currently a sealed all weather access it remains open and trafficable for the major part of the year. Townsville remains a strategic point for the export of product from the region because of its deep-water port facilities.

Access roads to the two communities of Kowanyama and Doomadgee (with over 1,000 permanent residents in each) are unsealed and are impassable during the wet season. Given the nature of the access to these communities and the road improvements that would be required to overcome flooding, it is not likely flood free access could be achieved within the life of this plan. However, significant road improvements to decrease the length of time of closure due to flooding could proceed.

Other communities across the region also suffer intermittent isolation as rising rivers cut roads – this includes Burketown, which can be isolated for much of the wet season. Flooding of roads and wet clay and black soil sub-grades which limit their use until they dry out are the major factor in disrupting transport movements to and from the region.



**Gulf Regional Road Network Map**



### Road Freight - Goods and Services

Road freight services are critical for the import of goods and services and the export of products and materials throughout the Gulf region. This is an essential service where the majority, if not all, goods consumed by the Gulf communities are imported. The **Economic Development Strategy** addresses the need for the

development of industries and businesses to supply essential goods. However, in the short to medium term future it is likely the region will continue to rely heavily on freight transport to access most essential items. Table 13.1.1. (a) provides information on the Commercial freight services that exist in the region:

**Table 13.1.1 (a): Commercial Freight Services**

| Origin                    | Destination                                    | Links                            | Services  | Comments           |
|---------------------------|--|----------------------------------|-----------|--------------------|
| Gulf Freight Services     |  |                                  |           |                    |
| Brisbane                  | Karumba  | barge: Mornington Island & Weipa | weekly    | weather permitting |
| Cairns                    | Karumba  | barge: Mornington Island & Weipa | weekly    | weather permitting |
| Tuxworth and Woods        |  |                                  |           |                    |
| Cairns                    | Karumba  |                                  | 3x a week | weather permitting |
| Cairns                    | Kowanyama                                      |                                  | 3x a week | weather permitting |
| Bethels Transport         |  |                                  |           |                    |
| Cairns                    | Georgetown                                     |                                  | 2x a week |                    |
| Cairns                    | Croydon  |                                  | 1x a week |                    |
| Georgetown Carriers       |  |                                  |           |                    |
| Cairns                    | Georgetown                                     |                                  | 2x a week |                    |
| Q-Link                    |  |                                  |           |                    |
| Cairns                    | Georgetown, Einasleigh, Forsayth, Mt. Surprise |                                  | 1x a week |                    |
| Cairns-Karumba Coach Line |  |                                  |           |                    |
| Cairns                    | Karumba  |                                  | 3x a week |                    |

QLink (Queensland Rail's road freight operator) will continue to bring supplies from Cairns to Mt Surprise, Georgetown, Forsayth and Einasleigh. There are limitations in the service provided by QLink, including:

- QLink will often not carry certain items, such as building supplies. This has implications for the affordability and availability of permanent housing in the Gulf;
- There are inadequate freight storage facilities in the Gulf towns leading to damage or theft of goods which are left to be collected;
- Delivery is often cancelled if parts of the freight route are flooded or impassable, placing the communities

along the delivery route at a disadvantage despite having sealed and flood free road access. This is particularly the case for townships such as Croydon.

Freight costs to isolated communities are high. Freight volume is relatively low and cartage distances long. There is little or no back loading potential to offset delivery costs. Accordingly there are few opportunities for reducing freight costs. High freight costs contribute to business overheads making it difficult to compete with prices in larger centres. In areas where road transport has to negotiate poorly maintained, unsealed roads, freight charges are further increased.

Lack of access to regular, reliable and affordable freight services has implications in terms of community well being as well as economic development. Access to basic food items, particularly in Aboriginal communities, at affordable prices is essential if nutritional problems are to be effectively addressed.

The major freight import routes are shown on the Transport Map and include:

- the Gulf Developmental Road from Cairns to Normanton and then on to Karumba to service the barge operations to Mornington Island and Weipa.
- the Karumba/Georgetown/Townsville link via the Kennedy Highway.
- the Matilda Highway linking Normanton to southern centres, Mt Isa and the Northern Territory
- The Wills Developmental Road serves Gregory, Burketown and Doomadgee from Mt Isa. There is unsealed road between Gregory and Burketown and Doomadgee.
- The Burke Developmental Road and Kowanyama Road providing access to Kowanyama.

For up to three to five months of the year many Gulf communities are compelled to obtain basic living supplies through airfreight services at considerable cost. Roads to some isolated communities are not repaired until late in the year, often just prior to the beginning of the next wet season.

Karumba, Mornington Island, Aurukun, Pormpuraaw and Weipa experience problems due to the closure of the Normanton to Karumba Road during the wet season. The Norman River Bridge, on the Burke Development Road is in need of repair. (A new two lane bridge is to be in place by the end of 1999.) Deadman's Gully is another section of the route which is subject to regular inundation, and works are due to commence in this section of road late in 1999.

The cost of total flood immunity on the Gulf Development Road between Normanton and Karumba is likely to be extremely high. (Department of Main Roads estimates that significant improvement to the Normanton-Karumba section - lifting the grade line by at least 0.6 metres - could cost approx. \$300 million)

### **Road Freight - Cattle**

Freight transportation is reliant on access to the key external markets including Mt Isa, Townsville, Cairns as well as southern markets. The Department of Main Roads undertook a Beef Cattle Road Transport Study in July 1998. This study identified the key cattle freight routes for the Gulf region. These routes are similar to those used to import freight to the region. Cattle are carted via:

- Gulf Development Road via Georgetown/Forsayth/Einasleigh/Lynd Junction to Townsville;
- Croydon to Richmond Road;
- Burke Developmental Road; and
- Wills Development Road to Cloncurry and to Julia Creek.

There is also live cattle export from the Port of Karumba (the Transport Map refers).

There are high cattle cartage costs due to road conditions and flooding that often delays or prevents access to markets and ports. This forces the Gulf pastoral industry to operate on a seasonal basis, rather than year round. This has implications for the economic development of the pastoral industry. In order to increase the length of the cattle season there is a need to reduce the period of closure of the primary cattle freight routes and to increase cattle freight options by improving road linkages internal to the region. However local roads will also need to be selectively upgraded to ensure cattle trucks can access the primary freight routes from the various properties.

### **Road Freight - Potential Horticulture and Cropping Industry**

The future freight requirements of the potential irrigation schemes throughout the region need to be considered in any road improvement programmes. At this stage it is most likely that access to fresh produce markets external to the region will be the key consideration in terms of the transport network. Given the high capital cost of roads, priority should be given in the future to the development of cropping and horticultural areas in proximity to the existing road transport network.

### **Tourism**

The Gulf attracts a wide range of tourists, however, the majority of visitors are those who can be classified as 'self drive' campers of domestic origin. The Transport Map identifies the currently used tourism routes.

The Gulf Developmental Road and the Burke Developmental Road carry high tourist numbers. However sections of single lane seal and poor road conditions combined with the road train traffic on these routes creates potential safety hazards. It is expected this situation acts to discourage a proportion of potential self-drive tourists.

Gravel and unsealed roads accessing major tourist locations generally limit use to 4-wheel drive or high clearance vehicles only. Most tourists in conventional vehicles avoid travelling on unsealed roads, particularly vehicles pulling caravans. Furthermore, it is a requirement of many hire car companies that conventional cars use sealed roads only.

The Tourism Section of the **Economic Development Strategy** identifies the need for improved east-west linkage along the Savannah Way between Cairns and Darwin as a priority.

Future tourism in the Gulf will require effective transport linkages between entry points, accommodation points and places of interest. However, the transport system is a significant component of the tourism experience and visitor perceptions can be undermined if transport services are deficient. Transport network improvements must be developed in a way that adds to the tourist experience of the region and does not detract from it.

### **Passenger Transport - Private Vehicle**

In a region which experiences relative remoteness and isolation, improvements to the range of transport modes, and greater availability of affordable, reliable and regular transport services would improve the quality of life for Gulf residents immeasurably, particularly in terms of:

- attending and participating in social, cultural and sporting events;
- opportunities to enrol in regionally based education, training and employment programmes;
- access to health care, specialists and social services;
- improved access to businesses in the region;
- access to Government services including QGAP office;
- increased regional cohesion through opportunities to participate in region wide development programs and organisations;
- increase opportunities for community participation in regional organisations; and
- meeting family obligations.

At present there is a great reliance on the key external centres that service the Gulf region, including Cairns, Townsville and Mt Isa. Key centres within the Gulf region are likely to continue and expand their service roles in the future (refer **Community Development and Planning Strategy**).

Linking internal centres should be given as much priority as linking the region with external centres. This is typified in the case of Kowanyama, which has easier access to Cairns than to its main community of interest in the Gulf region, being Normanton. In addition, the western Gulf communities of Burketown and Doomadgee have limited access despite heavy interrelationships and dependencies between the two centres. These two communities also have difficult access to the service centres and communities of the central and eastern Gulf such as Normanton, Karumba, Croydon and Georgetown.

There is an overall need for improved private vehicle and passenger transport linkages between centres within and external to the region.

#### ***Passenger Transport - Bus Services***

There are two existing bus services in the region. The Cairns to Karumba bus service provides a link between the Gulf region and the east coast. There is also a service between Normanton and Mt Isa via the Burke and Wills Roadhouse. The Transport Map refers. The cost of these services is considered to be high and may be a deterrent to more regular patronage.

Travel within the region as well as travel to external service centres is seen as part of a lifestyle that comes with living on remote properties or in isolated communities. However, not all Gulf residents have access to private vehicles and few have the resources to regularly afford public transport fares, which in most parts of the region is limited to air transport. There is a need to increase the range of passenger transport options throughout the Gulf region.

It is Government policy to provide public transport on a commercial basis, and increased emphasis is being given to private sector provisions of public transport.

The communities of Kowanyama, Doomadgee, Burketown, Gregory, Forsayth and Einasleigh have no access to a bus service. These communities lie predominantly in areas of the region without sealed road access. Until roads are improved, it is unlikely that bus services can be provided without substantial subsidies.

#### ***Road Improvements***

The following linkages have been identified in the previous sections as being of regional significance and worthy of inclusion in a regional road transport network:

- The Savannah Way linking Cairns to Darwin.
- The Wills Developmental Road linking Burketown and Doomadgee to southern centres.
- The Burke Developmental Road linking Kowanyama to Normanton and south to external centres and the Townsville to Mt Isa railway.
- The road linking Georgetown, Forsayth and Einasleigh to the Lynd and (via Harvey's Range Road) to Townsville - forming part of the shortest practical route between Townsville and Normanton (770km) for a major part of the year.
- The Croydon to Richmond Road linking Croydon to cattle fattening country in Flinders, Richmond and McKinlay Shires. This route also links Croydon to southern centres and the Townsville to Mt Isa railway, as well as providing a link for cattle to be exported via Karumba and Darwin.

A number of significant improvements will need to be made to various sections and components of the above road linkages in order for the benefits of the regional road transport network to be realised.

Table 13.1.1 (b) (over) broadly identifies the improvements likely to be required and lists the benefits that may result if the improvements were to be carried out. The Table excludes road works that have already been committed in capital works programmes such as the sealing of the Gulf Developmental Road between Normanton and Croydon.

There are considerable road improvements that would be required in order to realise the benefits of the regional roads network that have been identified. Alternative sources of roads funding need to be explored. The ***Integrated Planning Strategy*** addresses this matter in more detail. Even with substantial funding increases the regional roads network is not likely to be fully implemented until well beyond the life of the Gulf Regional Development Plan. Therefore priority works will need to be identified by Main Roads and the Local Governments as part of their planning procedures.

In this regard, the Department of Main Roads is currently preparing the Regional Road Investment Strategy to indicate the level of investment and affordable standards on state controlled roads in the Gulf region over the next 20 years.

**Table 13.1.1 (b): Benefits of Improvements to Regional Road Linkages**

| Road   | Benefits  |
|--|---|
| <p><b>Burketown-Doomadgee</b><br/>Seal &amp; flood improvement to reduce time of closure due to flooding</p>   | <ul style="list-style-type: none"> <li>• improve linkages for Doomadgee with the services offered in Burketown</li> <li>• improve air freight servicing opportunities</li> <li>• improve access to tourism, external centres, bus services and increased freight and cattle transport options as part of the Cairns - Darwin connection</li> </ul>  |
| <p><b>Cairns-Normanton</b><br/>widening and selective seal improvements</p>  | <ul style="list-style-type: none"> <li>• minimise conflicts between cattle and tourist traffic</li> <li>• improve freight transport from Cairns to Karumba</li> <li>• improve access to tourism, external centres, bus services and increased freight options as part of the Cairns - Darwin connection</li> </ul>  |
| <p><b>Burketown-Normanton</b><br/>seal &amp; flood improvement to reduce time of closure</p>   | <ul style="list-style-type: none"> <li>• improve access within the region by providing a direct link between the Western and central Gulf communities</li> <li>• improve for cattle movements throughout the region and to the Port of Karumba.</li> <li>• improve access to tourism, external centres, bus services and provide increased freight options as part of the Cairns - Darwin connection</li> </ul> |
| <p><b>Doomadgee-NT Border</b><br/>seal &amp; flood improvement</p>   | <ul style="list-style-type: none"> <li>• improve access to tourism, external centres, bus services and increased freight and cattle transport options as part of the Cairns - Darwin connection</li> </ul>  |
| <p><b>Normanton-Karumba</b><br/>flood proofing to reduce time of closure commencing with the Norman River Bridge and approaches &amp; Deadman's Gully.</p> | <ul style="list-style-type: none"> <li>• improve access to the Port of Karumba for the cattle and other potential industries</li> <li>• improve access within the region. (Linking Karumba and Mornington with Normanton and to other transport modes)</li> <li>• improve freight transport to Karumba and Mornington Island</li> <li>• improve tourism access to Karumba.</li> </ul>                           |
| <p><b>Gregory-Burketown Wills Developmental Road</b><br/>seal, flood &amp; black soil improvements to reduce time of closure</p>                           | <ul style="list-style-type: none"> <li>• provide an indirect sealed link between the Western and Central Gulf communities via the Burke and Wills Roadhouse.</li> <li>• improve access to tourism, external centres, bus services and increased freight and cattle transport options as part of the Cairns - Darwin connection</li> </ul>   |
| <p><b>Cloncurry- Normanton Burke Developmental Rd</b><br/>widening</p>   | <ul style="list-style-type: none"> <li>• improve freight links to Mt Isa-Townsville rail</li> <li>• improve cattle transport</li> <li>• minimise conflicts between cattle transport and tourism traffic</li> <li>• improve access to tourism, external centres, and bus services</li> </ul>   |
| <p><b>Kowanyama Road Dunbar to Kowanyama</b><br/>selective flood proofing to reduce time of closure</p>  | <ul style="list-style-type: none"> <li>• improve for freight transport and reduce reliance on air freight</li> <li>• improve for cattle movements</li> <li>• Improve access external to the region</li> <li>• Improve access to Normanton for community and recreation purposes</li> </ul>  |
| <p><b>Dunbar-Normanton Burke Developmental Rd</b><br/>flood improvements to reduce time of closure and works to improve the condition of the road</p>      | <ul style="list-style-type: none"> <li>• improve access within the region to Normanton for community and recreational purposes</li> <li>• increase freight transport options from Cairns or via Normanton.</li> <li>• improve for cattle movements and linkage to the Port of Karumba.</li> </ul>   |
| <p><b>Georgetown-Lynd</b><br/>(via Forsyth &amp; Einasleigh)<br/>seal and flood improvements</p>   | <ul style="list-style-type: none"> <li>• improved access within the region and to external centres (eg. Townsville's deep water port facilities)</li> <li>• improve for cattle movements</li> <li>• improve freight transport</li> <li>• expanded access for tourism</li> <li>• improve links for the Gulflander and Savannahlander</li> <li>• improve access to bus services</li> </ul>                        |
| <p><b>Richmond-Croydon</b><br/>flood improvement to reduce time of closure</p>   | <ul style="list-style-type: none"> <li>• improve for cattle transport to/from cattle breed and fattening areas and exports</li> <li>• Improve links to Townsville - Mt Isa railway</li> <li>• expanded access for tourism, linking dinosaur and mining trails</li> </ul>  |

**Transport Map**



### 13.1.2 Strategy

#### ***Desired Strategic Outcomes***

- A regional road transport network with the following features:
  - improved access between the Gulf communities and to service centres external to the region;
  - improved road conditions on the primary freight cattle and tourist routes and decreased time periods over which they are closed due to flooding and subsequent damage;
  - improved road conditions on major strategic linkages such as that to the deep water port facilities at Townsville; and
  - improved road conditions between the key transport modes including linkages to the Townsville to Mt Isa rail line.
- Efficient, timely and cost effective movements of goods and services within and external to the region including the coordination of road and airfreight delivery during the wet season.
- A range of efficient, affordable and coordinated passenger transport services including Gulf centres, external centres and other transport modes that are accessible to all Gulf communities.

- Develop an agreed schedule of road works priorities to inform the Department of Main Roads Regional Road Investment strategy and the Road works programs of the Gulf Local Governments and Aboriginal Community Councils.
  - improved bus linkages and other sources of Government funding;
  - sources of Government funds for passenger transport including subsidies;
  - improve and expand bus services;
  - improved quality and affordability and appropriateness of bus services particularly to Doomadgee, Burketown and Kowanyama as well as a link with the Mornington Island barge service.
- Initiate a review of all road freight services in the Gulf in consultation with the service providers and the relevant Government including consideration of the following matters:
  - an assessment of demand for QLink services throughout the region and whether these services can be provided commercially by QLink or through a community service obligation;
  - consideration of freight subsidies to some remote regions; and
  - measures to encourage businesses and individuals within the region to coordinate freight orders and transport deliveries in order to minimise freight costs.
  - the establishment of comprehensive and readily available information on bus services to assist in passenger access to services;
  - coordination of service timetables with other transport modes;
  - bus services for special events;
  - options for improving intra-regional bus services and appropriate interchanges with other transport modes.
- Initiate a review of all passenger bus services in the Gulf in consultation with the service providers and the relevant Government agencies and including consideration of the following matters:
  - increased access to bus services;

### 13.1.3 Priority Actions

- Initiate discussions involving the Gulf RPAC, the Department of Main Roads, Queensland Transport, and the Northern Territory Government to identify opportunities for linkages to the strategic planning for the areas adjacent to the Gulf region.
- Support the development of the Regional Road Investment Strategy by the Department of Main Roads and the Gulf Local Governments and Aboriginal Community Councils' Road Works Programs and ensure the consideration of the following road transport planning matters:
  - detailed feasibility investigations into road improvement options;
  - cost/benefit analysis between various road improvement options;
  - the total amount of roads funding available to undertake roads improvements in the Gulf region;
  - ensuring road improvements are undertaken throughout the Gulf region on an equitable basis to maintain existing roads employment programs and not to disadvantage employment opportunities in the road construction industry in any areas of the Gulf region;
  - ensuring that current road conditions are maintained and do not lapse as a result of the new priorities;
  - the primary use of the various road linkages in terms of freight, cattle transport, tourism, economic expansion, access to services and regional centres and passenger transport (private vehicles and bus services);
  - integration of road linkages with the other transport modes of air, sea and rail; and
  - consideration of the recommended road works priority actions in Tables 13.1.3 (a) and 13.1.3 (b) (*over*).

**Table 13.1.3 (a): Recommended New Road Commencements**

| Linkage                                      | Actions Required                                       | Priority  |   |
|--|--|---|---|
|  |  | High (0-5 yrs)  | Medium (5-10yrs)                            |
| Savannah Way (Burketown-Doomadgee)           | seal and improve flood ways to reduce time of closure  | commence selected seal and flood improvements                   |   |
| Wills Developmental Road (Gregory-Burketown) | seal and improvements to reduce time of closure        | commence selected seal and flood improvements                   |   |
| Savannah Way (Burketown-Normanton)           | seal and improvements to reduce time of closure        | commence feasibility study                                      | commence selected seal & flood improvements |
| Savannah Way (Doomadgee-NT border)           | seal and floodway improvements.                        | feasibility study   | commence works                              |
| Burke Developmental Road (Dunbar-Normanton)  | seal & floodway improvements to reduce time of closure | commence feasibility study for lime stabilisation & fabric seal | commence selected seal & flood improvements |
| Kowanyama Road                               | seal & floodway improvements to reduce time of closure | commence feasibility study                                      | commence selected seal & flood improvements |

**Table 13.1.3 (b): Recommended maintenance and Improvements**

| Linkage  | Actions Required   | Priority  |   |
|--|--|---|---|
|  |  | High (0-5 yrs)  | Medium (5-10yrs)  |
| Savannah Way (Cairns-Normanton)                | selective widening   | commence selective widening every 10km to 20km                                |   |
| Matilda Highway (Normanton-Karumba)            | selective floodway improvements to reduce time of closure. | feasibility study & commence selected flood improvements including bridgework | possible pavement stabilisation & fabric seal to reduce load restrictions |
| Burke Developmental Road (Cloncurry-Normanton) | selective widening   | commence selective widening   |   |
| Georgetown-Lynd (via Forsayth, Einasleigh)     | general improvements                                       | feasibility study   | commence works  |
| Richmond-Croydon                               | general improvements                                       | feasibility study   | commence works  |

## 13.2 AIR TRANSPORT

### 13.2.1 Issues

The Transport Map identifies the primary airports throughout the Gulf region. There is also a network of privately owned and maintained airstrips, mostly on pastoral properties. This network provides critical access for emergency services and supplies, where strips are maintained. Table 13.2.1 shows the primary public airport facilities in the Gulf.

For much of the year air transport is the only form of access to a number of communities. The Aviation Plan for Queensland identifies that certain regions in Queensland have special needs that are not provided for by existing infrastructure. The plan enables Government to set further priorities for improving air transport support for regional development and access for rural and remote communities. As part of the development of the Aviation Plan, an audit of the capabilities of existing infrastructure was completed. This information is now maintained by Queensland Transport in a database to assist in planning for future community and industry needs. It is available to air operators, local government, and airport owners and freight forwarders.

Responsibility for funding aviation infrastructure rests with airport owners in the first instance. Where there is a funding shortfall, proposals may be considered for supplementary funding by Queensland Transport through the Rural and Remote Airport Development Program. Two types of proposals are eligible under the program:

- Basic Access proposals are primarily aimed at improving safe access to basic air services, including emergency services, and
- Regional Development proposals are those that contribute to regional economic development consistent with government endorsed strategies.

It should be a longer-term priority for the Gulf airstrips to be developed to a consistent user standard. This will facilitate more effective air transport services by being able to access all major strips with single size aircraft for both freight and passenger services.

**Table 13.2.1: Airports In The Gulf**

| Airport           | Length | Surface       | Night Lights |
|-------------------|--------|---------------|--------------|
| Burketown         | 1372   | Sealed        | PAL          |
| Croydon           | 1463   | Gravel        | PAL          |
| Doomadgee         | 1656   | Sealed        | EO           |
| Einasleigh        | 1200   | Gravel        | EO           |
| Forsayth          | 900    | Gravel        | EO           |
| Georgetown        | 1138   | Sealed        | PAL          |
| Gregory           | 1180   | Gravel (Fair) | EO           |
| Karumba           | 1271   | Gravel (Fair) | PAL          |
| Kowanyama         | 1380   | Sealed        | PAL          |
| Mornington Island | 1320   | Sealed        | PAL          |
| Mount Surprise    | 1200   | Gravel        | EO           |
| Normanton         | 1676   | Sealed        | PAL          |

PAL - Pilot Activated Lights  
EO - Emergency Only Lights

### **Access to the Royal Flying Doctor Service**

It is essential that the primary Gulf airports and rural airstrips are capable of handling the Royal Flying Doctor Service (RFDS) aircraft, particularly in locations where there is no other form of medical service provided.

The Croydon airstrip is in need of sealing and Queensland Transport has approved a funding application. Sealing is expected to take place in the 2000-2001 financial year. All other centres have airport runways capable of handling RFDS flights. However, the Gregory airstrip is often inaccessible from the town during the wet season. An emergency airstrip has been constructed on the eastern side of the Gregory River on the Wills Developmental Road for use when floodwaters cut access across the Gregory River.

As the outstation movement increases there will also be a need for improved RFDS access in locations such as Raft Point on Bentinck Island and at Old Doomadgee to service the coastal outstations.

Rural and outstation airstrips are the responsibility respective owners. There is need for a network of well-maintained airstrips capable of accommodating RFDS flights throughout the Gulf region to improve access to emergency services.

### **Air Freight**

Runway extensions are required at a number of locations to accommodate larger transport aircraft. This should enable a reduction in airfreight costs during the wet season. In conjunction with any runway extensions the runway pavement strength should be assessed and upgraded if necessary to accommodate heavier aircraft.

The Karumba gravel airstrip runs parallel to the foreshore and is subject to cross winds. In wet weather the strip can be closed and the shell-grit verge is used as a runway. A longer runway is required to allow larger freight aircraft in during the wet season. Karumba is by far the busiest airport in the Gulf and is regularly closed due to weather conditions. It is urgently in need of upgrading or relocation. Carpentaria Shire

Council is investigating the feasibility of extending the runway at Karumba to 2000m or relocating the airport to a new site.

As Mornington Island is on the same freight/passenger route the runway at this location also requires extension. The runway extension needs to be coordinated so that the one plane can use both runways.

Burketown airstrip is too short to be included in the freight runs by larger aircraft and also needs flooding mitigation and erosion control works.

The airstrip at Kowanyama is also used to import freight during the wet season. Approximately 50 tonnes per week is imported. The airfreight issue at Kowanyama is more complex than just the length of the airstrip. Aircraft en route to other destinations in the Gulf land in Kowanyama laden with freight and fuel. Due to high air temperatures at the airport, it is not often possible to take off without lightening the load. This often means passengers are forced to miss the flight in order for the plane to be able to continue its freight run across the Gulf.

Kowanyama Aboriginal Community Council has been exploring options to improve freight services to the town. One option is to extend the airport. An application for funding is currently with the Government.

### **Air Passenger Travel**

There is only one commercial airline operating in the Gulf region. Transtate Airline provides regular commercial services to Cairns and Mt Isa from Gulf communities. However, these can cost up to three times as much as fares available over similar distances in other parts of the State.

Burketown, Normanton, Karumba, Doomadgee, Kowanyama and Mornington Island airports have regular air passenger flights. The focus of the existing services appears to be on providing links to Cairns and Mt Isa. However, key links between centres such as Kowanyama and Normanton are not provided. This necessitates a side trip to Cairns to travel between the two centres.

The Kowanyama to Normanton direct air link should be given a high priority due to the fact that alternative modes of transport between these centres is extremely limited. The condition of the Kowanyama to Normanton Road makes it impassable during the wet season and for a considerable time afterwards each year. There are no bus services between the two centres and this is not likely to occur until the road conditions are considerably improved. The upgrading of the road is considered to be a longer-term option given the length and condition of the road. Other more strategic road transport linkages such as the Savannah Way are more likely to receive a higher priority status. Therefore air travel will be the key to linking these two communities of interest well into the future.

Transtate has indicated that the Gulf services are well patronised and it is considered that business traffic will increase with increased economic activity. There is expected to be an increase in economic activity due to the Pasmenco Century Zinc project and as a result of increased tourism. On this basis Queensland Transport advises that regulation or subsidisation of the Gulf region could therefore hinder market forces and may conflict with the goals of the National Competition Policy especially given the current availability of commercial services.

The Gulf communities can be seen as being 'captive' air transport clients due to their isolation and inability to use other forms of transport in the wet season. With only one scheduled airline, the only feasible air passenger alternative is for air charters. There is considerable reliance on air travel for local travel, patient transfers and for Government personnel required to reach the Gulf communities.

## 13.2.2 Strategy

### *Desired Strategic Outcomes*

- Appropriate access to air services and availability of suitable infrastructure.
- RFDS access to all communities not serviced by local medical facilities.
- Affordable airfreight access to all communities isolated during the wet season.
- Improved affordability of passenger air travel.
- Improved commercial airline services between centres within the region.

- Prepare an aviation service and infrastructure strategy for the Gulf region to ensure that the long-term needs of the community are addressed.
- Identify any strategically appropriate rural airstrips to be upgraded to RFDS standard. (With a priority to the upgrading of the Gregory, Old Doomadgee and Raft Point airstrips.)
- Improve air freight access to all of the community.
- Improve affordability and community access to commercial airline services:
  - investigating other key community air transport linkages; and
  - improving transport links between the Gulf centres to facilitate access to the centres which are presently serviced by commercial airlines.

### 13.2.3 Priority Actions

- Undertake a study to develop a long-term plan for aviation services and infrastructure in the Gulf region.
- Facilitate the current scheduled improvements to the Gregory airport to improve RFDS access.
- Investigate the need for improved RFDS access to Raft Point and Old Doomadgee.
- Lobby for a review of subsidy arrangements for commercial airlines in the Gulf region;
- Lobby for an extension of existing air passenger services within the region with a priority to provide a link between Kowanyama and Normanton and Kowanyama and Mornington Island;
- *Kowanyama Airport* - extend the airstrip to overcome freight plane take off difficulties.
- *Karumba Airport* - relocate or upgrade and extend the existing airport
- *Burketown Airport*- Undertake urgent erosion mitigation works at the Albert River end of runway.
- *Mornington Island Airport* - Extend the runway to allow for large airfreight aircraft.
- *Croydon* - seal airstrip (funding has been obtained from Queensland Transport).

## 13.3 SEA TRANSPORT

### 13.3.1 Issues

The Port of Karumba is the only major port in the study area, with a primary role of providing freight services to Mornington Island and Weipa. (The Transport Map refers.) The Port also operates as a commercial enterprise in its own right, accommodating a fishing fleet, live cattle export facilities, pilotage facilities and the Pasminco Century Zinc Mine slurry facilities. There are also a number of smaller landings throughout the Gulf, none of which have the commercial potential of the Port of Karumba.

The Ports Corporation of Queensland administers the Port of Karumba, including approximately 50 hectares of land and a barge ramp at the Port. All other on-shore facilities are privately owned and include wharves for handling general cargo, livestock, seafood and petroleum. Although the Ports Corporation is continually reviewing the need for common user facilities, it advises the development of such facilities cannot yet be commercially justified.

Land based fishing and access to the river at the Port are limited to the boat ramp. Most people are forced to acquire a boat in order to enjoy access to fishing in the river. It is an objective of the *Fisheries Act* to ensure access to fisheries resources is fair. In this regard, the provision of a public wharf or jetty at the port of Karumba could achieve this objective.

The existing port plan is currently under review. As part of the Pasminco Century Zinc Mine development, the entrance to the port is being deepened to allow larger ships (up to 8000 tonne) to enter the port. The greatest restriction at Karumba is the shallow channel depth. Despite an extensive dredging program that has been recently completed, the size of the ships capable of utilising the Port facilities at Karumba is not expected to increase significantly.

Therefore, unless the Ports Corporation is required under some community service obligation, it is unlikely to provide a public wharf at the Port. Public and tourist access to the river along the Port is currently limited and there is need for improved access for fishing and recreational purposes.

However it is expected to facilitate live cattle exports which began in 1994 and should show significant growth. In 1997/98 35.8 kt of general cargo and 37.5 kt of livestock were shipped through the port despite the impacts of the Asian currency crisis. However, the existing on-shore cattle loading facilities are inadequate to handle larger ships, which require improved cattle loading and facilities to handle up to 2500 head of cattle per ship.

The Economic and Community Development Strategies identify Karumba as being a potential economic development and industrial growth centre in the Gulf region. This is primarily due to the increasing role of Port of Karumba as a trade and service facility. There is a need to allocate and protect sufficient land areas for the future growth of the Port and to accommodate associated industrial and commercial development.

The review of the Planning Scheme for Carpentaria Shire should incorporate the identification of suitable land adjacent to the Port to accommodate related business and industry.

There is demand for passenger and vehicle transport by barge between the Port of Karumba and Mornington Island. However, the primary purpose of the current barge service is primarily for freight.

There is also potential for barge services between Mornington Island and its many coastal outstations, including the community at Raft Point on Bentinck Island. In the longer term, barges could also service outstations along the coast at Old Doomadgee.

### 13.3.2 Strategy

#### ***Desired Strategic Outcomes***

- Expanded and improved on-shore facilities at the Port of Karumba.
- Adequate land supplies to accommodate Port related business and industry.
- Improved barge passenger transport facilities.

- The current review of the Port of Karumba Plan should include consideration of improved onshore facilities in terms of developing common user facilities including development of extension of cattle holding and loading facilities.
- The provision of adequate supplies of serviced land at Karumba for port and waterfront related industries and business activities in the review of the Carpentaria Shire Planning Scheme.
- Initiate a review of barge transport services in the Gulf in consultation with the service providers and the relevant Government and include investigation of options to improve community access to passenger barge services.

#### **13.3.3 Priority Actions**

- Support the review of the Port of Karumba Plan by the Ports Corporation of Queensland and for the consideration of increased common user and onshore cattle facilities.
- Support the review of the Planning Scheme for the Shire of Carpentaria and for its identification of services land to accommodate port related development.
- Ensure works commence in relation to the need for a review of passenger barge travel services within the next 5 years.

## 13.4 RAIL

### 13.4.1 Issues

There are two train services in the Gulf region that cater primarily for the tourist market, the Gulflander and the Savannahlander. The Transport Map refers. Chapter 8, the **Economic Development Strategy** expands on the tourism opportunities associated with the Gulf Railways.

The rail lines provide local employment for a number of residents living in several of the towns within the region. The town of Mt Surprise is dependent on the survival of the Savannahlander service as it is the biggest employer in the town with 10 full time employees working on the track and train. This figure is likely to change now the service has commenced operation (2 September 1998) between Cairns and Forsyth, as Mt Surprise will continue to be a focal point for this service.

The Savannahlander rail motor does not have the capability to carry vehicles, requiring return trips, rather than facilitating through-travel. Options to expand the service so the train caters for vehicles need to be explored. This will allow patrons the flexibility to continue on through the region rather than returning to Cairns.

The Gulflander takes passengers and vehicles from Normanton to Croydon on a weekly basis. It provides a service most of the year, wet season conditions permitting, and has operated continuously since 1888. The car service operated to capacity last year, showing its potential to be incorporated into a formalised tourist transport network. Croydon Shire Council is currently restoring its historical steam train, as a tourist attraction. In the short term it will run from Croydon to Golden Gate near Croydon. In the longer term, this train may enhance the Gulflander service to Normanton.

There are currently no transport services that link the two rail lines. The extension of the line between Forsyth and Croydon to provide a continuous route to Normanton would involve approximately 200km of new construction and would cater mainly for tourists. The limited tourist numbers likely to use the route would not justify the high cost of constructing the connection from Forsyth to Croydon.

The main rail line from Townsville to Mt Isa traverses south of the Gulf Savannah region. This line is a major freight route for the mining and cattle industries as well as providing other freight and QLink services. The Inlander passenger train links Townsville and Mt Isa twice a week in both directions, providing a tourist and regional public transport service. The Transport Map refers.

The Gulf region would benefit economically from improved road linkages to the major freight distribution centres along the Townsville to Mt Isa route, especially Richmond, Julia Creek, Cloncurry, and Mt Isa. Greater interchange between road and rail, utilising rail as an efficient transport mode connecting the region to the major port of Townsville would improve the, social and economic performance of the region.

If successful, the Australian Inland Railway Express (AIRE) proposal will also provide high-speed linkages to Darwin and the southern states through a connection at Mt Isa. However, this is likely to be a longer-term option.

### 13.4.2 Strategy

#### *Desired Strategic Outcomes*

- Incorporation of the Gulf railways and links to the Mt Isa-to-Townsville railway into the integrated transport network and into a Gulf Regional Tourist Strategy.

- Improve transport linkages and schedules between the Gulf railways and with the Mt Isa-to-Townsville railway.
- Investigate the feasibility of the Savannahlander carrying vehicles, and the Croydon historical steam train proposal.

### 13.4.3 Priority Actions

- Ensure the following work commences in relation to the strategies within the next 5 years.
  - Improve transport linkages with and between rail services.
  - Options for the Savannahlander to carry vehicles.

## 13.5 INTEGRATED TRANSPORT PLANNING

### 13.5.1 Issues

To date transport agencies have not actively facilitated the integrations of transport modes, services and facilities to counter the impacts of isolation during the wet season. In recognition of the need to co-ordinate regional transport and land use planning mechanisms, Queensland Transport has developed Stages One and Two of a three-stage process to implement the *Gulf Savannah Integrated Regional Transport Plan* (IRTP). The Gulf region forms part of the total area addressed in the IRTP.

Despite the integration of transport modes which has occurred to date, on the whole various improvements and upgrading to road, rail, air and sea transport systems have, in past, occurred without comprehensive planning for key linkages between these systems. In a region where resources, existing transport infrastructure and the range of transport modes are seriously limited it is in the interests of efficiency to integrate and to expand existing transport modes.

However, maximising efficiency of the transport network does not necessarily provide equitable access to all users. Transport infrastructure resource allocation needs to be made on the basis of social justice principles, equity, access, participation and equality, as well as cost efficiency.

The minimum expected qualities of the transport system should include efficiency, safety, reliability and accessibility. In addition, current and future transport planning should:

- provide emergency access by the most appropriate transport mode;
- integrate the existing transport components;
- improve key linkages between modes;
- identify and develop key interchange facilities; and where relevant
- co-ordinate services of the various transport modes.

Figure 13.5.1 identifies the areas where the four transport systems are presently linked and the types of transport requirements that contribute to these linkages.

**Figure 13.5.1: Integration of the Transport Network**

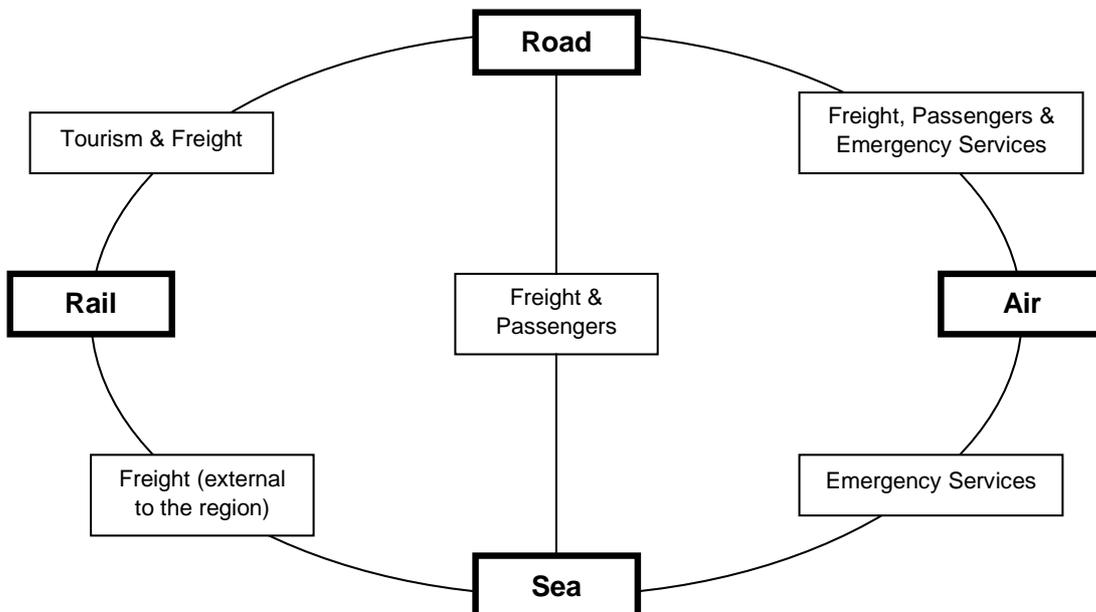


Figure 13.5.1 identifies the following five key transport system linkages:

- **Road – Air:** This linkage is utilised primarily to facilitate the transport of freight (particularly during the wet season), for passenger transfers and to provide access to RFDS and emergency services. Each Gulf community should either have all weather access to road freight services or all weather access to an airport capable of importing freight during road closures.
- **Road – Sea:** This linkage is utilised for the transport of freight and passengers to offshore destinations, for exports from the region and for recreational fishing and tourism. The Port of Karumba is the key sea freight and export node for the region. The more efficient this linkage becomes the less reliance will be placed on air transport for freight purposes, particularly for communities at Mornington Island and Weipa (outside the region).
- **Road – Rail:** This linkage is limited to the Gulflander railway that carries both vehicles and passengers. Improved linkages are required between the existing rail systems in the Gulf region as well as connecting the Gulf region with the Townsville-Mt Isa railway. This will increase tourist and passenger travel options. It will also facilitate freight and public transport to Townsville and other east coast destinations. Links could be enhanced by a local tourist bus service linking to coordinated time tables and potentially incorporating overnight stay or local tours.
- **Sea – Air:** This relates primarily to emergency services throughout the Gulf of Carpentaria waters, Karumba being the central location for air-sea rescue.
- **Sea – Rail:** This relates primarily to the Mt Isa to Townsville railway, linking the Gulf region to the Port of Townsville, via the Gulf road network. The Gulf road network also provides access to the rail systems at Mt Isa, Cloncurry, Julia Creek and Richmond.

## 13.5.2 Strategy

### ***Desired Strategic Outcomes***

- Increased efficiency, reliability and connectivity of the transport network in a manner that recognises the various elements of the network, their interrelationships and the most cost effective methods of upgrading the system.
- An integrated transport system providing an appropriate level of access to all transport users across the region and reasonable access to all sections of the community.
- Transport planning decisions incorporating the full range of financial, environmental and social costs and benefits in the assessment of transport options.

- Facilitate implementation of the actions in the *Gulf Savannah Integrated Regional Transport Plan (IRTP)*.

Ensure consideration of the following transport planning matters in the IRTP:

- the need to provide safe, efficient, accessible, affordable and reliable integrated transport system in the Gulf region;
  - the interrelationships between the road, rail, air and sea transport systems in terms of freight, passenger, RFDS and emergency services access and tourism demands;
  - the need to provide appropriate transport linkages relevant to the various transport users needs;
  - the need to develop regional interchange facilities; and
  - the need to coordinate the services, timetables and schedules of the Gulf transport modes.
- Establish a forum for the coordination of transport planning across all modes.
  - Ensure Local Government Planning Schemes identify and protect transport systems and, where relevant, make provision for interchange facilities.

### **13.5.3 Priority Actions**

- Ensure the following work commences in relation to the strategies within the next 5 years:
  - implement actions in the Gulf Savannah Integrated Regional Transport Plan;
  - identification of transport systems in Planning Schemes.
- Support Queensland Transport's proposed workshops throughout the region to ensure integration of transport planning.

# **14 IMPLEMENTATION AND COORDINATION**

## **14.1 INTRODUCTION**

The Gulf Regional Development Plan is intended to establish a framework for the proper development and management of the Gulf region and to guide future decision-making. The value of the GRDP will be largely determined by how successfully its strategies and recommendations are supported and implemented by all levels of Government, regional organisations and the community. The GRDP is not a statutory document, although its development on a regional basis and its endorsement by Government gives it considerable weight.

Successful implementation of the GRDP will be dependant upon on-going cooperation between the different interests and communities in the region. The common goal is to improve the circumstances of the region, to plan for its future and to better manage its economic, social, cultural and environmental values so as to meet the aspirations of its peoples.

It is essential that there be a coordinated approach to implementation of the GRDP. In addition, the best use must be made of available resources and a concerted effort made at the regional level to obtain additional resources to meet priority needs. This will require a considerable degree of cooperation and coordination between all levels of government as well as all sections of the community.

It is expected primary responsibility for implementation will rest with government agencies (Commonwealth, State and Local) as well as other responsible organisations, such as Aboriginal Community Councils, Native Title Representative Bodies, and ATSIC. The rights and responsibilities of individual Government agencies and other implementation organisations and authorities are to be respected and retained, including responsibility for the development and funding of programs within their sphere of interest.

To facilitate implementation of the GRDP it will be necessary to establish appropriate

arrangements to guide, monitor and assist implementation. The implementation process should, wherever possible, make use of existing administrative structures and organisations to avoid establishing duplicate processes.

The overall coordination of implementation activities is an on-going requirement that forms part of the GRDP. Accordingly, the GRDP contains recommendations to deal with this issue.

In essence, the GRDP and its subsequent implementation can be considered in three stages (refer Figure 14.1):

### ***Stage 1 - Plan Making***

Preparation and endorsement of the GRDP document: This stage is complete with the production of the document and following consideration by Government.

### ***Stage 2 - Implementation and Further Work***

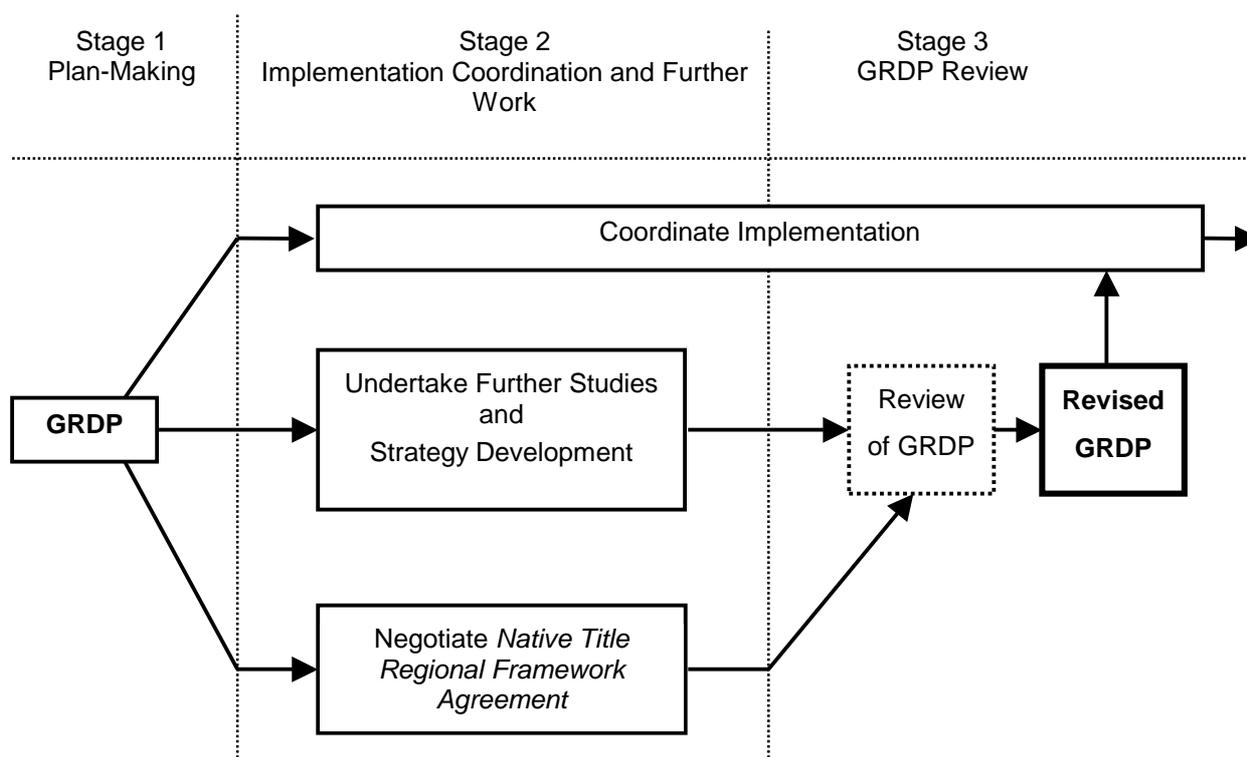
Stage 2 will be composed of three different elements. Firstly, arrangements need to be put in place to coordinate the implementation of GRDP outcomes that are to be carried out by Government agencies and relevant regional organisations.

Secondly, the GRDP recommends further studies and strategy development in specific areas. This work needs to be carried out as part of Stage 2 in parallel with other implementation activities.

Finally, negotiations need to begin on a *Native Title Regional Framework Agreement*, which develops principles and protocols for negotiations in respect of native title and regional development.

Key concepts of the Queensland Government partnerships approach - as used in the Cape York Partnerships initiative - are to be incorporated into Stage 2.

**Figure 14.1: Stages of the Gulf Regional Development Plan**



### Stage 3 - GRDP Review

The implementation activities and recommended further work will result in additional information, data and recommendations. These outcomes need to be incorporated into the GRDP document as appropriate. Accordingly, it is recommended that the GRDP be revised at an appropriate point in time determined by the RPAC to ensure it remains current. The GRDP will then be revised and reissued.

It should be recognised that the process of monitoring and review is on going. Regular reviews and any necessary revisions should occur throughout the life of the GRDP, beyond the end of Stage 3.

## 14.2 IMPLEMENTATION AND REVIEW ARRANGEMENTS

To coordinate implementation, a strong, representative regional organisation is required which incorporates those bodies having a primary responsibility or interest in

carrying out implementation activities as part of their core responsibilities.

This organisation will need to:

- play a central role in coordinating the activities of implementation bodies and agencies
- act as the “driving force” behind implementation of the GRDP
- monitor the progress in implementing GRDP strategies and recommendations
- undertake a periodical review of the GRDP to ensure it remains current and responsive to changing circumstances
- develop and provide a coordinated and united position on issues relevant to the Gulf region
- generate agreement on priorities and promote cooperation amongst Gulf communities and stakeholders
- obtain a recognised status and maintain credibility with government
- negotiate with Government to secure resourcing for GRDP implementation activities and to develop greater cooperation and coordination between government agencies

- keep the regional community informed of progress and activities related to the GRDP implementation
- secure resources to ensure organisation and operational support on an on-going basis.

The proposed organisational structure for Stage 2 is depicted in Figure 14.2.

### 14.2.1 Gulf RPAC (Stage 2)

It is considered appropriate that the Gulf Regional Planning Advisory Committee (RPAC) takes on the role of the peak regional body for stages 2 and 3 of the GRDP, with responsibility to:

- coordinate and drive implementation of the GRDP;
- oversee further studies and strategy development work as recommended in the GRDP;
- negotiate a *Native Title Regional Framework Agreement* between all relevant parties; and
- oversee a review of the GRDP as a result of the above-mentioned activities.

It must be recognised that sufficient resources will have to be obtained before Stages 2 and 3 of the GRDP can commence. At the time of preparation of this document, no resourcing or funding has been made available beyond Stage 1.

The Gulf RPAC already has representation from those sectors of the region that will be instrumental in implementing GRDP recommendations:

- Local Government (Croydon, Etheridge, Carpentaria, Mornington and Burke Shire Councils)
- Aboriginal Community Councils (Doomadgee and Kowanyama)
- State Government Agencies
- ATSIC
- Commonwealth Government
- Aboriginal Land Councils (Carpentaria Land Council, Cape York Land Council, and North Queensland Land Council)
- Gulf Savannah Tourism Organisation.

(Note: the jurisdictional boundaries of native title representative bodies within the Gulf region are under review - this may alter representation on the Stage 2 RPAC.)

It is proposed for Stage 2 of the GRDP process that the existing membership of the Gulf RPAC (refer Table 1.4) be extended to include representation from the Aboriginal Coordinating Council (ACC) and, if necessary, other representative parties as agreed by RPAC. The ACC (formed under the *Community Services (Aborigines) Act 1984*) is the peak representative body for Queensland's Aboriginal Community Councils.

Given the variety of common issues and opportunities shared with the adjoining regions of the Northern Territory, it would be advantageous to all parties to ensure that the Northern Territory Government is consulted with throughout the implementation of the GRDP – this could extend to offering some form of membership on the Gulf RPAC.

The Gulf RPAC would meet on an as-needed basis, possibly once or twice a year, to deal with major or contentious issues raised through the implementation process. The RPAC would also consider significant or substantive amendments to the GRDP. The responsibility for coordinating the *actual* implementation of components of the GRDP will fall to the *Implementation Coordination Group* (see below).

The Queensland Department of Communication and Information, Local Government, Planning and Sport (DCILGPS) should continue its management and support role through to the implementation of the GRDP and its on going monitoring and review.

Resources will be required to ensure the effective functioning of the Gulf RPAC and the on-going provision of logistical support by DCILGPS.

Accordingly, a priority action will be to seek funding from Government to provide for the coordinated implementation of the GRDP in Stage 2 and for review of the GRDP in Stage 3.

## 14.2.2 Implementation Coordination Group (ICG)

The ICG will be comprised of senior officers from State and Local Government agencies, as well as representatives from non-government organisations (such as industry or environment bodies), which have responsibility for implementing major components of the GRDP. The ICG would meet on a regular basis throughout the year and act to resolve implementation issues and ensure progress is made in implementing each of the GRDP components. If necessary, the ICG can refer regional plan matters to the RPAC for resolution.

The ICG will establish working groups with corresponding lead and support agencies to implement specific strategies. The activities of these working groups may include the revision of the corresponding strategies to further refine key priorities, and reporting to the ICG regarding progress.

To successfully undertake its implementation and coordination role on behalf of the Gulf RPAC, the ICG will require logistical support and technical advice. There is also the need for:

- facilitation and liaison with implementation agencies on a day-to-day basis
- monitoring of implementation activities
- dissemination of information
- provision of assistance and advice
- management of reviews of the GRDP.

The fulfilment of these tasks will be critical if the full potential benefit of the GRDP is to be realised by the Gulf community and stakeholders. Resources will be required to ensure the effective functioning of the ICG and the on-going provision of logistical support.

Accordingly, a priority action will be to seek funding from Government to provide for the coordinated implementation of the GRDP by the *Implementation Coordination Group* in Stage 2.

## 14.2.3 Further Studies and Strategy Development

The GRDP (Stage 1) incorporates strategies designed to address a range of key issues confronting the region. A number of these strategies and their associated priority actions recommend further work and studies be undertaken in relation to broad regional strategy development.

The priority further studies and strategy development include:

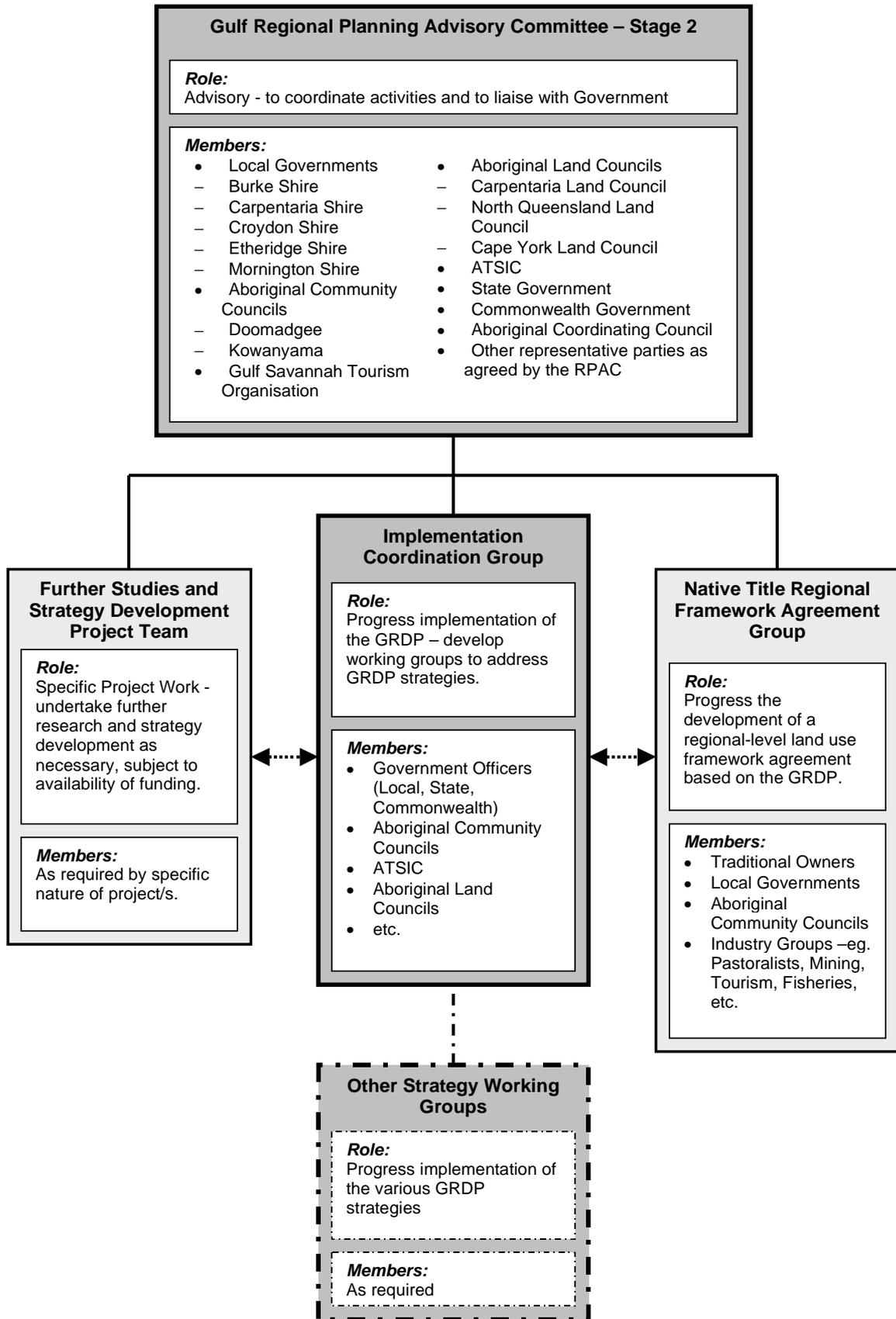
- Environment;
- Tourism;
- Employment, Education and Training;
- Housing
- Communication.

The GRDP (Stage 1) also recommends studies and investigations to assist with the implementation of GRDP recommendations or to allow specific regional issues to be addressed.

The need for the above additional work is a direct result of the limitations imposed by the available funding to develop the GRDP in Stage 1.

A priority action should be to secure funding and resources to complete GRDP Stage 2, in respect of the priority strategy and study recommendations in GRDP Stage 1. All levels of Government should be approached to contribute funding to undertake this work under the direction of the Gulf RPAC.

**Figure 14.2: Stage 2 Organisational Structure**



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