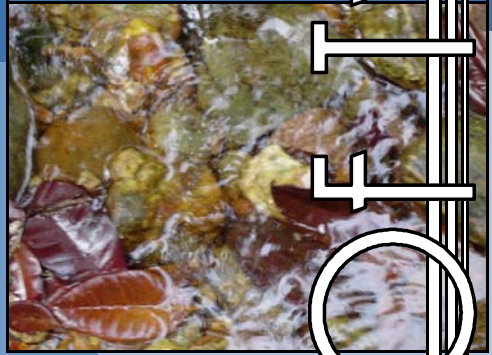




UPDATE  
2003



STATE OF THE SHIRE

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Johnstone Shire Council has compiled this report in good faith using supplied information from its own and other sources. It does not accept responsibility for any inaccurate or incomplete information supplied by third parties and included in the report. No representation is made as to the accuracy, completeness, or suitability for any particular purpose of the source material included. Readers should seek appropriate advice as to the suitability of the material for their needs.

## MESSAGE FROM THE MAYOR

Johnstone Shire Council is proud to display our continued commitment to state of the environment reporting, with this year's release of the State of the Shire Update.

2003 was a busy year, with a many changes affecting our lives in the Shire. Most were positive steps forward, but there have also been some challenges requiring the community's attention. On the whole, there has been steady progress towards making the Shire demonstrate the best it has to offer.

This booklet is based on triple bottom line reporting, so it describes the Environments of Society, Economy and Ecology.

Each of these is interdependent upon the others; for the State of the Shire to be vibrant there has to be a balance between all. It is Council's role to lead the community to achieve this balance. The Council's plans are based on this strategy of sustainability—to ensure that resources and opportunities are accessible to all today, but also indefinitely into the future.

People today are the guardians of the future, for the sake of our children and their children, and for the quality of life we will provide for them. This is the simple truth that forms the core of Council's philosophy for the public good.

Achieving the public good in the face of complex situations from day to day is the challenge that Council answers, as a leader and as a representative of the Shire's every person, including their successors.

The State of the Shire Report is Council's commitment to demonstrating this achievement. It has the purpose of helping us to plan, and to respond when problems become evident. The report maintains a record of the state of the environment, so we can see when there are changes. The report is also a demonstration of our public transparency, to each of our employers—the members of the community.

I hope that you will enjoy and find informative this year's State of the Shire Update.

Yours faithfully,

Cr. Neil Clarke.



Cr. Neil Clarke  
2004 Mayor

## CITIZEN OF THE YEAR—DORIS PALMER

Doris Palmer was awarded the citizen of the year for her tireless community work as a member of the Baptist Church in Innisfail. She is known locally as the 'Short-bread Queen' for baking 26,000 short-bread biscuits which were sold for the church charity. The biscuits were baked from home in a conventional oven, and required 185 pounds of butter (84 kilograms).

Aside from raising funds, Mrs Palmer also puts together presents for the shoebox ministry. These shoeboxes contain clothes and toys and are sent to orphans around the world. Her time is also spent knitting soft bandages for people with Hansen's disease.

Doris bakes meals, and helps with the housework when there are occasions of need for families or individuals in the community.

At the age of 82 Doris is an inspiring example of a person's capacity for community involvement. She is also a feisty and formidable spirit, as anyone who has had their fingers bruised in a handshake with her can tell you. She only reluctantly gave up her motorcycle licence at the age of 80.

Doris has lived in the Shire for five years now and has grown to love the tropical environment. She thinks people should take care of their home, by keeping the Shire free of litter and the drains clear of pollution like oils and grass clippings. She would like to see attractive trees planted to beautify the towns, and encourages people to utilise the parks and green spaces for barbecues and recreation. At Coquette Point Mrs Palmer would like to see a lookout built, so that tourists and locals alike can enjoy the view of the Johnstone River.



Photo courtesy of the Innisfail Advocate.

## INTRODUCTION TO THE 2003 UPDATE

Environmental reporting provides public access to information on issues affecting the Shire's Community, Natural systems, and Economy. It is recognised today that these three aspects are interconnected, affecting one another and together creating the whole of our Environment.

Therefore, a pressure on one aspect of the Environment will usually have further implications. Our responses to fixing a negative condition in the Environment must be balanced with the potential further implications.

The 2003 Update includes this Pressure, Condition, Response, & Implications model throughout. The goal is to understand how best to balance the human activities that occur in the Shire, in order to ensure that our natural, community and economic systems are all sustainable in the long-term.

The 2003 Update continues the development of environmental indicators - which are data and figures reflecting the severity of a problem, or simply monitoring the natural state of a system. This year's indicators are comparable to the indicators in the last Updates—so we can see if there have been any positive or negative changes.

Additionally, the booklet describes the progress achieved since the 2000 State of the Shire Benchmark; which set out goals for the community. 2003 was the last year for completing these goals. A new benchmark and goals will be presented next year.

Progress since the 2000 benchmark is set out as a report card for each chapter. The criteria are:

- Action on the 2000 Benchmark recommendations.
- Filling deficiencies in data
- The State of the Shire
- Goal achievement
- Community awareness

You will notice that the report card is rated from A to F; the ratings are described here.

A—(Excellent) A high level of progress or achievement.

B—(Good) Progress and achievement

C—(Normal) No real changes beyond what was already in place. Normal effort.

D—(Poor) Slackening of established practices. No effort.

F—(Fail) Worsening of the State of the Shire.

Project Coordinator: Brian Sundermeijer  
Natural Resource Management/Environmental Protection—Johnstone Shire Council

Project Manager: Matthew Hyde



# BIODIVERSITY

## Introduction

Johnstone Shire includes outstanding and significant areas of Biodiversity. The World Heritage Area comprises 47% of the land in the Shire, but it does not contain all of the biodiversity of significance. Efforts by the Council, State and Federal organisations, and community groups continue to make positive contributions towards the preservation and restoration of fauna and flora.

## News

### Policy and Legislation

#### *Strategy for the Conservation of Biodiversity in the Johnstone Shire*

Johnstone Shire Council completed the Strategy for the Conservation of Biodiversity in the Johnstone Shire. It was approved by Council in December.

The strategy will focus work by:

- Identifying priority areas for conservation of biodiversity in the Johnstone Shire; &
- Providing a prioritised list that will be recognised by funding bodies as a strategic approach towards conservation of biodiversity in the Johnstone Shire.

The result of this prioritisation has seen the biodiversity strategy focus future conservation effort into four primary areas -

- 1) **Granadilla/Mission Beach.** There is a significant amount of remnant vegetation in this zone with strong linkages between remnant areas.
- 2) **Basilisk Range/Cowley Defence Reserve,** which encompasses area between the Liverpool Creek north to the mouth of the Moresby River at Mourilyan Harbour and west to the Basilisk range, which forms the headwaters of the Moresby River.
- 3) **Ninds Creek Catchment.** This zone encompasses the Ninds creek catchment along the coastal range from Mourilyan harbour to Coquette point and includes the wetland system associated with Ninds creek.
- 4) **Nerada/East Palmerston.** The zone encompasses the area of several tributaries of

### Pressure

- The Council's biodiversity strategy has identified major pressures on flora and fauna in the Shire. These include the following:

- Continued land clearing
- Alterations to drainage systems and water tables
- Inappropriate fire regimes; &
- Feral animal and exotic plant invasion.

These factors threaten the integrity and ecological function of our natural ecosystems and the long-term survival of many of our native plant and animal species.

the North Johnstone River. The catchments of Rankin, Wadda, Berner and Fishers Creeks are contained within this zone.

Application of the Strategy will provide Council and the Johnstone Shire Community with:

- A strategic approach to conservation of biodiversity for implementation by government agencies and the community;
- A link into the regional natural resource management process in regards to conservation of biodiversity;
- Conservation of biodiversity within protected land, reserves and on freehold land; &
- Strategic rehabilitation of degraded areas.

#### *Draft Wet Tropics Conservation Strategy*

The Wet Tropics Management Authority released the draft Wet Tropics Conservation Strategy in October. The strategy has been developed to promote cooperative management to ensure the future ecological health of the Wet Tropics WHA. The strategy identifies the need to address the many direct and underlying pressures that threaten the Area's integrity. It emphasises the need for cooperative, coordinated management between all stakeholders in order to:

- Identify, conserve and rehabilitate all natural World Heritage values and associated cultural values within the Wet Tropics World Heritage Area,
- Identify, conserve and rehabilitate areas of high biodiversity outside the WHA which contribute to the values and integrity of the Area, &
- Mitigate processes that threaten the integrity and values of the WHA and surrounds.



### Wet Tropical Coast Regional Coastal Management Plan

The EPA released the Wet Tropical Coast Regional Coastal Management Plan in December. Local Government must have regard to the plan for developments assessable under the Integrated Planning Act (IPA) or the current Shire planning scheme. The aim of the plan is to ensure that decision makers appropriately consider coastal resources and values in planning, development assessment, and coastal management.

The plan identifies five key coastal areas in the Shire – Ella Bay, Innisfail, Moresby, Kurrimine, and Mission Beach. These areas are further subdivided into 14 localities. There are varying pressures on each of these different areas and localities; the Plan describes desired outcomes in response to these pressures.

### Flora

The Johnstone Shire is home to a variety of rare or threatened flora. Approximately 23% of plant species in the wet tropics are either endemic or listed as rare or threatened. One of the most recognisable species is the Native Sugar Palm (*Arenga australasica*).

The most threatened areas in the Shire are the basalt rainforest remnants, which contain a very high level of diversity. Before clearing occurred the basalt rainforest was the most complex development of rainforest in Australia.

The Wet Tropics NR&M board are presently conducting a catchment basis assessment of endangered plants.

A new issue of concern is Rainforest Dieback, attributable to a root fungus *Phytophthora*

### Implications

- Humans are a part of the natural environment, in form, and because it provides everything that is essential to our continued survival.

Rainforests are the earth's lungs, providing oxygen and absorbing greenhouse gases. The fauna are part of a web of interrelationships that keeps the forests alive. To survive, and for our future generations to survive, we must nurture the natural environment.

The natural environment offers more than these basics. Part of the quality of life in Johnstone Shire is encountering some of the unique fauna such as cassowaries. The rainforests and waterways offer us recreation and respite from the urban landscape.

This has economic implications—our pristine natural areas are our major drawcard for tourism. As an example, cassowaries can be seen as a resource from this point of view. Care must therefore be taken to preserve the habitat that sustains the cassowary, and development must be restrained to protect the resource. Community cooperation is required to ensure that individual attitudes support this greater goal. Only cooperatively can these types of benefits be reaped.

As a part of the greater web of life we must adopt in our personal lives a morality of respect for the natural environment that supports us all. It deserves to exist as intrinsically as any of us, and without it, none of us exist at all.

*cinnamomi*. Numerous patches of dieback were identified in regions of the WHA. Studies have been conducted into the dieback phenomenon. Although the cause is still unclear, distribution of the fungus was found to be significantly correlated with human roads and tracks.

It is hoped that the spread of the fungus can be minimised by improving drainage and restricting access along roads and tracks where there is potential for infected soils to be picked up.

Remnant vegetation may be under pressure from the development of a proposed power line. The route avoids the WHA, but tracks through coastal lowland habitat containing significant rare plants. The Ecological Impact Assessment prepared is currently under a review process.

Broad Forest Types in the Wet Tropics Region	Regional Extent ('000 ha)	WHA Extent ('000 ha)
<b>Rainforests</b>		
- Complex mesophyll	36	16
- Mesophyll	348	283
- Complex notophyll	71	52
- Notophyll	203	193
- Microphyll	20	17
- Semi-deciduous	5	1
- Deciduous microphyll	8	0.5
- With sclerophyll emergents	144	106
<b>Sclerophyll Forests and Woodlands</b>		
- Tall open forest	54	37
- Medium and low open forest and woodland	852	135
<b>Vegetation Complexes</b>		
- Shrublands	19	7
- Swamp communities and coastal complexes	113	22
- Mangroves	43	14

From WTMA: State of the Wet Tropics Report 2002-03; Based on work by Tracey and Webb in 1975, and by Olsen in 1993.

## Habitat Representation

### *Regional Ecosystems*

The classification status of the Shire's regional ecosystems was changed greatly in 2003. The Vegetation Management Act classifies ecosystems according to location, soil type and species composition. They are then rated according to how much of the ecosystem remains in Queensland. Endangered (<10% remains), Of Concern (10-30% remains) and Not of Concern (>30% remains).

In the Shire, one 'Endangered' ecosystem was reclassified to a level of 'Of Concern'. Five 'Not of Concern' ecosystems changed to a level of 'Of Concern'. This is due to the representation of these systems outside of the Shire, as well as within the Shire. It means that the Shire's remnant ecosystems are of even greater importance for conservation than previously.

The Shire also contains variations of the standard regional ecosystems which are being proposed as subsets. These are found in Eubenangee Swamp and Ella Bay National Park. All are wetland

## Pressure

- Vegetation in the Shire is well protected in the uplands of the WHA. However, the coastal plains contain a diversity of ecosystems that have been reduced and isolated by human settlement and agriculture.

These remnants are vulnerable to invasion by weed plants, as they often have large exposed edges and little core area to maintain their integrity. The isolation of these small communities can also mean that important ecological functions from fauna are not occurring, or that there are no sources for replacement when a species is lost.

Clearing, altered drainage in wetlands, inappropriate fire regimes, and pest species are continuing pressures on the Shire's vegetation systems.

ecosystems and are considered to contain many rare and endangered species.

Updated regional ecosystems mapping showed the following status of vegetation in the Shire:

No concern at present	Of concern	Endangered
15	18	15

Adapted from: Environmental Protection Agency (2003). Regional Ecosystem Description Database (REDD). Version 4.0. Updated Sept 2003.

### Areas of remaining vegetation in the Shire

Vegetation Mgt Act Status	Total Johnstone Shire	Area outside WHA and Protected Area Estate
Endangered	5866 Ha	2130 Ha
Of Concern	22463 Ha	6942 Ha
Not of Concern	70737 Ha	11669 Ha
<b>Total</b>	<b>99066 Ha</b>	<b>20741 Ha</b>

Compared to other regions in Queensland, the Wet Tropics Region has a very high number of endangered ecosystems. This is due to the fragmentation of ecosystems on the lowlands.

### *Conservation on private land*

The Council encourages conservation on private land through the covenant program.

Voluntary Conservation Covenants are an agreement between an organisation such as Council (or QPWS or WTMA) and a landholder

to preserve and maintain habitat on the landholder's property. Different rewards exist, with either a reduction in the rates, bonus development rights, or taxation reimbursements.

In 2003, 5 new rate deferral and 6 bonus development right covenants were established with Council, for an area of 116.42 ha. This brings the total properties with covenant to 63, with an area of 1520.36 ha.

Two covenants at Bingil Bay exist with the WTMA. The area of these is approximately 30 ha. The WTMA is presently encouraging landowners to utilise Council for covenants.

Land for Wildlife agreements are another incentive to promote the conservation of vegetation on private land.

1 additional Land for Wildlife property of 76 ha was added in 2003. This brings the total of properties to 8—an area altogether of 218.93 ha. Another 1 property was still 'working towards registration' at the end of the year.

Council reviewed and updated its habitat mapping. Regional ecosystem maps were combined with the cassowary habitat mapping. This now allows Council to provide covenants for threatened and vulnerable regional ecosystems on private land. Endangered regional ecosystems are already protected, as they cannot be cleared under the Vegetation Management Act.

## Revegetation

### Council

Council's revegetation unit conduct planting and weed control projects around the Shire. They also maintain the revegetation nursery. In 2003 the nursery supplied 38,000 trees for environmental projects. Council's staff are supported by a dedicated team of volunteers. In 2003, the number of volunteers increased to 85.

Their work included:

- Coventry Creek Vegetation Linkage – 2 ha
- Moresby River Riparian Rehab – 2.5 ha
- Community Vegetation Initiative – 4 ha

Internal Council Projects included:

- Spannagle Road litter screen
- Dunne Road



Landcare volunteers

- Bingil Bay Road
- Greens Gravel pit
- Stoters Hill Green waste batter

Contract works included:

- Stoters Hill Sub-Station Landscaping
- Mourilyan Mill toe stabilisation
- Sugdens Creek Revegetation

Weed control included *Hymenachne* control on public land, centred on major River and Creek systems. Pond apple control work was carried out in the North Maria Creek catchment.

### Innisfail TAFE

The Innisfail TAFE continued enrichment planting along the Johnstone River adjacent to the TAFE. Part of this has been demonstration planting to promote bushtucker trees and farm forestry. It is hoped that landholders will diversify into these industries and be encouraged to replant riparian areas.

Training courses are also being held and have received a good response from farmers. This has also promoted cultural exchange with the indigenous students.

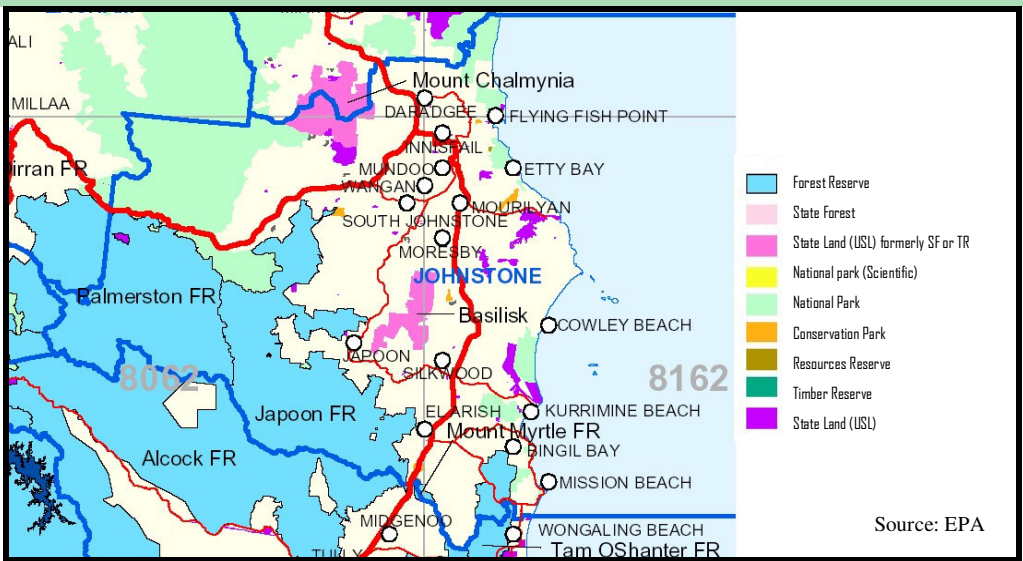
The TAFE also cooperated with the Council to remove sisal hemp and replant an old Coastcare site at North Mission beach.

### JRCMA

The JRCMA facilitated the following revegetation projects:

- Liverpool Creek (~2 ha). This was conducted in conjunction with the Cairns Community Development and Employment Program.
- A property near the southern end of the Shire (~3 ha). This project reconverted grazing land to rainforest.





Source: EPA

- Riverine restoration along the North Johnstone River on private land (~0.75 ha).
- Lockyer Creek (~2 ha stretching along the river). Conducted with Fitzgerald Rotary.

#### *Centre for Tropical Restoration*

- The Centre for Tropical Restoration (CTR) continued work on a five year project sponsored by Powerlink. planted ~2 ha were in the El Arish region. Landholders have been involved through promotion of this vegetation as a part of Integrated Pest Management (IPM) to control cane rats. The trees provide habitat for birds of prey. The project has the goal of establishing linkages for fauna movement between the coastal lowlands and the WHA uplands. Cassowaries are a key target species.
- A 200 ha property was purchased adjacent to Eubenangee Swamp. This important wetland area will benefit greatly from the restoration to be carried out on the property.
- 2000 trees (~1 ha) were planted at the Wadda banana plantation. The plantation's owners have demonstrated excellent proactive environmental support.
- Assistance with the development of the Misty Mountain walking trails in the Palmerston region. 6-700 trees were planted.

#### **Wet Tropics Forest Transfer Program**

A number of State Forests have been handed over to the QPWS for management. Most of these areas are in the WHA. They represent the finalisation of the process of commitment to the conservation of the WHA. This process is still ongoing, as the forest areas are being classified according to conservation values. In the Shire they will become national parkland, but some small areas for mining extraction (quarries) may still exist.

The transfer of Unallocated State Land is the other part of this process. Two large areas in the Shire that will undergo assessment are the Basilisk range, and the area south of Mount Chalmynia.

#### **Fire**

QPWS conduct prescribed burns in areas where the vegetation is dependent on fire. In 2003 there was public concern that prescribed burning was occurring at the wrong time of the year, particularly in one instance where burning occurred during the nesting period of a flock of migratory birds.

QPWS plan to promote education throughout 2004 on fire regimes and the necessity of fire for sustaining particular ecosystem types.

## Fauna

More detailed information remains to be gathered on the fauna in the Shire.

The EPA threatened species unit conducted work on two types of fauna in the Shire besides cassowaries. These included Spectacled Flying Foxes and Endangered Stream Frogs.

- Stream frogs were studied at Mission Beach, Lacey Creek and in Wooroonooran WHA. The ongoing investigation looked at frog numbers, and the effects of the chytrid fungus. The fungus is partly responsible for a national decline in frog numbers.

- The Spectacled Flying Fox *Pteropus conspicillatus* is classified as *vulnerable* under Federal legislation. Colonies are regularly sighted in the Shire, but populations of this flying fox have been declining over a number of years. The EPA conducts annual surveys. The last three years have seen a reduced but apparently stable population. Protection of the animal in 2002 may have halted culling by farmers as a fruit crop pest, though there are still reports of tree clearing where the animals set up a roosting colony. This is also illegal under the EPBC Act.

The 'State of Australia's Birds 2003' by Birds Australia was published in December. This work compares changes over the last 20 years. The Johnstone Shire area is one of high species richness and has not demonstrated any change over the time frame. Bird species richness fell mainly in areas of Australia where clearing was significant. The bulk of clearing in Johnstone Shire occurred more than twenty years ago.

Council prepared interpretive material—Living with Wildlife. This was for release with the 2004 rates notices.

## Pressure

- Clearing of habitat is the main threat to the survival of fauna species. The clearing of even small areas can be a problem, when these areas link other patches of vegetation—thus forming a corridor for fauna to move between areas. This can be important for animals to forage or to breed. The size of a habitat area is also important—if it is large it will support a greater diversity with food plants, and room for faunal territories.

Fauna in smaller habitat areas are also vulnerable to domestic animals—dogs and cats allowed by careless owners to roam uncontrolled. Similarly, feral animals are a pressure, often targeting young animals or eggs. Roads dividing habitat areas can form a deadly barrier to fauna movement.

Appropriate fire regimes are important in some habitat types, as some animals will depend on the bounty of regrowth after a fire.

There is also some effect from diseases on wildlife such as frogs. Research is continuing into the causes.



Red legged Pademelons at Wildcare

## Mission Beach Wildcare

Mission Beach Wildcare was established in 2002 to tend and foster injured native animals for release back into the wild. They presently have 25 members involved.

WILDNET – Fauna recorded so far, as part of the Wildnet Program

(At least these numbers of species exist within our Shire—there are definitely more)

Fauna in the Shire	Qld NCA Class	Amphibians	Reptiles	Birds	Mammals
Significant Species—due to either State, National or International Conventions	Endangered	5		4	
	Vulnerable		2	7	
	Rare	3	3	11	1
	Common			48	
	Introduced	1	1	8	5
<b>Total No. of Species Registered to Date in the Shire (minimum possibly present)</b>		<b>25</b>	<b>30</b>	<b>339</b>	<b>34</b>

Source: Environmental Protection Agency (2003) Wildnet. (Database) - EPA, Brisbane. 11/2/04.

In 2003 Wildcare took 166 animals into care. 77 of these animals survived their injuries, 6 were still in care at the end of 2003. 82 of the animals succumbed to injury or stress.

The major cause of injuries to mammals was from vehicle strikes, often orphaning infants in the pouch. Dogs were the other major cause, also separating infants from their parent. Stress from the dog attack killed some of the animals brought in.

Birds brought in were most often chicks fallen from the nest, especially during rough weather. Cats, cars, and flying into windows also contributed.

Wildcare advises people to check the pouch if a marsupial is injured or killed. It is a good idea to drive carefully on moonlit nights, as nocturnal animals will be more active. Dogs should be restrained in areas with wildlife, and fenced in to prevent wandering.

Wildcare raise funds with the ‘Sponsor a Wallaby Program’. The program involves people with progress reports and pictures of the animal that they are sponsoring. The funds raised are used to buy food in bulk to assist the carers with their animals.

### Dogs and Wildlife

Loose dogs are a significant pressure on wildlife. The number of roaming dogs forms an indicator

<b>Dog complaints involving Native Fauna in 2003</b> (Based on Council data)	
Cassowaries	0
Other wildlife	5
Town break up of dog complaints—All types —Roaming dogs are the most common complaint.	
Innisfail	380
Flying Fish Point	25
Moresby	5
Mourilyan	28
Kurrimine	26
Bingil Bay	15
Mission Beach	19
Silkwood	13
South Johnstone	18
Mundoo	2
Wangan	20
Garradunga	5
El Arish	12
Cowley	3
Boogan	1
Coquette Point	1
Rural (outside residential areas)	32

of this pressure. Complaints against dogs are made regularly to Council; these include reports of roaming dogs.

Dogs taken into parks or nature reserves for the purpose of pig hunting are also a problem, as they can indiscriminately harm native animals.

### Cassowaries

The 2002 Update featured a photo of Lucky – one of two cassowary chicks that were fostered at the QPWS Cassowary Rehabilitation and Relocation Program. Both chicks were reared successfully and released near Ella Bay in September and November last year.

The latest addition to the care program is Stretch, who was brought in and who will be in care for a further 9 months.

The Cassowary Rehabilitation and Relocation Program has attracted attention from some major media producers. One of chick releases was filmed by Aussie Animal Rescue and will be screened in 2004. Australian Geographic filmed at the Rehabilitation site and will be running a feature article on cassowaries also. Late in 2002 the David Attenborough film crew also spent time filming at the Rehabilitation site.

Media attention of this kind is very beneficial to educating people about the pressures on cassowaries, and for increasing community concern.

The Community for Coastal and Cassowary Conservation maintain records of the number of cassowaries reported sighted by tourists and locals in the Mission Beach region.

Although there is a decrease in total sightings since 2002, this would appear to be mainly due to



Stretch

a great reduction in the number of chicks sighted. Despite the high number of chicks reported in 2002, there has been no increase in the number of sub adults sighted in 2003.

Reported Cassowary Sightings—Mission Beach	2001	2002	2003
Adult Males (positively identified)	<i>n.a.</i>	193	118
Adults (unidentified sex)	246	188	214
Sub adults	112	137	124
Chicks	97	264	89
<b>Total</b>	455	782	545

(Source: C4). Note that *Sightings* will depend on the response from tourists and locals and will vary according to visitor numbers or community interest.

C4 also record cassowary deaths in the Mission Beach area. Of the known deaths the following causes were attributable.

5 chicks were recorded – 1 killed by a dog attack, 3 of natural causes, and 1 unknown causes.

2 subadults – Both killed in vehicle strikes.

1 adult female – Unknown causes.

Cassowary conservation was promoted by educating people not to feed cassowaries. Feeding has been determined as a cause of aggressive and demanding behaviour from cassowaries – so called ‘problem’ birds, which have to be relocated. Worse still is that feeding attracts cassowaries to roadside areas where they are very likely to be run over – the major cause of unnatural fatality for cassowaries. QPWS involved a range of local businesses to display warning signs about feeding cassowaries. Fines of up to \$3000 now apply for this bad practice, and will be enforced.

8 problem cassowaries had to be relocated in 2003. Hopefully education about feeding will reduce this number in the future.

### Pressure

– Human cohabitation with cassowaries has brought a lot of pressures on these large flightless birds. Cassowaries are periodically killed by people speeding in vehicles, are also vulnerable to attacks by dogs. Habitat clearing has reduced populations of the birds, as cassowaries occupy territories. This makes it impossible for the cassowary population to expand greatly, even when there are some good years and a number of chicks survive. Further reductions in habitat are a significant hazard to the viability of the cassowary population.

QPWS visited schools and tourist groups to further promote living together with cassowaries. Schools regularly visit the ranger base in Bingil Bay, and take part in activities such as putting together a cassowary information kit, or revegetation plant outs.

Schools were increasingly involved in 2003. Goondi, South Johnstone and Woree state schools respectively sold books, calendars, and raised money - to contribute to the C4 gift fund, which is in place for the purchase and preservation of critical cassowary habitat.

What is believed to be the first ever free-range rehabilitation took place with three chicks at Mourilyan. These ten-week old chicks lost their father, but were supplied appropriate food by a QPWS volunteer for a number of months. They were then weaned until they became successfully able to forage for themselves.

QPWS created a cassowary response trailer. This contains all the equipment necessary to deal with injured or problem birds.

The upgrade of Mission Beach road included a cassowary management plan. A number of



Cassowary preening



methods to calm traffic have been introduced. Culverts under roads were being investigated. It remains to be demonstrated whether cassowaries will use such tunnels, but they will be of great benefit to other wildlife – particularly nocturnal marsupials.

A program to monitor the Cassowary population by sampling DNA from droppings was under development by QPWS. Some problems have so far been encountered - a number of rainforest fruits contain chemicals that degrade the DNA. Further work is progressing to overcome this setback and the method may be trialed in 2004.

### Crocodiles

CrocWise education by QPWS to encourage safe and responsible behaviour around crocodile areas was ongoing. Human attitudes have changed positively, particularly in response to being able to report crocodile concerns to QPWS or Council.

Generally, crocodiles along the inhabited east coast are remaining at low-level but stable populations. The population is restricted by two factors -

- The availability of nesting habitat
- Crocodile management tends to target the large animals, which are the breeders.

Despite this, the population is breeding and there has been some small expansion of crocodiles into areas in which they have not been seen for a long time. Although the species is listed as vulnerable, there is no significant likelihood of extinction.

The results of recent research conducted by the QPWS indicates that crocodiles have extensive ranges along a river, and along the coast; including excursions to other river systems. This dispels the myth that crocodiles are limited to defined territories—as the crocodiles studied moved through one another's foraging ranges daily.

It is therefore not possible to keep an area of river clear of crocodiles. Fortunately, management of crocodiles in the Shire's public river areas is not based on this idea. Crocodiles are removed only when they adopt behaviours such as frequenting boat ramps or jetties. There is no reason for a crocodile to adopt such



Crocodile trapped for removal

behaviour unless people are irresponsible and feed crocodiles, swim, or leave bait or fish scraps at such locations.

The research also indicated that crocodiles could return home despite significant translocation distances. Translocation is no longer an option for crocodile management.

#### No. of Crocodiles removed, within the Shire 2003

17/7	Upper Johnstone River	Male	2.72 m
23/9	Johnstone River	Male	3.73 m
12/10	Moresby River	Male	3.56 m
23/10	Johnstone River	Male	3.16 m

### Pest Species

Feral pigs are a significant pressure on wildlife and the ecosystems they inhabit.

The NR&M Wet Tropics Feral Pig Trapping Program ceased after nine years of operation. Council is now responsible for ensuring that landholders control feral pigs on their land. This can be enforced under the Lands Protection Act. QPWS control pigs in the national parks, but presently only on an opportunistic basis.

Another threat is the presence of wild deer in the Palmerston, Mena Creek and Bingal Bay areas of the Shire. They have the potential to cause significant damage in open woodland areas. Control is presently limited to shooting which is proving successful.

**Conclusion**

2003 saw the finalisation of a number of strategic plans towards the continued protection and restoration of natural values in our area, and over the Wet Tropics region.

The condition of the environment remained relatively stable through the year. No significant changes to the status of any flora or fauna were reported. Some conservation statuses have been redefined, but this is due either to re-evaluation or because of changes outside the Shire.

Better information on the status of vegetation has become available. More information on fauna in the Shire is required.

**Future Direction**

The new strategic plans will shape and integrate work towards conservation in future years.

The plans will restrain the direction of development in the future, so there may yet be a period of adjustment before a synthesis is fully achieved and respected.

It remains to be seen how successfully the strategies that have been formulated are put into practice.

**Report Card for Biodiversity****OVERALL GRADE****B+**

<b>Criteria</b>	<b>Grade</b>	<b>Recommendation Group</b>	<b>Explanation</b>
Action on recommendations <b>15 of 19</b> recommendations actioned to date	<b>B</b>	Biodiversity Strategy Interpretation ranger for the Shire Cassowaries and crocodiles	Completed. Position not created by the EPA but mitigated by regional work conducted. Many plans and approaches are underway.
Filling deficiencies in data	<b>B</b>	Regional mapping of conservation values  Fauna monitoring Vegetation monitoring	Council improved conservation mapping, EPA released regional ecosystem mapping, Stanton mapping underway. No detailed information on species. No detailed information on private clearing or on endangered species.
State of the Shire	<b>C+</b>	Fauna  Flora  Pests	No major changes reported. A decline in frog species may still be occurring. No major changes reported. Rainforest dieback may be a new threat. Covenant program continues successfully. Remain at stable, problematic levels.
Goal Achievement	<b>A+</b>	All	Progress by organisations through planning. Continued dedication from small groups in the community.
Community Awareness	<b>B+</b>	Public education   Events	Cassowaries and crocodiles have been promoted, including additional public signage Council developed interpretive material – Living with Wildlife Council developed brochures—Conservation Incentives. Few community events.

# LAND MANAGEMENT

## Introduction

The economy of the Shire relies heavily upon agricultural production, which covers most of the coastal plains area. Because of this, the state of the environment depends heavily upon land management.

Efforts continued in 2003 to minimise adverse impacts, through the promotion of responsible and improved land-use practice.

## News

### JRCMA—Sustainable Agriculture

The JRCMA conducted work with canegrowers. The aim is to develop soil specific guidelines for fertiliser application. The work will improve on region-wide guidelines, which lack practical specificity.

### FNQLGPPAC

Work continued on the FNQLG Pest Plant Advisory Committee's Regional Pest Management Plan. The plan has developed strategies to help landholders ensure that they control pest plants on their land. The strategy will be released in 2004.

### Council

Council promoted best practice through the development of stormwater management information leaflets for agriculture. These list the techniques currently available to help prevent erosion, pest invasion, or nutrient and sediment loss.

## Pest management

The Council's commitment to weed control continued in 2003. Close to 50% of the original levels of weeds at the inception of the program have so far been controlled.

Levels of Hymenachne, Pond Apple, Lantana and Sickle Pod are still thought to be increasing in the Shire. The other 37 declared pest plants in the Shire remained at static levels or were decreasing.

Weed control was aided in 2003 and previous years by the exceptionally dry climatic

## Pressure

- Land management aims to achieve the best productivity from the land with a balance of minimum environmental harm. Poor land practice wastes money because excesses of fertiliser or work are required, and the environment is impacted in the following ways.

- Fertilisers and nutrients are lost from the land and cause problems in waterways and the ocean.
- Sediment is lost from the land and causes turbidity in waterways. Nutrients will also be bound to this sediment.
- Pest plants entail control costs, and reduce the land's productivity. Uncontrolled pest plants can also impact upon neighbouring land, and natural ecosystems.
- Pest animals harboured on land may affect crops or cause problems to stock or native wildlife.
- Inappropriate clearing can lead to increased risks of erosion, weed invasion where the land is not managed, and places pressure on the remaining biodiversity in the Shire.

Currently, the Shire's agriculture has some major effects on aspects of the environment. Landholders have been working towards reducing this pressure for some time. Research has continued into effective methods of better practice so that environmental concerns are balanced against farmer's livelihoods.



conditions prevalent.

The Council promoted weed management during Weedbuster Week with an educational display. Landcare organised a weed identification and revegetation workshop, along the South Johnstone River in Innisfail.

## Land Clearing (Source : NRM&E SLATS website [www.nrme.qld.gov.au/slats/index.html](http://www.nrme.qld.gov.au/slats/index.html))

Vegetation clearing has slowed over the last ten years according to the NRM&E's satellite imaging.

Year	New woody regrowth	Rate of woody vegetation change (ha per year)							%Wooded Vegetation Cover* (WHA=47%)	% Total Clearing in Queensland
		CLEARING								
		Pasture	Crops	Forest	Mining	Infra-structure	Settlement	Total Cleared		
99-01	0	15	8	0	0	2	0	25	62.41 (15.41)	0.0043
97-99	2	7	21	1	0	0	0	30	62.43 (15.43)	0.007
95-97	5	7	86	0	0	0	3	96	62.49 (15.49)	0.028
91-95	0	0	120	0	0	2	1	123	62.56 (15.56)	0.042

Hymenachne was the primary target for control by Council during 2003, which reduced the weed's levels down to a manageable level for the landholder.

The Hymenachne and Siam control programs run by Council and by NRM&E Land Protection wrapped up in 2003. Controlling these pest plants is now the landholder's responsibility. Council will be responsible for ensuring compliance.

### Success of the Hymenachne Control Program

No. of Properties	Council assisted	Weed area	Self control	Weed area
Start 2001	30 prop.	375 ha	10 prop.	50 ha
End 2003	26 prop.	105 ha	9 prop.	4.5 ha

Pest animal populations, including pigs and dingoes remained at static levels during 2003. The recent emergence of feral deer in the Shire has not become as bad a problem as expected. The deer have been culled to low levels, as they are sought after by locals for meat.

## Cattle

The cattle industry grew steadily during the latter half of 2003, due mainly to changes over from cane. The DPI was receiving approximately a new registration every fortnight.

It is estimated that there are now 258 registered cattle growers (with 11 head or more of cattle).

Johnstone Shire has traditionally been a fattening area for cattle. Outside growers pasture cattle for a time to fatten the beasts before sales. This is changing, as the Shire has seen an increase in permanent growing areas for live export.

## Implications

- Poor land management affects the livelihoods of those participating in other industries. Fisheries and reef tourism are the most immediately affected when nutrients, chemicals or sediment in runoff impact adversely on aquatic ecosystems. Tourism on the land will also be affected when natural values are disregarded.

Land degradation through erosion or through forms of soil contamination impacts upon future generations. Over-exploitation for short-term returns may destroy or impair the land as a resource for future generations.

Pest management is required or the pest species will spread and affect the whole community, reducing productivity for all.

Land management for the cattle industry may be affected by the water quality protection plan in 2004. Growers are concerned that the plan may affect them adversely by contributing costs to their operations. Grazing land is not known to contribute high levels of nutrients to waterways.

## Sugar Cane

Green trash blanketing, Crop rotation and strategic tillage were promoted for the cane industry at an Australian Cane Farmer's Association conference, and by the Sugar Research and Development Corporation. These systems both reduce labour and increase productivity. Additionally, the methods reduce nutrient and sediment losses from cane land.

28,250 hectares were harvested, this is lower than for 2002 (35,500 ha).



Area	Mourilyan	South Johnstone	Babinda
<b>Tonnes of Cane</b>	<b>747,388</b>	<b>798,486</b>	<b>996,345</b>
<b>Area (ha)</b>	<b>8,899</b>	<b>9,310</b>	<b>10,041</b>
<b>CCS</b>	<b>12.72</b>	<b>12.79</b>	<b>12.05</b>
<b>Green Trash Blanketing</b>	<b>96%</b>	<b>93%</b>	<b>98%</b>
<b>Area Fallowed</b>	<b>6%</b>	<b>6.3%</b>	<b>8.7%</b>

Source: BSES. All areas improved the level of green trash blanketing. The introduction of crop fallowing is still at an early stage.

Cane land management continued to improve in the Shire during 2003. There was greater understanding and implementation of strategic (or zonal) tillage. These terms better describe what is also known as minimum tillage. Strategic tillage has proved positive for farmers, as it reduces costs, time, and labour. The practice reduces the risk of erosion and therefore the risk of sediment loss into waterways.

Crop rotation (fallowing) has been less popular, as farmers are presently not confident that higher yields will result after an initial shortfall. The current economic circumstances of the cane industry are considered a barrier to the introduction of crop rotation.

Almost all farmers have adopted green trash blanketing as standard practice, on all or most of their farm areas.

2003 saw a reduction in fertiliser usage on cane, which reduced this pressure on the environment. However, this occurred mainly because farmers were unwilling to invest heavily in fertiliser for crops at current cane prices.

Cane productivity was not affected by the reduction in fertiliser application. This is the effect of a long history of super-application of fertilisers, so soils maintained

high nutrient levels.

In effect, low cane profitability has had benefits to farm management, through refinement of fertiliser use.

Farmers should perform soil testing regularly with professional advice from agencies such as BSES; it is guaranteed to save money on fertilisers, and to prevent over-fertilisation affecting the environment.

Similarly, financial constraints caused farmers to reduce the application of chemicals for control of pests such as the cane grub. These chemicals are highly expensive. Unfortunately, there is a risk now that by saving costs, farmers are exposing themselves to an outbreak of cane grub. If this were to occur it would further add to the tribulations of the industry, the costs of which would far outweigh those saved by controlling the grub.

An alternate chemical to control cane pests, Comfidor, will undergo trials. There is some concern that the new chemical is more mobile in the soil than the usual Chlorpyrifos, which binds well to soil particles. Trials will be conducted to address this issue, which is of particular concern here in the Wet Tropics.

BSES increased the number of workshops and seminars held with farmers to promote effective best practice. Participation by farmers has been encouraging.

COMPASS workshops have also continued.



## Pesticides and Herbicides

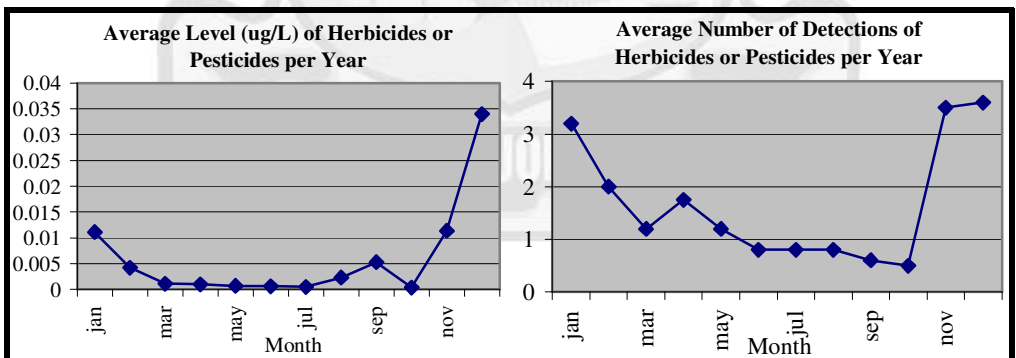
Water Monitoring by Council's Health Department includes a test for pesticides and herbicides in five waterways. Although these levels have not yet exceeded health or environmental guidelines, they form an indicator of the management of farm chemicals, and the management of chemical runoff from farms. Frequency Seen in the table describes how often the chemical was detected during the year.

**Pesticide and Herbicide Detections**

Site	mg/L	1999		2000		2001		2002		2003	
		Freq. Seen	Average Level*	Freq. Seen	Average Level*	Freq. Seen	Average Level*	Freq. Seen	Average Level*	Freq. Seen	Average Level*
Johnstone River	Atrazine	17%	0.045	0%	0	0%	0	8%	0.020	0%	0
	Diuron	8%	0.030	0%	0	0%	0	8%	0.020	10%	0.010
	OC/OP	0%	0	9%	0.010	0%	0	0%	0	0%	0
Nyleta Creek	Atrazine	8%	0.460	9%	0.020	9%	0.030	0%	0	0%	0
	Diuron	8%	0.310	9%	0.030	0%	0	0%	0	0%	0
Jurs Creek	Atrazine	0%	0	0%	0	0%	0	8%	0.030	0%	0
Liverpool Creek	Atrazine	33%	0.193	18%	0.025	36%	0.038	17%	0.030	0%	0
	Diuron	42%	0.068	9%	0.040	36%	0.040	50%	0.053	40%	0.015
	OC/OP	0%	0	9%	0.010	0%	0	0%	0	0%	0
Mena Creek	Atrazine	50%	0.120	9%	0.080	9%	0.020	17%	0.025	18%	0.030
	Diuron	75%	0.224	4%	0.044	73%	0.076	50%	0.037	45%	0.024

\* Average of the level of pesticides when detected. Detected levels were often higher. However, no exceedences of any Health or Environmental Guidelines were ever recorded. Water volumes in the Shire are quite high.

Note: All sites were tested for all pesticides and herbicides - only rows including detections have been presented.



From the table - incidences of Chemicals in certain regions, such as Mena Creek and Liverpool Creek, are more common. It can be seen from the graphs how the incidences and levels of chemicals increase during the wet season.

Overall, there appears to have been a reduction in the levels of chemicals over the last few years. This could indicate some improved farm management. Alternately, it may be due to the recent dry weather, which would have reduced stormwater runoff.

## Bananas

A few more banana farmers incorporated Environmental Management Systems (EMS) on their farm operations to minimise pollution from runoff or farm chemicals, and to minimise water requirements. Awareness of EMS is increasing in the farming community, but there is still a need for greater adoption.

No major problems with diseases affected the banana industry – due mainly to dry weather. The only significant disease that affected bananas in 2003 was yellow sigatoka. Regulations to control the spread of yellow sigatoka have been tightened. This will add further costs to banana farming at a difficult time. No further outbreaks of black sigatoka were reported; it appears that this disease has been successfully controlled.

It is estimated that there are 250-280 growers in the Shire, with bananas on approximately 5000 hectares. These numbers did not change greatly during 2003, but may be affected during 2004 if the industry continues to experience low profitability. 2003 was characterised by overproduction, low profitability and low returns for growers.

Pressures on the environment from the industry are mainly from access to water resources, and nutrients entering waterways. Low rainfall during the year caused growers to exert more than usual pressure on the Shire's streams and waterways. Yields were slightly reduced due to the lack of water.

It is hoped that the adoption of environmental management systems will help to alleviate pressure on the environment from fertiliser use. However, the adoption of an EMS does not yet guarantee environmental best practice. The ISO 14000 standards are based on continuous improvement, so growers can meet legal requirements by making only minimal changes over time. Whilst this should result in improved practice in the long term, growers are presently under heavy financial pressure to optimise yields. Because fertiliser use is only a small proportion of the cost of production for horticulture, farmers often over fertilise in order guarantee high yields.

This is a form of risk management on income when prices for the crop are likely to fluctuate.

The environment is currently at the bottom of the list of banana grower's concerns. Primary concerns are imports from the Philippines, low profitability, labour, and industry structure and representation. Until these problems are settled, environmental best practice will be low priority.

## Tropical Fruits

The Tropical Fruit Industry suffered a poor harvest in 2003. This was due to climatic conditions. Although there was a good flowering, dry weather reduced the crop yield. Furthermore, with the onset of rains in the wet season, fruit drop affected ~60% of crops.

Tropical fruits remains a relatively small industry, but is expected to grow in the future. Issues with land management from this sort of farming are not clear at present, but the industry is environmentally friendly at the present scale.

Land areas for the Region are estimated as follows:  
Rambutan—170 hectares (~30 ha in the Shire)  
Mangosteen—100 hectares  
Durian—100 hectares  
Other Tropicals\*—100 hectares  
(\*Includes Pomelo, Dragon Fruit, Carambola, Star Apple, Abiu).  
(Source: DPI)

Tropical fruits are ideal high value crops for the Shire, as the area is guaranteed good rainfall each year. During wet years, this form of horticulture is less likely to have adverse environmental effects such as erosion from runoff.

Diversification into tropical fruit is an option for cane farmers, especially since areas that cannot be mechanically harvested for cane can be used for fruit trees. Cane growers are likely to already have much of the farming equipment required. While cane can be grown around Queensland, tropical fruits are restricted to the Far North.

## Conclusion

Land management has continued to improve, with more involvement from landholders. Control of pest species has progressed, with targeted weeds down to half their original levels. Riparian revegetation continued, but much remains to be done, and the state of the Shire's waterways has not yet seen significant improvement.

## Future Direction

Land management will continue to improve. There may also be some lessening of environmental pressure if the traditional agricultural industries are downsized. Control of Pest Species will have to continue. It remains to be seen how landholders respond to the changeover in responsibility. Council will take on the new role of enforcement.



## OVERALL GRADE

**B**

Criteria	Grade	Recommendation Group	Explanation
Action on recommendations <b>20 of 20</b> Completed	<b>A</b>	-Best practice and sustainable land practices -Waterways and riparian areas -Pest species	-Promoted and supported by all organisations.  -Revegetation ongoing.  -Weed control.
Filling deficiencies in data	<b>C</b>	-Waterways and riparian areas -Land practices	-Stormwater monitoring ongoing.  -Some information available through Mills. Further information required.
State of the Shire	<b>B+</b>	-Land Practices  -Waterways -Pest Species	-Growers have continued to implement changes slowly over time, despite difficult economic conditions. Some have displayed exemplary commitment. -Waterways still under pressure. -Weed control continues to achieve success.
Goal Achievement	<b>B-</b>	-All	-All organisations continued to make steady progress.
Community Awareness	<b>B</b>	-All	-Promotion of best practice by Council and other organisations. Landholder participation has been improving slowly.



# WATER AND ATMOSPHERE

## Introduction

2003 was the International Year of Freshwater. Water issues in the Shire affect recreation and livelihoods, through the degradation of aquatic ecosystems and the abundance of marine species. Air quality similarly impacts on the community, through health, and quality of life effects. More serious is the impact that atmospheric pollution has towards global climate change.



## News

### *Productivity Commission Report*

The Productivity Commission completed work on the report on 'Industries, Land Use and Water Quality in the Great Barrier Reef Catchment'.

It concluded that there has been a decline in water quality since European settlement, not only in rivers, but to waters surrounding reefs and sea grass beds in the GBR lagoon. This is from nutrient and sediment discharges. Diffuse sources, particularly crop production and cattle grazing are the most significant contributors of pollutants. Opportunities exist to manage water quality impacts. Present levels of agricultural management vary; from very good to worst.

Locally, the inner reefs off the Johnstone Shire are amongst those considered to be at the highest risk from terrestrial runoff.

According to the report, the North and South Johnstone rivers have the highest river pollution index of all the rivers in the GBR catchment. This is due to high levels of fertiliser used in the Shire and the amount of discharge from the river.

### *RWQPP*

The Reef Water Quality Protection Plan was completed in a cooperative effort between Federal and Queensland State Governments.

The balance of evidence is that sediment and nutrients from land-based sources are impacting the inner reefs and seagrass areas of the Reef. The vast majority of the 2900 reefs that make up the Great Barrier Reef are in good condition but some of the 450 inshore reefs are showing impacts consistent with a decline in water quality.

The RWQPP aims to assist in halting and

## Pressure

- Waterways, the oceans and the atmosphere have traditionally been dumping grounds for human by-products and wastes. This has been the result of the idea that the 'solution to pollution is dilution'.

Unfortunately, as our awareness of the connectivity of systems has grown, it has become obvious that the pollution has continued to cause problems which are returning to affect us and other life on Earth.

The pollution from our Shire falls into two major categories:

- Artificial substances—such as chemicals and compounds from industry. These can be toxic to organisms, can affect natural processes such as the ozone layer, or can detract from the quality of life in the Shire.
- Naturally occurring substances—chemicals and compounds found in nature, but which are at elevated levels or are occurring in unnatural locations. This will change the state of the natural systems they are foreign to. An example can be soil from erosion causing reduced light levels in a normally clear creek.

The onus on human beings is therefore to minimise and control the by-products of human activities before they impact on natural systems.

reversing the decline in the quality of water entering the Reef. The focus of actions in the RWQPP is on relatively low cost measures to encourage good planning and to assist landholders in adopting best management practices that are both profitable and

environmentally sustainable. The RWQPP acknowledges the past work undertaken by landholders, cooperatively with Government and Industry and builds on the strategies and plans already in progress.

The RWQPP will effect funding over ten years to government bodies and industries to achieve the goals set out.

#### *NHT*

The Natural Heritage Trust contributed \$190,000 to promote eco-efficiency to Queensland cane growers through the COMPASS program. The aim is to improve water quality and protect the reef.

#### *South Johnstone River Management Plan*

Work progressed on the South Johnstone River Management Plan. This will be released by the JRCMA in March 2004. The plan comprises a whole of river approach and is based on green engineering techniques. This will ensure that the costs will be reduced, and that riparian groups and landholder groups will be able to afford to conduct the work required. Restoration will be to enhance stream function for biodiversity, rather than to maximise drainage.

#### **Promotion**

##### *Council*

Promotion was conducted by Council on water issues, by hosting an art exhibition and interpretive display during National Water Week in October. A number of street drains around the town centre were also stencilled with a barramundi and an environmental message—to promote awareness of pollution through litter and wastes entering stormwater. This concept has been extended to a regional effort through the FNQ Regional Organisation of Councils, who initiated discussion to permanently imprint concrete street drains in a similar manner.

Brochures promoting stormwater management were developed and will be released in 2004.

##### *JRCMA*

The JRCMA acquired funding for a video production. The video will demonstrate the benefits of riparian revegetation, showing site successes and the process of establishing riparian vegetation.

#### **Implications**

- The states of the water we use and the atmosphere affect our health and the health of the flora and fauna of the Shire.

They also affect industries such as fisheries and tourism, which depend on healthy ecosystems as a resource.

Pollution has effects up to the global level, cooperative management is a responsibility that affects our Shire as part of the whole world.

#### *Johnstone Ecological Society*

The Johnstone Ecological Society, in conjunction with the Roman Catholic Church, organised interpretive information to educate the community on wetland issues. Wetlands in the Shire are in a poor condition due to drainage changes and the invasion of weeds.

#### **Freshwater**

##### **Stormwater Monitoring**

2003 saw the Johnstone and Eacham Shire Councils initiate Stormwater Monitoring. The monitoring program analyses water from the North and South Johnstone Rivers, the Beatrice River, and Peterson Creek. These monitoring points are part of the Johnstone River Catchment. The data gathered from the rivers is compared to ANZECC 2000 water quality guidelines and exceedences of these standards noted. It is apparent that levels of nutrients are commonly above the guidelines. Pesticides were not a problem. The following numbers of the 11 sites exceeded the ANZECC Guidelines in 2003.

	Feb	Jun	Sept	Nov
Total Oxidised Nitrogen <sup>1</sup>	8	All	9	7
Total Nitrogen <sup>1</sup>	6	10	8	10
Filterable Reactive Phosphorous <sup>1</sup>	7	2	5	7
Total Phosphorous <sup>1</sup>	All	6	All	2
Pesticides <sup>1</sup>	0	0	0	0
Faecal Coliforms <sup>2</sup>	10	8	6	8

<sup>1</sup> For aquatic ecosystems

<sup>2</sup> For primary recreational contact (swimming)

##### **Fish**

The DPI Queensland Fisheries Service continued to conduct the Long-term Monitoring Program. Species diversity appears to have remained stable over the last few years.

Johnstone River Fish	2001	2002	2003	2004
No. of species recorded	43	41	42	40

Source: QFS long term monitoring program.

Note: This does not represent Total Diversity, as some species are not susceptible to the electro-fishing method utilised by the QFS. The data is indicative.

The introduced pest fish species known as Tilapia (*Tilapia mariae* and *Oreochromis mossambicus*) remain present in the Johnstone River.

## Water Use Efficiency

### JRCMA

Water use efficiency was promoted by the JRCMA to agricultural landholders. A study was commenced to determine the minimum water requirements of farmers with banana, papaya and dairy pasture. This was on the basis of high yield results for production, rather than a focus on stream ecological function.

The study arose in response to the present over-allocation of water resources. Licensing is based on a Mega Litre per hectare system, and does not reward water use efficiency. It is hoped that the findings will enable NRM&E to better determine allocation. The pressure upon streams being utilised for irrigation may thereby be lessened.

## Water Allocation

Because the past years have been extremely dry there has been great contention over water allocation management. Water levels in a number of creeks caused the NRM&E to ban extraction for short periods of time.

There is no practical manner yet established to control water usage and to promote efficiency.

Water Entitlements -Source: South Johnstone NRM&E

Year	99	00	01	02	
	-00	-01	-02	-03	
Applications received	233	256	184	346	
Entitlements and Permits Issued from Application	New	34	42	17	114
	Renewals	170	80	49	57
	Amendment	3	7	10	4
	Transfer	73	39	33	60
Total	280	168	109	235	

## River Flow

The NRM&E conduct regular monitoring of flow volumes in some of the major rivers and creeks. As can be seen, 2003 was a relatively dry year,

Water Quantities in the Rivers	Megalitres, Oct 2002 - Oct 2003	Average (over last ~30 years)
North Johnstone River (Glen Allyn)	70,898 ML	168,972 ML
North Johnstone River (Tung Oil)	539,441 ML	1,732,923 ML
South Johnstone River (Central Mill)	215,945 ML	785,823 ML
Liverpool Creek	44,139 ML	150,921 ML
Fisher creek	10,339 ML	30,164 ML

Source: NRM&E Watershed website—[www.nrme.qld.gov.au/watershed/index.html](http://www.nrme.qld.gov.au/watershed/index.html)

with flows of half to a third of average volumes.

## Pollution

The EPA laid charges against Malanda Dairy Pty Ltd over two spills of factory effluent into the North Johnstone River. The spills were the result of an effluent pipeline cracking.

Council commenced reporting on emissions from its facilities to the National Pollutant Inventory (NPI). The facilities include the Sewage Treatment Plant, open and closed Landfills, and the Water Treatment Plant. All of these facilities release some emissions either to ground or surface water, or to the air. Despite treatment, the sewage treatment plant contributes significant Nitrogen and Phosphorous nutrients to waterways. Development of a plan for tertiary treatment at the plant is in progress, with studies being conducted to set targets for acceptable nutrient release.

The NPI contains data on 90 priority substances that are emitted to the environment. The substance list was determined by consideration of health and environmental risks in Australia.

15 business facilities in the Johnstone Shire reported emissions to the NPI and 5 diffuse sources were calculated in 2002-2003. This has increased from only 5 facilities reporting in 2001-2002.

The amounts of emissions in kilograms is tabulated on the following page. Where there are dashes the substance has not been recorded as emitted. The increased list for 2002-2003 is due to the addition of the new businesses reporting.

## Implications

### - Climate Change

There is growing concern and evidence that the release of energy trapping gases from human activities is contributing to the present accelerated increases in global temperature. If this trend continues, the elevated temperature is likely to have the following major effects:

- changing local weather patterns;
- changes in rainfall and run-off;
- raising of the cloud level;
- greater probability of large and damaging floods;
- changes in soil moisture during the growing season;
- shifts in bioclimatic zones;
- changes in the distribution and abundance of native flora and fauna;
- coral bleaching;
- local and regional extinction of species;
- increased plant growth due to CO<sub>2</sub> fertilisation;
- increase in diseases; and
- increased frequency of natural hazards such as bush fires.

## Complaints received by Council regarding pollution 2003

Air	5
Odour	17
Noise	18
Water	2
Waste	8
Rubbish	70
Oil Spills	1
Dust	6
Beach	11
Other	8

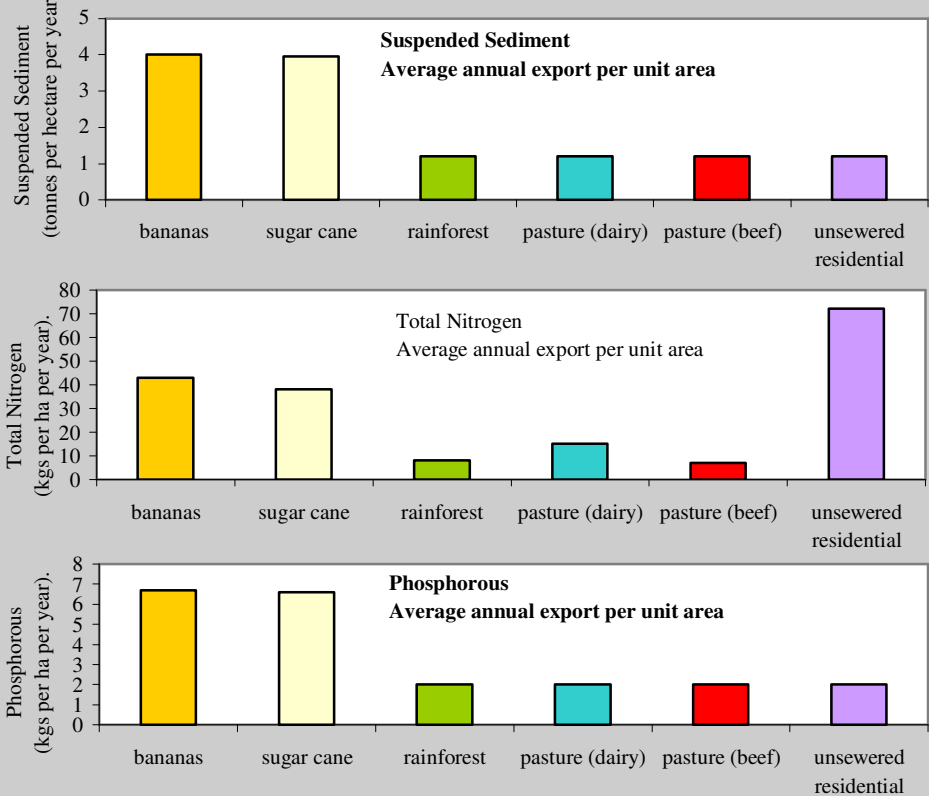
Substance ((kilograms)	2000-2001	2001-2002	2002-2003
Acetone	-	-	36
Acrylonitrile	-	-	29
Ammonia (total)	-	-	87,000
Antimony & Compounds	-	-	13
Arsenic & compounds	5.3	1.7	2.9
Benzene	110	22	120
Beryllium & compounds	-	0.0020	0.98
Cadmium & compounds	0.46	0.14	2.9
Carbon disulfide	-	-	3.9
Carbon monoxide	1,200,000	1,200,000	1,800,000
Chlorine	-	-	120,000
Chloroethane	-	-	7.1
Chloroform	-	-	6.2
Chlorophenols (di, tri, tetra)	-	-	0.10
Chromium (III) compounds	-	0.033	8.6
Chromium (VI) compounds	0.98	0.31	3.7
Copper & compounds	-	0.027	11
Cumene	3.1	15	1.1
1,2-Dichloroethane	-	-	5.6
Dichloromethane	-	-	200
Ethanol	-	-	17,000
Ethylbenzene	6.2	-	57
Fluoride compounds	1.8	0.57	0.030
n-Hexane	130	24	93
Hydrogen Sulfide	-	-	110
Hydrochloric acid	-	93	-
Lead & compounds	36	11	13
Mercury & compounds	0.030	0.0060	0.13
Methyl ethyl ketone	-	-	45
Nickel & compounds	-	-	35
Oxides of nitrogen	320,000	320,000	480,000
Particulate matter	160,000	240,000	350,000
Phenol	-	-	190
Polychlorinated dioxins & furans	-	-	0.000065
Polycyclic aromatic hydrocarbons	440	450	670
Sulphur dioxide	150,000	140,000	150,000
Toluene	100	93	1,400
Total Nitrogen	-	-	1,200,000
Total Phosphorous	-	-	260,000
Total volatile organic compounds	7,900	5200	7,600
1,1,2-Trichloroethane	-	-	1.2
Vinyl Chloride Monomer	-	-	48
Xylenes	35	30	-
Zinc & compounds	-	-	140

Adapted from the NPI website ([www.npi.gov.au](http://www.npi.gov.au))



## Pressure

- The Natural Heritage Trust commissioned a study into water quality in the Johnstone Basin in 2001. The findings of this study can help explain the sources of water pollution. A comparison can be made between human activity and the equivalent area of natural rainforest.



Source: Natural Heritage Trust Report - Land Use Impacts on Water Quality in the Johnstone River Catchment

The businesses reporting to the NPI were - Bundaberg Sugar Ltd. Mourilyan Mill, Bundaberg Sugar Ltd. South Johnstone Mill, Centrel P/L Innisfail depot (Reliance Petroleum), Consolidated Meat Group Pty Ltd, Northern Iron and Brass Foundry Pty Ltd., Johnstone Shire Council Sewage Treatment Plant, Johnstone Shire Council - 1 operating and 8 closed Landfills.

The landfill data shows that our waste doesn't just disappear when buried; it is still contributing pollutants to the environment as it breaks down. Tertiary treatment to remove nutrients is planned for the sewage treatment plant.

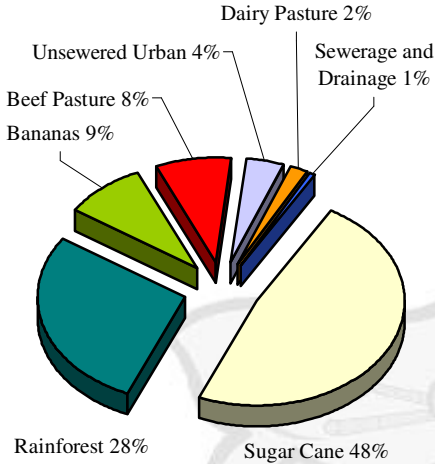
### Diffuse Emissions

Diffuse source N and P Emissions from Beef and Dairy Pasture, Cane and Banana Farming, as well as from Rainforest and from Unsewered Areas have been added by the NPI.

The rainforest data enables calculation of total emissions to the GBR lagoon, but it should be noted that rainforest contributes very little per unit of land area compared to horticulture. The area of rainforest for the Johnstone River Catchment has been calculated as ~52% of the land.

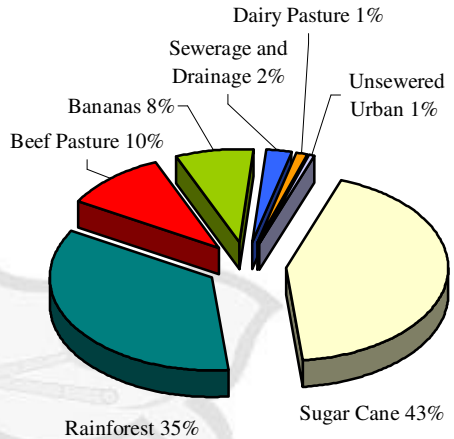
A comparison of the total amounts being released indicates that targeting sugar cane with better farm management will have the greatest effect towards reducing nutrient emissions from our Shire.

**Nitrogen Emissions (kg)  
to the Johnstone River, 2002-2003**



□ Sugar Cane	- 580,000 kg
■ Rainforest	- 340,000 kg
■ Bananas	- 110,000 kg
■ Pasture for Beef Production	- 98,000 kg
■ Unsewered Urban	- 53,000 kg
■ Pasture for Dairy Production	- 22,000 kg
■ Sewerage and Drainage Services	- 6,800 kg

**Phosphorous Emissions (kg)  
to the Johnstone River, 2002-2003**



□ Sugar Cane	- 110,000 kg
■ Rainforest	- 90,000 kg
■ Pasture for Beef Production	- 27,000 kg
■ Bananas	- 20,000 kg
■ Sewerage and Drainage Services	- 6,100 kg
■ Pasture for Dairy Production	- 3,000 kg
■ Unsewered Urban	- 1,300 kg

**Marine and Estuarine**

**GBRMPA**

2003 saw significant progress towards protection of the Great Barrier Reef, with the public release of the draft GBR rezoning plan. The rezoning plan will increase the area of reef protected, and will control human impacts on representative areas to better protect the reef's biodiversity. These representative areas include all the differing habitats and species communities of the reef. A minimum of 20% of each type of area will be protected by 'no-take' zoning (green zoning) which prevents impacts from fishing or other utilisation.

July 2004 will see the implementation of the new reef zones. Until this time the previous zoning plan remains in effect.

**AIMS**

The Australian Institute of Marine Science

(AIMS) conducts long term monitoring of the Great Barrier Reef, for hard and soft coral coverage. Coral coverage was at a very low level in 2003, following degradation by a Crown of Thorns Starfish (CoTS) outbreak.

Monitoring of more of the inshore reefs is planned for the future.

Raised nutrient levels from human activities of land have been linked to CoTS outbreaks. Nutrient availability promotes the growth of oceanic algae. These algae are food for many reef species at the early stages of development, such as CoTS. Increasing the survival rate of the CoTS larvae affects the outbreaks of the adult population.

Coral bleaching is a threat presently affecting the GBR. It is thought that climate change and increasingly hot weather conditions are raising sea temperatures. Corals are sensitive to elevated

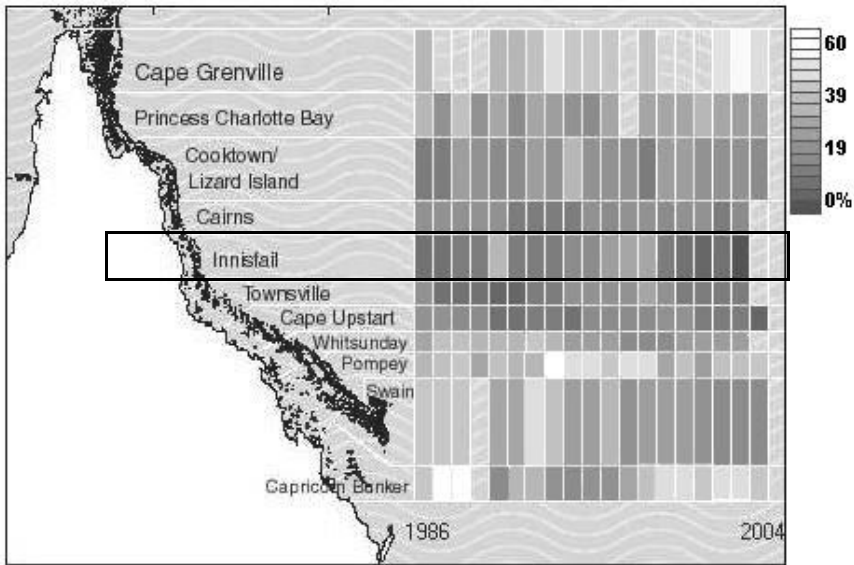
temperature, and die back. 1998 and 2002 have seen the worst cases of mass area coral bleaching, affecting inshore and outer reefs. Coral bleaching is occurring globally, and there is concern that global climate change will have disastrous consequences for the reef.

The state of coral coverage further affects fish and other reef life which depend on the coral for food and habitat.

### Mourilyan Harbour

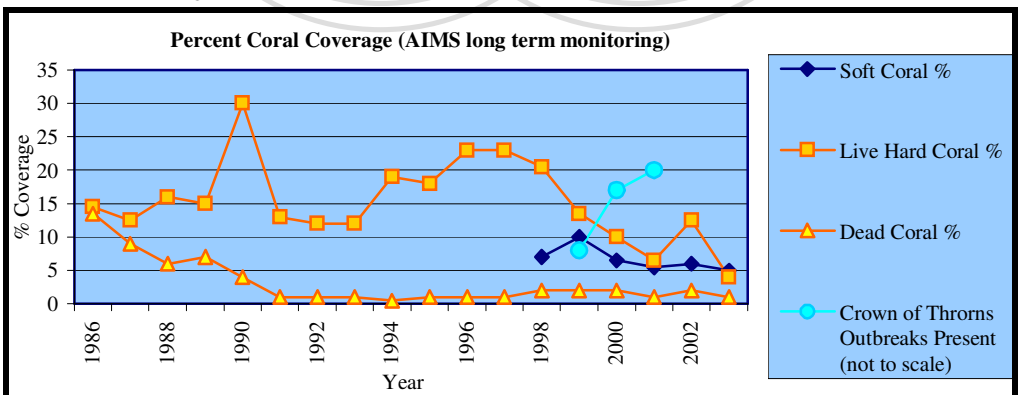
The Ports Corporation Of Queensland (PCQ), in conjunction with the DPI, conducts a regular monitoring program of sea grass in Mourilyan Harbour. At the end of 2002, December monitoring reported a significant reduction in intertidal *Halophila* seagrass on Seaforth Bank. The DPI considers this to be due to regional climatic conditions rather than the localised influence of the harbour. *Zostera* seagrass meadows remained stable and healthy.

### Percent Cover of Hard Coral— AIMS Broadscale Survey



Source: AIMS website — [www.aims.gov.au](http://www.aims.gov.au)

It can be seen that the latest surveyed coral coverage in the Innisfail section is the lowest amongst all the other monitoring times and locations.



## Conclusion

2003 saw significant progress towards the reduction of pollution to both water and atmosphere.

Strategies and goals were set to encourage better practice, and better information was being collected to monitor the effectiveness of any changes.

The state of the environment did not improve greatly during the year, but further progress is expected, due to continually increasing support from the community, industry, and the agricultural sector.

## Future Direction

Recreation, Tourism and the Aquatic Industries will benefit in the long term from the work being initiated to mitigate pressures on the environment. Impacts to waterways may be reduced if there is downsizing of the agricultural sectors. This may occur due to the difficulties cane farming and bananas are currently facing.

Whether or not this is the case, best practice farming must still be encouraged.

Atmospheric pollutant data will continue to be gathered. It is likely this information will influence future policy decisions at the National level and help encourage industries to reduce emissions.

### Report Card for Water and Atmosphere

**OVERALL GRADE**

**B**

Criteria	Grade	Recommendation Group	Explanation
Action on recommendations <b>6 of 7</b> recommendations actioned to date	<b>A</b>	Balanced assessment of causes and extent of nutrients and sediment. Water monitoring. Water allocation.	Undertaken through State and Federal assessments of effects to the GBR.  Stormwater monitoring. Monitoring of flow volumes by NRM&E.
Filling deficiencies in data	<b>A</b>	NPI reporting  Coral Coverage Freshwater fish  Stormwater monitoring	Council included analysis and public reporting on its pollution emissions. The NPI has included estimates of riverine pollution. AIMS continued to monitor the reef. DPI fisheries continued the long-term monitoring program. Council implemented monitoring of the Johnstone catchment's major rivers.
State of the Shire	<b>D</b>	Pollution  Freshwater  Marine	Reporting may help change practices in the future. Pollution loads remain above guideline levels. Water allocation management is not occurring. The reef in the Shire's area is highly degraded.
Goal Achievement	<b>A</b>	All	State and Federal Plans completed. Implementation of stormwater monitoring. Implementation of NPI reporting. Work towards the rezoning of the GBR.
Community Awareness	<b>C+</b>	All	Promotion of the International Year of Freshwater, and stormwater management. Promotion by community groups.



# SOLID WASTE MANAGEMENT

## Introduction

Johnstone Shire Council has a commitment to improving waste management practices. The Waste Management Strategy was accepted as policy by Council in 2003. It has the following objectives:

- Reducing waste to landfill;
- Educating the public to separate wastes; &
- Conducting ongoing research into alternate technologies for waste treatment.

## News

2003 saw the continued success of programs aimed towards these goals, the implementation of a few new initiatives, as well as investigations into potential future strategies.

Council's waste management programs continued successfully during 2003. The programs include – public education, DrumMuster, composting, commercial waste reduction, bin surveys, waste stream analysis, Clean Up Australia Day, green waste subsidy, vermiculture, and the pre-cyclone cleanup.

Council continued its focus on organic waste reduction through household composting and worm farms. The volume requiring transport and dumping is thus reduced and the nutrients contained in the material are retained as a resource for use around the garden.

A Sharps Management Plan was worked on in 2003. Council will promote and make available facilities for appropriate sharps disposal, to the community and to businesses.

Incidents with sharps will be monitored. This information will identify where additional service provision is required. Sharps management will also be promoted to businesses in the Shire.

The results of a preliminary Investigative Monitoring Program on waste separation became available. The program involved 70 premises and found community attitudes towards waste separation were positive.

These results formed part of the decision making process in developing a Regional Waste

## Pressure

- Disposal of waste costs the community money, and loses potential resources. Also, once stored in a landfill the wastes can impact adversely on the environment through groundwater leachate, greenhouse gases, or through odours.

The high rainfall in the wet tropics causes serious environmental problems when attempting to store biodegradable wet waste. Leachate is formed which is a by-product of water moving through the decomposing landfill. The leachate often comprises harmful and unhealthy chemical constituents. When organic waste is part of the landfill the amount of leachate generated is greater. Another problem with wet waste that requires management is the generation of methane, which is explosive and also a greenhouse gas.

Stoters landfill is a dry waste landfill, which has been engineered to prevent leachate entering groundwater. Excess landfill leachate is disposed of to sewer. All wet waste is transported to Townsville. This entails a cost to the ratepayer, but is necessary to comply with environmental legislation.

Management Plan. Opportunities exist to cooperate with other Shires in further coordinating waste disposal.

## Waste Categories

Compostable	35.87%
Recyclable	24.45%
Residual	20.08%
Paper/card (compostable or recyclable)	19.57%
Hazardous	0.02%

## Waste Diversion

Total % able to be diverted	79.92%
Total % organic able to be diverted	55.44%

Community education continued. Information on waste disposal is available at real estate agents, and from Council. Council also contributed a display on waste at the Innisfail show. There were presentations to community groups, and 15 schools were visited to promote responsible waste disposal, wet and dry waste separation, litter reduction, and recycling.

The Local Authority Waste Management Advisory Committee has aided these efforts.

They provide a mobile education facility in the form of a bus, available to 30 member Councils. The bus contains information and activities to educate on waste management and recycling.

The State Government's ChemCollect program ended in 2002. It helped farmers dispose of unwanted chemicals and containers that could not be cleaned out. This was a once-off program, but AgSafe intends to run a similar effort - the ChemClear program, which is long-term and will be funded by the chemicals industry.

### Recycling

Recycling for certain materials is presently provided at the Shire's transfer stations. A plethora of salvageable goods is also retained, and these are sold for a minimal fee at the transfer stations. Council's waste subcontractor also separates some types of recyclables from the bin waste stream.

Cardboard	140 tonne
Plastics (including HDPE and PET)	4 tonne
Light Steel	300 tonne
Heavy steel	60 tonne
Aluminium	45 tonne
Non-Ferrous Metals	25 tonne
Car Bodies	45 tonne
Tyres	500
Hydrocarbon based Oil	18,000 Litres
Chemical Containers (DrumMuster)	5,000
Batteries	40 tonne

Provision of household collection of recyclables was investigated in 2003. Present introduction would be financially exorbitant, and would require a significant fee in the rates. Investigation

### Implications

- Many of the components of waste streams are reducible, reusable, or recyclable. This requires community involvement – as waste must often be separated before it enters the disposal process. (Separation later is usually too costly.) The level of technology available and affordable also determines whether the resources in waste can be reused or recycled. The market value of the resources in the waste and the extraction costs and transport are the other factors. As waste management and reprocessing capabilities increase there will be lessened costs to the community and to the environment.

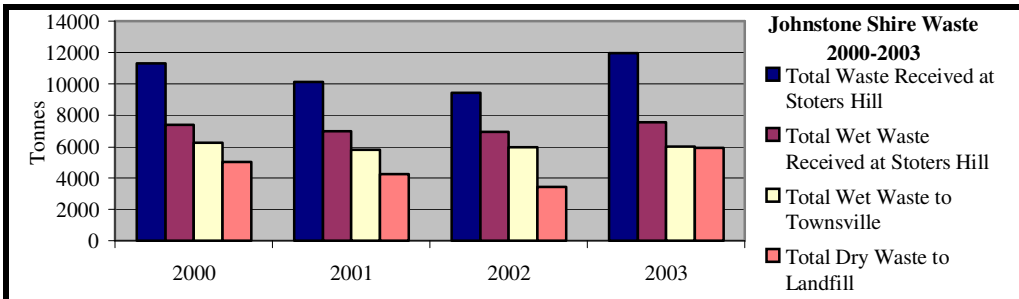
will continue to overcome these hurdles.

The commercial Waste Reduction Plan continued to gather information. Waste assessments were conducted at a number of businesses. The plan will progress further once avenues for recycling are established.

Promotion of Planet Ark continued – this program collects and recycles Christmas cards and printer ink cartridges. These efforts help to raise community awareness of recycling.

### Indicators—2003

Wet waste volumes increased. However, the amount requiring transport to Townsville remained the same. 6013 tonnes p.a. of wet waste are being transported to Townsville – still short of the 5100 tonnes p.a. target (from 7100 tonnes) by the end of 2004. Progress has remained constant at the halfway point to the target. Total waste and dry waste volumes to the Stoters landfill appeared to increase significantly, but this is due to improved measuring of dry waste established in 2003.



Note : Figures for dry waste, and therefore total waste, have increased due to improved measuring.

Bin contamination rates remained steady, with close to 20% percent of bins showing contamination between the wet and dry waste streams. This reflects public participation.

The number of compost bins distributed remained at 2350, which is above Council's original target. There is still a steady interest from the community for new bins. Council maintains a waiting list (currently 100 people), and rotates the bins when they become available. Similarly, the number of worm farms remains at 60. There is a waiting list of 10 people.

Both of these methods of recycling organic waste can be easily set up at home without the need for special bins. Information is available from Council's Health Department.

The DrumMuster chemical container collection program received 8344 containers in 2003. This has proven extremely popular, and has risen from ~5000 in 2002, and ~3500 in 2001.

Disposal facilities are located at the waste transfer stations.

Clean Up Australia Day was again a success in 2003. 839 registered volunteers, including 403 registered school children from four local schools participated in Clean Up Australia Day. The most common items found were Cigarette Butts, Plastic and Aluminium Drink Containers, and Fast Food Wrappers.

The 2003 Pre-Cyclone Season Cleanup ran for eight working days. 40 tonnes of material was removed and disposed of at the transfer stations.

Green Waste Mulch at the Transfer Stations continues to be popular. Large volumes are created, but are utilised as readily by the community.

### Conclusion

Waste management continued to improve.

### Future Direction

Regional coordination may lead to new options.

## Report Card – Solid Waste Management

## OVERALL GRADE **B+**

Criteria	Grade	Recommendation	Explanation
Action on recommendations <b>9 of 9 Completed</b>	A+	-Waste reduction -Community involvement -Monitoring	All recommendations have been investigated and acted upon, or are currently underway. Further investigation of additional goals took place with sharps management.
Filling deficiencies in data	A	-Monitoring	Reduced bin surveys took place. Strategic monitoring to identify the potential for recyclables was instigated.
State of the Shire	B-	-Sharps manag't -Waste reduction  -Community involvement	Sharps management plan implemented Total wet waste volumes increased. Wet waste volumes requiring transport to Townsville remained steady. Community participation in waste separation remained the same.
Goal Achievement	B	-Sharps manag't -Waste reduction	The Sharps Management Plan was implemented. Implementing household recycling problematic. Commercial waste reduction depended on recycling.
Community Awareness	B	-Community involvement	Community awareness appears steady. There is positive interest in alternative waste separation. Council has continued to provide education and interpretive material to the public.

# THE SHIRE COMMUNITY

## Introduction

The Johnstone Shire is a culturally diverse community. The traditional owners include the Ma:mu people (Innisfail area) and the Djiru people from Mission Beach area. The Shire population includes immigrants from around 63 countries, speaking 48 languages. There are approximately 46 religions practiced within the Shire. Christianity in its various denominations is the most followed, others include Animism, Buddhism, Hinduism, Islam and Sikh.

The Council is committed to providing and ensuring support for community issues, and to enhancing the environment for recreation.

## News

The Innisfail Community Support Centre has identified a lack of public spaces as a problem. The support centre organises monthly groups to provide a space for isolated persons to socialise. Unfortunately, it is difficult to manage these groups whilst ensuring the privacy of other persons requiring support for very personal and sensitive issues.

There is a need for a public space, ideally a Community Centre, where persons experiencing isolation or facing discrimination can gain social contact in an environment regulated by staff to ensure openness and acceptance.

Whilst there are many societies and clubs operating in Innisfail, many of these groups are comprised of well-established locals. This can make it difficult for new persons or persons with differences to find acceptance. A community centre can be an interim place for persons experiencing social isolation.

A complimentary approach would be a focus on anti-discrimination education to clubs and community groups, to ensure that members are more open, and make social groups available to a wider range of people.

Collaboration between the community services could be improved. The services in the Shire are used to working independently. Ideally, community development work and the promotion of social capital should be centrally organised.



## Pressure

- Individuals comprise a population. It is the interactions between individuals that comprises a community.

A supportive and healthy community shares the burden of difficult times, and supports and raises individuals in need. This is known as social capital.

Goals for a community include establishing:

- Neighbourliness
- Shared emotional connection
- A sense of place
- A sense of history
- Openness and welcome
- Altruism
- Civic participation

Pressures exist when the community is disparate, where people or groups are alienated from the majority, and where private interests are pursued at the expense of the welfare of others.

It is then that more institutional services are required to fulfil these community roles.

However, staffs within the services are too busy meeting current service requirements to conduct such organisational work. Council should take on this role as a central facilitator, so that the development would be unbiased, and owned by the community. Funding should be sourced to staff a community development worker, to coordinate collaboration between services, and to work towards improving social capital in the Shire.



## Implications

- The demand on the community services depends on the state of the community.

Where the people are cooperative and supportive of one another in times of trouble then individuals are less likely to pass thresholds into problem states. There will then be lessened demand on the services to provide support.

An open and friendly community will welcome outsiders and their ideas—thus allowing the town to develop in innovative ways.

Good social bonds and positive directions will encourage youth to put energy into the community, particularly where they can see and have access to causing change.

Outsiders such as tourists will be better inclined to stay, where encouraged by hospitality, and where a thriving town displays its face to the world—through its cultural activities and in its built environment.

Economically, where people work together the critical mass for new industries can be achieved.

## Innovation in Rural Queensland

The DPI in conjunction with Queensland University produced the report “Innovation in Rural Queensland – Why some towns thrive while others Languish” (Plowman et al. 2003). The research conducted at eight rural Queensland towns analysed how successfully these communities could cope with pressures to adapt to contemporary circumstances and changes. The report looked at what level of community resources existed to respond innovatively to create successful ideas, and at how possible it was for the community to overcome problems affecting the town.

Key Findings for Innisfail, compared to the other towns, were as follows. This information was based on interviews.

- Less innovative than a number of other participating towns.
- Perceived lack of depth in professionalism.
- Perceived poorer in external communication and freshness of ideas coming in from outside the town.
- Perceived adequate spare capacity to help out, more than in other towns.
- Innisfail residents had resided significantly longer in the town than any other, and longer

than those in the innovative towns.

- Little population fluctuation, innovative towns had an increasing population.
- Decline in the % of the pre-40 age group, and an increase in the post-40 age group. Innisfail was better than most in keeping its youth in the town.
- Over 40% of occupancies were rentals – highest of any of the towns.
- A high and stable percentage of the total population in the work force, and a declining % of unemployed.
- An increasing dependency on employment in agriculture, though this dependence was half that of the other towns.
- The retail trade equalled the number of people employed in agriculture.

## Community Support

### Innisfail Community Support Centre

The Support Centre continued to offer free counselling services and support programs, accessible to all in the community. The support centre has one fulltime community support worker and a part-time family support worker, as well as volunteers.

In 2003 the following programs were offered, in response to identified needs in the community.

- Parenting information sessions on various topics
- Stress Management program
- Tax help
- Grief and loss education for children who have experienced the death of someone close to them and/or whose parents have separated or divorced
- A program for women survivors of childhood sexual abuse
- Self esteem program for women
- Self esteem program for children

The support centre also coordinates a women’s group who meet monthly to socialise. Another group including men will be started in 2004.

Funding for the support centre is received from the Department of Families. Council provides the building the centre is housed within.

Most clients utilising the support centre are on social benefits, unemployed or under-employed. Despite recent economic tribulation in the

agricultural industries, there have been few visits from members of farming families, for support or to take advantage of the financial advice services offered. It is considered that this group of people have a reluctance to utilise the support facility, despite increasing dilemma.

The major problems identified through the persons requiring support services are those in the home - domestic violence and child abuse (mainly by family members). These problems are elevated in the Shire compared to other regions in Queensland.

Other issues affecting persons utilising the support centre are social isolation and severe depression. Availability of transport has been identified as an issue for disabled persons.

### **Innisfail Youth and Family Care**

Innisfail Youth and Family Care provide services and facilities for youth and families. The youth shelter is a place for youth aged 12 to 21 who have nowhere else to go. Case management aims to increase their options, with job-seeking or further education. Where possible, family mediation attempts to restore homeless youth back to their families; however this is very seldom an option.

The service runs an emergency relief program with money available to provide food stamps or other aid.

Crisis accommodation for families is available in the form of a duplex with two separate units. This accommodation is short-term (3 months). There is unfortunately a huge demand for this housing. While the goal is accessible emergency housing, there can be a six month waiting period.

The service also provides 6 units, which are long-term accommodation for homeless youth. This allows youth to transition from the shelter when they have no other option. It remains difficult for staff to provide adequate support for the youth occupying this accommodation.

These accommodation facilities are funded by the Department of Housing.

Another facility provided is the Boiler Room, which provides a recreational venue for youth who would not normally engage in typical organised activities. The facility survives on Council funding, however due to costs the opening hours have been significantly cut.

The service's major work is with youth homelessness. Unfortunately there are no simple reasons for this problem in the Shire, and each individual case is different. There may be some tendency for modern families to give up on their children more easily, when faced with problems.

### **Council**

The Council's Domestic Violence Officer offers support to men or women suffering domestic violence. The DVO was established as a permanent position in February 2003, so access to DV service has improved. The establishment of a DV worker in Tully has also helped with the demand for support.

The Council provides support information, referrals, help with DV applications, court support, and crisis accommodation (one 3 bedroom house, and two 2 bedroom units – all are fully furnished and low rent). The Council is also linked with the Tableland Women's Facility to offer further accommodation and support.

An identified need is that the demand for support is too great for the officers currently employed. Prevention of domestic violence was promoted by the Council during DV week in 2003.

### **Respite**

#### **Council**

Council offers respite through for 164 clients, under the Health and Community Care (HACC) program. The Respite Care Centre offers social contact and support for older people and younger disabled. The service also operates in Kurrimine on Mondays.

A bus service is provided to transfer clients who have difficulty getting out of the home. The



respite involves clients in activities, outings and lunches for an average of 20 clients a day.

Other services include the home maintenance program – which provides lawn mowing for those incapable of heavy work. In-home respite is also provided, particularly to allow regular carers to take a break.

A podiatrist and an exercise physiologist regularly attend the respite clients. They help to keep clients mobile and active in life.

The Respite Centre was involved with the International Day of Disability. A concert was organised in Alan Maruff House, which was attended by 100 people.

The purpose of the respite is to get people who often have no regular social contact, or who live in remote areas, out from their homes and into a social environment. Demand on the service outstrips the supply. Significant waiting lists exist; of 16 persons for respite, 8 persons for in-home care, and 20 persons for the home maintenance.

Needs are likely to continue to increase in the future, as the proportion of aged people in the community increases. The Shire already has a disproportionate percentage of aged persons compared to the Queensland average. Continual increases in funding will be essential for services to cope with the growing demand.

### **Chjowai**

Chjowai facilitate respite provision for mainly indigenous clients. The program operates on Tuesdays outside the centre, and on Thursday for indoor respite. This is a HACC program which includes domestic assistance, social support and visits to isolated persons, transport, shopping trips, and home maintenance. There is personal help at the centre with filling out forms, or with social welfare referrals. The Chjowai Hall is available for hire, or for conferences.

Emergency relief is another service provided; this is shared with organisations such as St. Vincent de Pauls.

Chjowai used to organise a playgroup for young children, unfortunately raised insurance costs forced the cancellation of this program.



## **Multiculturalism**

Cross Cultural Awareness Training is regularly organised for Council staff. Approximately 63% of staff were trained during 2003. This brings training levels to 80%, even despite staff turnover. Multicultural Affairs Queensland conducts the free training. They have also conducted a few community training sessions in the Shire. Council's focus has been to organise in-house training first and then expand out to the wider community. The training will ensure that Council is approachable and that service provision is culturally sensitive.

Similar training on Council's Community Relationship Plan, and on Equal Opportunity Employment is carried out with all new staff.

The Kulture Karnivale, organised by Council, is the Shire's greatest annual celebration of cultural diversity. It has advantages also at the organisational level because it brings cultural groups together, introducing them to one another and to Council's departments.

The attendance at the Karnivale increased by another thousand people in 2003. The Karnivale gives community groups the opportunity to engage the public. It encourages the display of pride in culture, and in integration without conformity.

The Cultural Reference Group meets every second month. The group promotes networking between persons working in the multicultural sector. Information sharing at these meetings ensures that issues are identified so that service provision meets the needs of the community.

Arts Queensland conducted information sessions

in 2003 as the request of the Hmong Queensland Association. This led to a grant for workshops to pass on knowledge of the traditional Hmong musical instrument. The instrument is essential to rituals involving spirit knowledge, and is therefore an important part of Hmong spirituality. The workshops passed on the skills required to keep the cultural knowledge alive.

#### *Promotion*

Three separate promotions to increase awareness of the community services available were conducted. These occurred under the Kulture Karnivale banner, but included general services such as respite, counselling, etc.

Council's multicultural officer did presentations to students in TAFE language classes. Included was information on how Council works and the services provided. This was part of an objective to make Council accessible to persons new in the Shire, or to Australia.

Council's efforts towards multiculturalism under the State LAMP program were presented at the National Local Government Conference in Townsville. Promoting work in the Shire has given other Councils the opportunity to learn from our ideas.



It is important to the Djiru people, as development at Mission Beach expands, that they too benefit. It is important that future generations of the Djiru have a place and opportunity at Mission Beach.

There are places at Mission beach which are traditionally significant areas and are still in use today. However, other such places have become inaccessible to the Djiru.

### **Traditional Owners**

The Aboriginal Cultural Heritage Act was passed in 2003. It is yet to commence (2004), but thenceforth will affect all new projects and developments that occur in Queensland. Traditional owners will have to be consulted. How the Act will be interpreted, and how it will advantage the traditional owners is still to be seen.

The economic downturn in the agricultural industries will affect the Shire's aboriginal people, many of whom work in this capacity. There is hope that tourism will offer an alternative avenue for employment, but there is concern that much of this indigenous tourism will not be directly owned by the people.

#### **The Djiru People**

The Djiru run a facility at Clump Mountain, Mission Beach. They attend to the needs of groups of 'at risk' youth, and offer camping and cultural education to private groups also.

#### **The Ma:mu People**

The development of bush tucker marketing programs is proving a successful avenue for the Ma:mu.

Women's business is attended to by the Ma:mu 'Grandmothers'. The Grandmothers are involved in issues affecting the Ma:mu people, and also provide support to young indigenous women. The Grandmothers conduct voluntary work with indigenous girls at the high school, teaching the stories and the culture, and also being there to provide emotional support. Many of the girls they work with do not have elders in their direct family to learn from.

The Ma:mu elders are concerned that they are not consulted often enough on local issues. A case in point is the proposed dredging of the Johnstone River. The flats at the river mouth sustain many yabbies and fish which the Ma:mu utilise. The Ma:mu have not been invited to contribute to discussions concerning the dredging.



Few changes occurred to the provision of general health in 2003.

Many of the specialists services are provided through outreach from Cairns. This includes gynaecology, obstetrics, psychiatry, additional surgeons. These specialists visit at regular intervals.

An ear, nose and throat specialist will soon be available at the Cairns base hospital. This was a service identified as an important need for the Shire, and the region.

The hospital will undertake redevelopment of two of its buildings in 2004. This will help to improve the current organisation of clinical services.

The redevelopment will impact on aged care. A national policy to reduce high-need long-term care provision from hospitals will mean Warrina Home will take on this role. The Home will receive the equivalent funding, ultimately however the total number of beds available for aged will be greatly reduced.

*Mental Health*

Mental Health services continued to improve in 2003. The services, based at the hospital, secured funding for a psychiatrist to work 2 ½ days per week in the district. Recruitment of this person will occur in 2004. Similarly, an early intervention project officer will start in 2004, who will work with the region’s hospitals and community service providers towards suicide prevention.

Pressure on the Shire’s mental health services has been reduced with new district facilities. A new service was opened in offices in Babinda, and another service will operate from the community health centre in Cardwell.

Support for the Mental Health service’s consumers and their carers continued. There is a monthly recreational group for consumers, this used to be fortnightly in previous years, but is still regular. A carer group provides advice and support for the carers. An annual consumer and carer forum is conducted, to improve service provision and to identify needs in the community. The mental health services worked towards establishing community connectedness through a series of promotions with the Healthy Communities project. Improving the social fabric

<b>Innisfail Hospital</b>			
	<b>2000/2001</b>	<b>2001/2002</b>	<b>2002/2003</b>
Day Only admitted patient episodes of care	1,720	1,677	1,656
Total admitted patient episodes of care	5,564	5,443	5,552
% Day-only episodes of care	30.9%	30.8%	29.8%
Total admitted patient accrued days	35,192	33,425	31,361
Daily average occupied beds	96	92	86
Chargeable episodes of care as a % of total episodes of care (excluding unqualified newborns)	28.5%	24.9%	23.2%
Total non-admitted patient occasions of service	80,015	83,709	85,189
Total number of babies born in the hospital	303	276	244

Source: Qld Health Annual Report 2002-2003  
– Acute public hospital activity data

of the community can help people to help each other avoid mental health problems. A whole of community approach was complemented with a series of small grants for projects and groups.

Projects conducted occurred:

- Promotion of mental health services in the district, at the Harvest festival
- A skate competition
- An indigenous mental health workshop – Jingili
- A media campaign
- Community connectedness work
- Revitalisation of Cowley beach
- Funding for a community services respite project.

The mental health services are hoping to continue this work, subject to an evaluation being done in 2004.

Additionally, there will hopefully be more staff enhancements over the next number of years, to increase the service provision for the district.

## Council

Affordable Housing for aged pensioners was improved with the replacement of two units in Ibis street. The Department of Housing funded this, with \$20K in-kind support from Council. Another grant like this has been applied for, to replace units in Martin Street, one of which has been deemed unliveable. Currently, 30 low cost housing spaces exist for the aged. A waiting list of 17 applicants existed at the end of 2003.

New State Housing legislation raised rent for affordable housing tenants. This increase was incremented in three stages over nine months. Fortunately for tenants, the greater part of the increase is counter-balanced by additional Rent Assistance from Centrelink.

The effect of the policy change has been to ensure long-term financial stability for affordable housing programs run by Councils. These programs will now run on rent revenue rather than depending on revenue from rates.

Council also runs the Lakes Residential Village, for independent retirees. 30 spaces exist here, with a waiting list of 14 applicants.

## Wet Tropics Community Housing

Wet Tropics Community Housing Scheme provides transitional housing for low-income applicants waiting on the public housing list. Tenants must move out when public housing becomes available, unless there are extenuating circumstances. The scheme also offers the opportunity for tenants in debt to the Department of Housing to repay their debt and become re-eligible for public housing.

The service increased the number of available properties greatly during 2003 – to 50 houses and units. The service now extends regionally from Tully to Babinda.

5 groups are targeted by the scheme:

- Persons with disability
- Aboriginal and Torres Strait Islanders
- Youth
- Single persons
- Women escaping domestic violence

Where persons have specialised support needs, these are met by other service organisations. The scheme does offer a program of assistance with

the purchase of whitegoods.

Despite the number of properties available, there is a large waiting list – approximately 100 families or individuals are on the applicant waiting list.

## Chjowai

Chjowai offers community housing mainly for indigenous persons. They have 43 properties under this scheme.

Rates are the major impact on Chjowai's generated funds. In order to expand their housing services, whilst maintaining supportive rent rates for the clients, Chjowai are interested in discussing avenues with Council to reduce the rate burden.

## Department of Housing

Good provision of public housing is offered in Innisfail. 155 houses exist in total, with waiting periods for applicants of 6 months to 72 months (the waiting list details change every quarter). The number of properties remained the same during 2003. When last reviewed the following information was available.

Accommodation Type	No.	Av. Wait (months)
1 bdrm seniors units	19	72
1 bdrm apartments	6	60
2 bdrm townhouses	4	24
2 bdrm duplexes	22	36
3 bdrm houses	69	40
4 bdrm houses	19	24
5 bdrm houses	2	18

Department of Housing Accommodation

The Aboriginal and Torres Strait Islander Housing Program provides 50 properties in Innisfail. Wait times vary from a minimum of 12 months to 60 months.



The situation for Youth in the Shire has improved greatly, mainly due to the increasing number of activities being organised. This will further improve, with new direction and funding happening at the PCYC and through Council.

### PCYC

The goal at the PCYC is to create an environment where youth can interact and enjoy themselves, without drugs and alcohol.

In 2003 the PCYC organised:

- High school and junior dances.
- 2 sleepovers with movies, sport and activities; attended by ~100 teenagers each.
- 2 Skateboard competitions (with Council).

The PCYC was very successful in attracting grants and funding for projects expected to commence in 2004. Funding was gained for:

- New basketball facilities.
- Gym equipment.
- A weights room and seating in the main hall – local business sponsors contributed.
- Running 5 youth camps.
- An extra bus

Future plans involve gaining funding to set up a Pulse Café – where youth will have unstructured access to games, movies, a recording studio, a website, and where bands can play music. A mezzanine floor area is also planned – as a viewing area for sport events.

The PCYC also organises an after school care program for ~60 children, involving activities and some help with homework. During the holidays they care for ~100 children per day.

### Council

Council contributed to the wellbeing of youth through a number of activities and plans. However, the main identified problem has been a lack of participation, rather than a lack of activities.

The Council organises the Youth Advisory Committee (Youth ALYV), made up of 8 youths in 2003. Unfortunately, membership of this committee is usually down by the end of each year, as the youth involved leave the Shire to go to university or to work. Addressing youth needs has been planned for 2004, with the Youth ALYV members applying for a grant to hold a Youth Forum - to 'get out and get involved' to



Graffiti art at the SK8 park

increase participation. The Forum will showcase organisations such as the PCYC, Interact, and the Youth ALYV.

Graffiti workshops were a well-attended activity for youth in 2003. This was a joint project funded under the Graffiti Solutions Program and organised between Council, the Rotary club of Fitzgerald, Innisfail Police, and the Boiler Room. Workshops were carried out over 8 weekends, with the finale being the decoration of the Innisfail Skate Park. The project provided a creative outlet for youth, helped bridge the generation gap, and also educated about the dangers of inhalant abuse.

The SK8 competition in August was a successful follow up. This was funded under a Healthy Communities grant. Skaters from around the region attended the competition.

Council has reintroduced the Sports Star of the Year awards, after a gap of 18 years. The Innisfail Advocate and the Rotary Club of Innisfail have helped in this promotion of sports.

Students enjoyed playing professionals and councillors during Junior Council Week as part of Local Government Week. Another activity organised was a colouring competition for younger students. As a result a local girl won at both regional and state levels.



Johnstone SK8 Park

**JSCA**

The Johnstone Shire Cultural Association is a not-for-profit association in receipt of operational funding from the Council. The JSCA in 2003 was involved in the following programs:

- International Women's Day Breakfast
- Council's Centenary Celebrations
- Disability Week arts workshops & forum
- Kulture Karnivale
- Innisfail Harvest Festival

**Australian Sugar Industry Museum**

In March 2003 the Australian Sugar Industry Museum identified the need for \$100,000 support to continue operations. The Queensland Sugar Industry (QSI) was requested to continue this financial support. The QSI decided that, given the state of the industry, it could no longer provide financial support for the Museum. This has meant that the long-term future of the sugar museum and regional art gallery space is now uncertain.

**Biennial Art Exhibition**

Innisfail's Biennial Art Exhibition occurred again in 2003. The number of entries increased from previous years, and the opening night saw an excellent crowd. Prize moneys offered were larger and non-acquisitive—this encouraged a number of well-recognised artists to participate. The community has become more involved in the recognition of visual art. This may be due to exposure to art and local artists at the gallery in the Central Arcade.

**Council Library**

The Innisfail Council Library has an active membership of ~41% of the Shire's community. 1083 people joined during the year, and 104,846 people visited. The Library offers programs such as Internet training, talks by authors, and activities for children.

**Brothers Leagues Club Innisfail**

Brother Leagues Club is a major social centre for many people in the Shire, and comprises ~4000 members. The Club provides for a range of age groups—the average membership age is 46. The club offers bingo and fun mornings for the aged during the week, as well as affordable lunches

An identified need in the 2000 SoS benchmark was the need for adequate provision of facilities for unstructured activity by Youth. With the provision of the Skate Park, and local bikeways underway there are no plans for provision of further facilities. The Council will instead concentrate on promoting participation.

**Innisfail Youth Shelter**

The Innisfail Youth Shelter received funding and have been able to provide an extra part-time youth worker.

**Education**

School enrolment did not change greatly from 2002 to 2003.

<b>PRIMARY</b>			
<b>Public</b>		<b>Private</b>	
El Arish	70	Innisfail	373
Silkwood	124	Silkwood	48
Moresby	32	South Johnstone	120
Mourilyan	179		
Mena Creek	50		
South Johnstone	54		
Mundoo	87		
Flying Fish Point	85		
Innisfail SS	310		
Innisfail East SS	270		
Palmerston East	25		
Innisfail Inclusive Education Centre	17		
Goondi	402		
<b>TOTAL</b>	<b>1705</b>	<b>TOTAL</b>	<b>541</b>
<b>SECONDARY</b>			
<b>Public</b>		<b>Private</b>	
Innisfail State High School	<b>795</b>	Good Counsel	<b>548</b>
<b>TERTIARY</b>			
Innisfail TAFE	<b>711</b>		

In 2003 the TAFE institute reintroduced visual arts, and a conservation and land management course.



Art Deco trim at the new Target



### Events – Calendar 2003

Australia Day celebration  
International Women's Day  
Youth Express  
Lest We Forget run  
Festival of the Three Saints  
Innisfail Ballet and Dance Competition  
Council Centenary Celebrations  
Innisfail Annual Show  
Outrigger Regatta  
Kulture Karnival  
Drag Racing  
Ulysses Bike Run  
Innisfail Bill Fish Tournament  
Brothers Football Club Rodeo  
Innisfail Art Society Biennial Art Exhibition  
Flying Fish Fishing Competition  
Innisfail Annual Races  
Innisfail Art Deco Harvest Festival  
Opera at Paronella Park  
Innisfail Eisteddfod  
Art Deco Ball  
Exhibitions and Workshops at Sugarama



Innisfail Fire Station

It is also hoped that promotion of the town in this manner will help attract tourism. Town walks and interpretive signs are planned to make art deco more accessible to tourists.

A Street Scape Plan may be introduced in the future to further ensure the preservation of art deco in the town centre.

and food.

The club supports the local football team, and sponsors the Innisfail netball. Other community sporting clubs are supported through the facilities available; on Saturday mornings the club is open for raffles and other fund raising.

An average of 200 people attend lunches at the club on weekdays. Friday and Saturday nights, as well as Saturday lunches experience an average of 350 in the club building.

### Art Deco

2003 saw further promotion of Art Deco culture in the Shire, particularly Innisfail. Council included an Art Deco Policy to the Shire Plan – facades on new building work may have to match the art deco character of the town before Council passes approval. The best example of this is the new Country Target, which has excelled in complying with this condition.

The other major push has been to repaint the building facades on Innisfail's main streets with art deco colours. A number of businesses in Edith Street have followed this lead, also repainted was the Innisfail Fire Station. Council's Shire Hall and Brother's leagues club are also planning to follow suit, as are many other buildings in the town. The aim has been to preserve the buildings and to give the town a pride of character, and to inspire a 'sense of place' in residents.

The Art Deco Society held a number of events including:

- The Inaugural Art DecoBall
- A cocktail party
- Jazz and Croquet at Paronella Park
- The Art Deco theme at the Harvest Festival
- The Council Centenary Celebrations which involved a number of actions including – art deco costumes and the dress up of shop fronts, a market in the park, a band, the performance of "Find me at the Federal", and a football match.

It is considered that the creative push in a unified direction has resulted in a general increase in creative inspiration. Some examples include books that have been written about the art deco period in Innisfail, a photographic workshop on interiors, costuming and crafts, as well as the adoption of the art deco style by a local winery. The society is funded under Regional Arts Development Funding (RADF).



Art Deco at Target Country

## Crime

Statistics for crime are summarised in the table opposite. There may be some problems in comparing the data to the rest of Queensland, due to the success and focus of the local police force.

From these statistics it is noticeable that the rate of assaults are somewhat higher than the State average. Disturbingly, sexual offences are significantly higher. The category of crimes against the person has risen since 1998-1999.

Drug offences and good order offences are also noticeable higher than the State average, though this category declined.

Johnstone Shire is well below the State average for Offences against Property. There are far fewer of these types of crimes – at 2/5 of the rate over the entirety of Queensland. This also was lower over time.

The police force has been looking at crime prevention through partnerships with the support services. Crime incidents are frequently related to income, family or substance abuse problems, often incorporating a number of these issues.

Consent to conduct family conferencing is established with a household experiencing such problems. This allows support agencies to take the affected family through the options available towards solutions. It is an innovative program, and may achieve success through its focus on the causes. The process also takes power away from the perpetrator and returns it to the family.

Crimes 2003	Public Breach				Drink Motor		
	Person	Pty.	Order	DVO	Drugs	Drive	Vcl.
Innisfail	162	557	268	47	183	143	33
El Arish	2	5	3	0	23	9	0
M. Beach	25	133	19	3	80	49	10
Mourilyan	2	19	6	6	33	19	5
Silkwood	9	27	5	1	32	20	6
S. Johnst.	19	46	9	3	30	15	2
<b>Total</b>	<b>219</b>	<b>787</b>	<b>310</b>	<b>60</b>	<b>381</b>	<b>255</b>	<b>56</b>

## Summarised small area crime profiles 2001-2002

(Rates per 10000 persons)

**Johnstone LGA**  
(estimated population 19,383 at 2001 census)

### Offences against the person

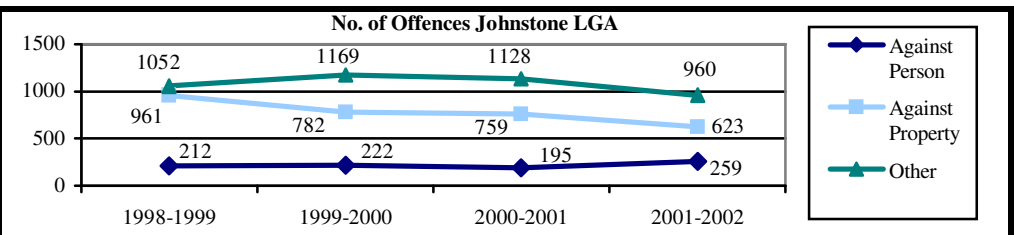
	No.	LGA Rate	Qld Rate
Homicide	2	10	7
Serious assault	75	387	316
Other assault	54	279	208
Sexual offences	64	330	178
Armed robbery	1	5	45
Unarmed robbery	2	10	16
Extortion	0	0	2
Kidnapping etc	0	0	9
Other	61	315	304
<b>Total</b>	<b>259</b>	<b>1336</b>	<b>1085</b>

### Offences against property

Unlawful entry with intent			
Dwelling	54	279	1091
Shop	27	139	237
Other	48	248	600
Arson	5	26	73
Other property damage	153	789	1414
Motor vehicle theft	74	382	1592
Stealing from			
Dwelling	26	134	241
Shop	42	217	392
Other	145	748	1600
Fraud	30	155	689
Handling stolen goods	19	98	164
<b>Total</b>	<b>623</b>	<b>3214</b>	<b>8094</b>

### Other Offences

Drug offences	354	1826	889
Prostitution offences	0	0	22
Liquor (excluding drunkenness)	11	57	47
Good order offences	153	789	412
Stock related offences	0	0	6
<b>Total</b>	<b>960</b>	<b>4953</b>	<b>2866</b>



## Conclusion

Social Capital in the Shire was promoted by the community service agencies during 2003. Of success has been the community's response to festivals and events that were organised.

However there is still a great demand on the service provision. Staff are not able to deal with all clients, and where infrastructure services are available there are long waiting lists.

This is despite there being some increase in staff and facilities available in 2003. Clearly, where possible more funding for workers and projects should be sourced.

## Future Direction

Recently, there has been a change in the approach to problems in the community. Rather than solely attempt to meet the needs of client who are experiencing difficulty, there has been direction to heal the community as a whole.

The goal is that where the community has healthy interrelationships, individuals will be less likely to develop troubles. There will also be a support network of neighbours where friends and family are not available.

Ideally, this building of social capital through actions and programs by the community services will in time decrease the need for community service provision.

## Report Card for the Shire Community

**OVERALL GRADE**

**B-**

Criteria	Grade	Recommendation Group	Explanation
Action on recommendations <b>12 of 14</b> recommendations actioned to date	<b>A</b>	Community Services Education Health Public transport	-Community services addressed almost every need identified in the benchmark. -Alternate pathways are available. -Health specialists out reach from Cairns. -Low level public transport is available.
Filling deficiencies in data	<b>C+</b>	All	-DPI Innovation report helped identify some challenges for leaders and the attitudes of the community. -No further work since Needs Analysis required.
State of the Shire	<b>C</b>	Community Community Services Health Recreation	-Participation by the community in events and culture is increasing. Demands on services are remain high. -Provision of services remains at threshold levels. Networking between service providers is increasing. -Additional outreach from Cairns. -Provision has improved but participation by youth is still low.
Goal Achievement	<b>C</b>	All	-Low levels of goal achievement continued in 2003. Most effort was expended coping with current community needs.
Community Awareness	<b>B</b>	All	-Promotion of the community services was conducted, by Council and by Mental Health.

# ECONOMIC DEVELOPMENT

## Introduction

The Johnstone Shire's economy is based on agriculture with the predominant crops being sugar cane and bananas. Also, a significant amount of land in the Shire is used for cattle fattening. Fisheries are another important industry. Most people in the Shire are directly or indirectly employed in the primary industries.

Expanding manufacturing and service industries within the Shire provide the diversity necessary for long-term growth. The largest foundry north of Brisbane is located at Wangan.

Tourism is an emerging industry with great potential for further growth.

Efforts towards economic development have focused on diversifying income sources, and improving the Shire's economic resilience.

## News

### Council

Due to the absence of an Economic Development Officer for most of 2003, there was little progress towards the development of an Economic Development Strategy for the Shire. An extension on funding for the strategy was applied for, and it should be completed in 2004.

### The Chamber of Commerce

The Shire's Chamber of Commerce increased its membership to approximately 100.

The Chamber was actively involved in promoting local businesses. A car giveaway during 2003 was a major aspect of this work. The Cutter Awards are organised to promote customer service by individuals and businesses in the Shire.

Projects supported by the Chamber of Commerce include:

- The development of the Tropical Froggery.
- The Canopy Walkway.
- Unification of the cane industry.
- Support for the banana industry.
- Dredging of the Johnstone river.
- Town signage.

### Main Roads

The department of Main Roads began work on

## Pressure

- The Shire is economically dependent mainly on the primary industries of cane and bananas. Both of these industries are struggling at present. Of note is the difficulty for Australian goods to compete on the world market.

The primary industries are also under pressure from tighter environmental regulation. Although this will ultimately benefit the community it is presently financially difficult for landholders to move to compliance.

Opportunities exist for the expansion of alternate primary industries such as fruit, however these are limited by market sizes. Some potential industries like farm-forestry require a critical mass of involvement to create the infrastructure for transport and processing.

Tourism infrastructure is well developed in the Mission Beach area. Promotion and more facilities are required to expand tourism into other locations - to make the Shire a recognised tourism destination.

A lack of skilled persons and a lack of outside ideas have been identified as a problem contributing to lack of innovation in the Shire (see the Shire Community section). There is also a significantly aged population, who are less likely to contribute to significant changes.

For the primary industries practical alternatives must be discovered and developed. This has not yet occurred successfully.

Good leadership and cooperation will also be required. A lesson to be avoided is the inundation of industries with established markets—such as has occurred to the banana industry as cane farming lost viability.

the new South Johnstone Bridge, and major improvements to Henderson Drive, and Innisfail-Japponvale road.

### Ma:mu Bushtucker and Innisfail TAFE

The Bushtucker project progressed, with the completion of the nursery to operational level. This is part of work by the Ma:mu to market bush tucker crops.

A business plan has been completed, and a memorandum of understanding with the TAFE. Coles has expressed interest in distributing bush tucker products once they are available.





New Bush Tucker Nursery at the TAFE

Demonstration plantings are being conducted to involve and train landholders. The TAFE is also promoting farm forestry timber plantations.

### Development

Major developments approved in 2003:

- A Target Country store was approved and construction started in late 2003.
- Subloo's received Council approval for a marina in the town harbour. This development is undergoing the process of application with other agencies.
- Council approved the development of a Kmart; progress on this has been delayed due to two Court appeals against the development conditions. The decision is expected in 2004.

Development Applications to Council	2002		2003	
	No.	New Lots	No.	New Lots
Urban	5	23	17	88
Economic Development	1	1	2	-
Rural Residential	2	6	4	4
Rural	9	7	20	73
Town Planning				
Impact assessments	36		45	

The majority of subdivisions approved were for the Innisfail/Belvedere area, the others were at Mission Beach and a few at Kurrimine.

Innisfail is ideally located to capture consumers that currently must travel long distances to Cairns. The Kmart and Target Country are

### Implications

- The health of the community depends greatly upon the vibrancy of the economy. Where there is financial hardship and widespread unemployment there are increased incidences of social health problems. Service provision of health and education can consequently decline in capacity. Also, the infrastructure and community services provided by Council depend upon a healthy rates base for adequate service provision.

Environmental achievements (such as revegetation, weed control, or pollutant control) are also lessened where profit margins cannot incorporate more than basic cost effectiveness. Under economic pressure it is more likely that long-term resources will be over-harvested for short-term profits, breaking down cooperative management. This undermines the sustainability of resources in the Shire, and results in continued problems for the future.

The stability of other ventures such as tourism expansion can be affected by an unhealthy community and by the compromise of natural resource values—eg. nutrient pollution to the reef, weed invasion, degradation of remnant vegetation and pressure on fauna such as the cassowary.

expected to attract customers from the subregional; catchment. Local businesses should benefit through a follow on effect from the extra people. It is hoped that a movie theatre will follow in the wake of the major retail stores to further complement the attraction of consumers to Innisfail, by providing an entertainment outlet.

### Building Approvals by Council

Buildings	2002		2003	
	No.	Value	No.	Value
Houses	42	\$4 709 767	52	\$ 7 425 863
Duplex	-		-	
Units	-		-	
Accomm.	-		-	
Commercial Buildings	51	\$3 701 583	23	\$ 6 855 125
Other Structures	198	\$2 829 286	184	\$ 2 757 231
<b>TOTAL</b>	<b>291</b>	<b>\$11 240 636</b>	<b>259</b>	<b>\$ 17 038 219</b>

The draft of the Great Green Way regional tourism strategy was released in 2003. The strategy will guide the development of tourism in the region between Townsville and Cairns. Promotion of attractions in the region will be integrated. So far the focus has been mainly on improving opportunities and information for tourists from the self-drive market.

Motels and caravan parks in the Shire enjoyed a year of good business in 2003. However, the customers were mainly workers involved in short to medium term work projects in the Shire. There was no reported increase in tourist use of these facilities.

An Ecotourist Resort has been proposed for Ella Bay. Meetings continued in 2003 between Council and the developer.

The development is planned to comprise a central facility and 30 self-contained luxury presidential suites. The project will be almost entirely self-sufficient except for telecommunications. Water supply, power generation and wastewater disposal will be obtained, generated or treated on site applying best ecological practice.

Progress towards the development of the Canopy Walkway progressed with funding promised by the State Government in 2004/05. The project is supported as part of the Queensland Government's goal to promote the state as a world class ecotourism destination. The walkway will be a collaboration between Council, QPWS and the Ma:mu. It is expected that the attraction will greatly increase tourist visitation and spending in the shire.

Tourists at the Information Centres		2001	2002	2003
<b>Innisfail</b>	Domestic	74%	73%	73%
	International	26%	27%	27%
	<b>Total</b>	<b>10 476</b>	<b>12 066</b>	<b>11 563</b>
<b>Mission Beach</b>	Domestic	53%	47%	48%
	International	47%	53%	52%
	<b>Total</b>	<b>26 276</b>	<b>26 332</b>	<b>26 693</b>

International visitors to Mission Beach are mainly from the UK or other European countries.

The completion of the Misty Mountains walking trails opened another locus for nature tourism. The extensive walks also include camping and day use areas.

River cruises along the Johnstone River did not continue through 2003.

It is thought that dredging the river will increase usage of the town harbour. Subloo's have a received Council approval to develop a marina on the harbour.

Planning towards the construction of a Tropical Frogery progressed during late 2003. The committee worked towards a feasibility study and establishing a business plan. The frogery will be primarily a tourism venture, but add on effects will include:

- Research into frogs;
- Species conservation; &
- The possible sale of frogs.

Blue Thunder boat cruises was established. The business offers reef experiences leaving from Clump Point.

Promotion of Innisfail as an Art deco tourism attraction continued.

### Paronella Park

Paronella Park is the Shire's most recognised cultural tourism destination.

~140,000 visitations were recorded in 2003.

The year was one of growth in the number of international visitors, particularly from Japan and SE Asia. This was somewhat affected later in the year by the SARS epidemic which reduced tourism from Asia. However there have been increased tour buses of Asian visitors, and a huge increase in the Asian self drive market.

The park has increased the appeal of its facilities to the Asian market. There were also inclusions in 2003 of extended opening hours and night tours, and the development of an indigenous cultural component with the Baddagun people.

Paronella Park won the 2003 first place award as a Queensland Heritage and Cultural Tourism Attraction.

**Tourism Estimations for the Wet Tropics Region** - Specific breakdowns for the Shire are not available (Source BTR—National Visitor Survey and International Visitor Survey)

**Tourism Expenditure in the Wet Tropics Region (fin. year ending 2002)**

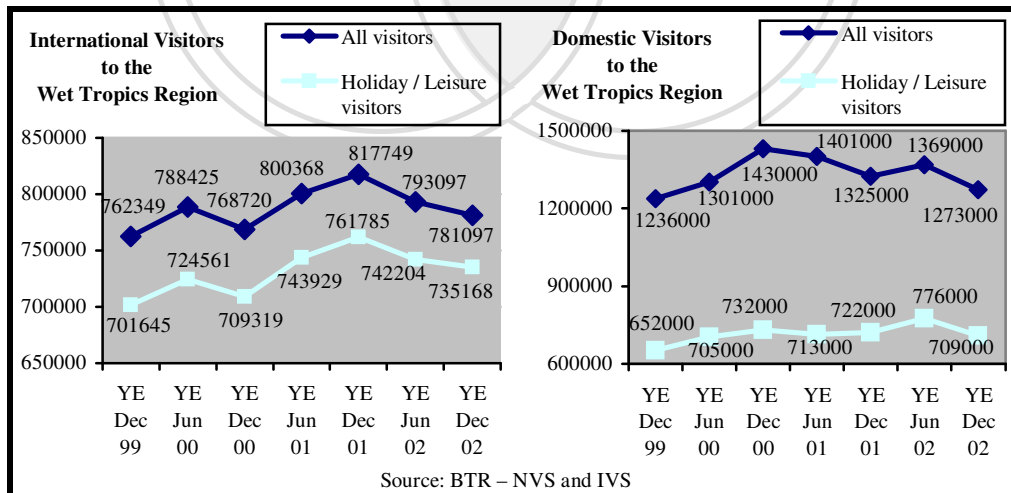
**Tourism Age Profiles (fin. year ending 2002)**

Age Profiles	International	Domestic
15 to 24 years	22%	13%
25 to 44 years	47%	45%
45 to 64 years	25%	30%
65+ years	6%	12%

	International	Domestic Overnight
<b>Visitors</b>	759,000	1,298,000
<b>Visitor Nights</b>	5,336,000	7,180,000
<b>Expenditure</b>	\$902,000,000	\$1,093,005,000

**Top Ten Activities Participated In by Tourists in Wet Tropics (fin. year ending 2002)**

International Tourists		Domestic Tourists	
<b>83%</b>	Go shopping for pleasure	<b>66%</b>	Eat out at restaurants
<b>66%</b>	Go to the beach (including swimming and diving)	<b>52%</b>	Sightseeing
<b>55%</b>	Visit national parks / state parks	<b>43%</b>	Go to the beach (including swimming and diving)
<b>54%</b>	Visit wildlife parks / zoos / aquariums	<b>34%</b>	Go shopping for pleasure
<b>49%</b>	Go to markets	<b>25%</b>	Pubs, clubs, discos
<b>42%</b>	Visit botanical or other public gardens	<b>24%</b>	Bushwalking / rainforest walks
<b>42%</b>	Go on guided tours or excursions	<b>24%</b>	Other outdoor activities (e.g. horse riding, rock climbing, white water rafting, bungee jumping, four wheel driving etc)
<b>40%</b>	Visit friends & relatives	<b>20%</b>	Go on a daytrip to another place
<b>38%</b>	Pubs, clubs, discos	<b>18%</b>	Visit friends & relatives
<b>33%</b>	Visit history / heritage buildings, sites or monuments	<b>16%</b>	Visit national parks / state parks

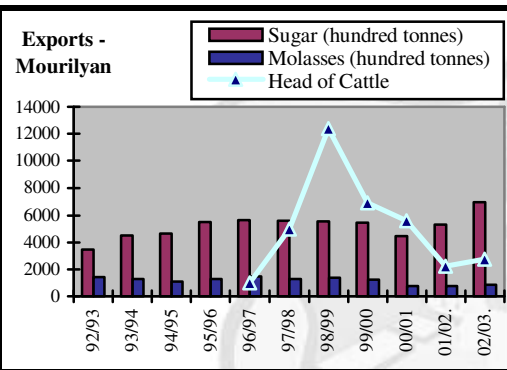
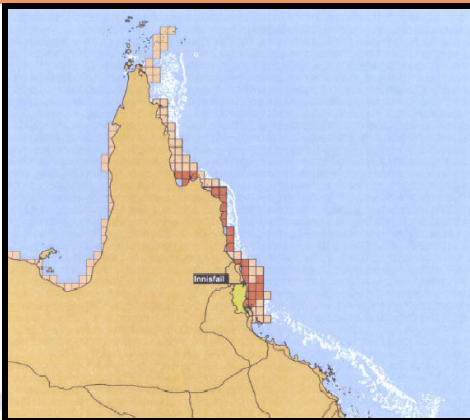


## Mourilyan Harbour

Mourilyan Harbour handled 43 ships in 2002/03, which exported -

- 696,224 tonnes of sugar (up 18.66% on the previous year; also a new record)
- 87,706 tonnes of molasses (up 13.35%)
- 2,772 head of live cattle (up 23.32%)

Discussions have continued towards expanding trade opportunities from Mourilyan Harbour. Timber export may be a possibility.



Source: Ports Corporation of Queensland [www.pcq.com.au](http://www.pcq.com.au)

## Fisheries

The Far Northern Commercial Fishing Industry is Queensland's largest outside of Brisbane. There are 339 boats in the region with a significant number of these boats based within our Shire.

### Effects of the Reef Zoning Plan

The Bureau of Rural Sciences carried out estimates on the loss to annual Gross Value of Production (GVP) from the GBR rezoning plan. In the short-term the Johnstone Shire's Fishery industries will lose approximately 10% of their annual income. This is the same as the average loss that fisheries along the reef's coast will experience. Some other regional areas will be harder hit. Approximately one third, or \$118 million per annum of Queensland fisheries income comes from the reef. A reduction of \$10.3 million p.a. is expected.

Innisfail fisheries are currently estimated at a GVP of \$5,541,000 p.a. This will become \$5,072,000 p.a. under the revised Zoning Plan, in the short-term.

### Innisfail Fisheries (Source: DPI Fisheries)

- Primary Resource Catchment (dark squares)
- Secondary Resource Catchment (light squares)

Recreational fisheries contribute \$201 million p.a. to the Queensland economy per year. It is presently estimated that the Revised Zoning Plan will affect less than 1 in 10 recreational fishing spots. Recreational fishers are expected to be able to adapt in response to the changes.

The loss to fisheries income is balanced greatly by the benefit to sustainability of the reef, and long-term protection of the production resource. It is calculated that after a period of initial loss, restocking from protected areas and improved fisheries management will increase fisheries GVP by 19% by 2010. Productivity Commission forecasts before the introduction of the Zoning Plan had previously estimated a 6% decline by 2010 (due mainly to stock depletion).

Tourism estimates for the GBR region also overshadow the short-term loss to fisheries GVP. Tourism contributes \$4,064 million p.a. to the GBR region. Only \$589 million p.a. of this is directly from marine park tourism but the reef is interlinked with tourist attraction to the region. Tourism is expected to continue to grow as a source of income to \$5,070 million p.a. by 2012, and to \$6,340 million p.a. by 2022. This growth will be affected if the environmental values on the reef are degraded.

(Sources: Bureau of Rural Sciences Report 2003, Bureau of Tourism Research Report 2003, Productivity Commission Report 2003, P.D.P. Report 2003, GBRMPA Summary Report 2003).



## Aquaculture

The aquaculture industry remained steady, with some small increases in production. Prawn aquaculture has been affected by imports of cheap prawns. Restrictions on reef fishing with the new zoning may increase demand for aquaculture product.

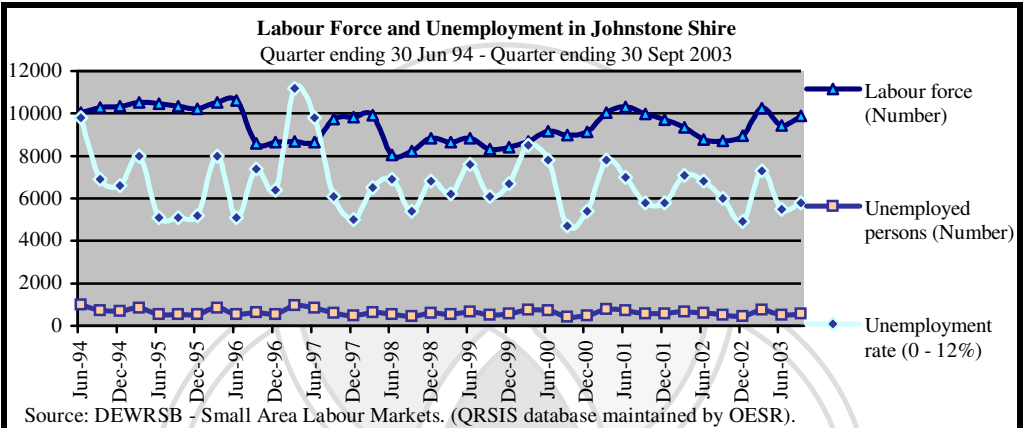
Future development in the aquaculture industry will have to meet more stringent guidelines to control nutrient release, under the Wet Tropical Coast Regional Coastal Management Plan 2003.

## Business and Employment

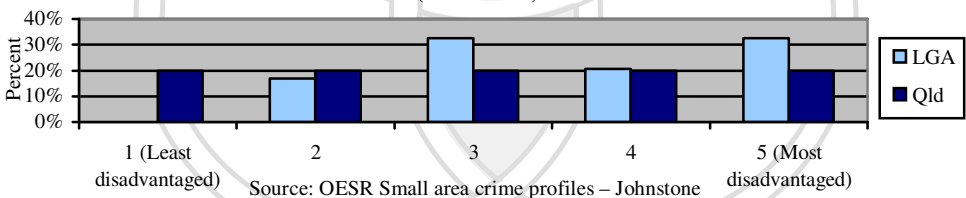
Information on the labour force, unemployment and businesses in the Shire are tabulated here.

In the first graph, it can be seen how the seasonality of the agricultural industries affects the unemployment rate.

More detailed information on the structure of employment associated with agriculture will be available next year.



**LGA population distribution by index of Relative Socio-Economic Disadvantage Quintiles (1996 census)**



**Number of Businesses and Number of Employees by Area Postcode (Jan 2003).**

Note: Some postcodes extend beyond the Johnstone local government boundaries.

No. of People Employed	Number of Businesses									Total
	Mission Beach 4852	El Arish 4855	Silkwood 4856	Silkwood East 4857	Mourilyan 4858	South Johnstone 4859	Innisfail 4860	Kurrimine, Mena Creek 4871		
0 to 4*	14	1	1	1	3	2	82	115	219	
5 to 19	17	3	2	0	5	2	113	149	291	
20 to 99	5	0	0	0	0	0	22	39	66	
100+	0	0	0	0	1	1	5	9	16	
	36	4	3	1	9	5	222	312	592*	

Source: (Adapted from) DET: Workplace Health and Safety. (QRSIS database maintained by the Office of Economic and Statistical Research (OESR)).

\*See footnote under table on next page.

## Types of Businesses by Postal Area in Johnstone Shire—Jan 2003

NOTE: Some Postcode areas extend beyond Johnstone Shire local government boundaries.

	Mission Beach 4852	El Arish 4855	Silkwood 4865	Silkwood East 4857	Mourilyan 4858	South Johnstone 4859	Innisfail 4860	Kurrimine, Mena Creek 4871	Total
<b>Manufacturing</b>	<b>1</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>4</b>	<b>21</b>	<b>23</b>	<b>53</b>
Food beverage & tobacco manf	0	0	0	0	2	1	4	5	12
Textile, cloth, f/wear. Leather manf	0	0	0	0	0	0	1	1	2
Wood & paper product manf	0	0	0	0	0	1	5	2	8
Printing, publishing & recd media	0	0	0	0	0	0	1	2	3
Petroleum, coal, chem & assoc manf	0	0	0	0	0	0	2	0	2
Non-metallic mineral prod manf	0	0	1	0	0	0	1	1	3
Metal prod manf	1	0	0	0	0	0	4	3	8
Machinery and equipment manf	0	0	1	0	0	2	2	6	11
Other manufacturers	0	0	0	0	0	0	1	3	4
<b>Electricity, gas &amp; water</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>3</b>	<b>4</b>
Electricity & gas supply	0	0	0	0	0	0	1	1	2
Water supply, sewage & drain serv	0	0	0	0	0	0	0	2	2
<b>Wholesale trade</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>33</b>	<b>11</b>	<b>48</b>
Basic material wholesaling	1	0	1	0	1	0	11	3	17
Machinery & motor vehicle w/saling	0	0	0	0	0	0	14	5	19
Personal & h/hold good w/saling	0	0	0	0	1	0	8	3	12
<b>Retail Trade</b>	<b>10</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>3</b>	<b>1</b>	<b>76</b>	<b>91</b>	<b>183</b>
Food retailing	6	0	0	0	1	1	16	42	66
Personal & h/hold good w/saling	4	0	0	0	0	0	32	32	68
Motor vehicle retailing & serv	0	1	0	1	2	0	28	17	49
<b>Accom, cafes and restaurants</b>	<b>17</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>27</b>	<b>92</b>	<b>138</b>
Accom, cafes and restaurants	17	1	0	0	1	0	27	92	138
<b>Government admin &amp; defence</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>8</b>	<b>29</b>	<b>38</b>
Government administration	0	1	0	0	0	0	8	29	38
Defence	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	0
<b>Health and Community Services</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>35</b>	<b>34</b>	<b>73</b>
Health services	1	0	0	0	0	0	21	21	43
Community services	2	0	0	0	1	0	14	13	30
<b>Personal &amp; other services</b>	<b>4</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>21</b>	<b>29</b>	<b>55</b>
Personal services	1	0	0	0	0	0	9	8	18
Other services	3	1	0	0	0	0	12	21	37
Private Households employing staff	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	0
<b>Postal Area Total</b>	<b>36</b>	<b>4</b>	<b>3</b>	<b>1</b>	<b>9</b>	<b>5</b>	<b>222</b>	<b>312</b>	<b>592</b>

Source: (Adapted from) DET: Workplace Health and Safety.

QRSIS database maintained by the Office of Economic and Statistical Research (OESR).

\*Footnotes: Businesses with 0-5 employees are not required to register with Workplace Health and Safety. Only selected business have been presented here due to an inadequate coverage of the number of employees in industries such as Agriculture, Finance and Property, etc.

**Total  
Businesses\***

The cane industry continued to experience difficulties in 2003. The industry was exposed competitively to a low world commodity price for sugar, and was further badly affected by a strong Australian dollar during the year. Australia's sugar industry is 85% export based, i.e. Australian domestic consumption takes up only 15% of its output. Also, the industry is not protected from imports in the domestic market.

Despite very good crops and climatic conditions in 2003, industry gains were below the cost of production. Price per tonne for the crop planted in 2002 came in at \$270 per tonne of sugar. Growers have so far managed to tough out the economic downturn but are expected to face greater difficulties, with price projections for the 2003 crop even lower, at \$230 per tonne of sugar. Many farmers may not raise a crop in 2004, since this trend is expected to continue.

Strategically, the industry focused on the short-term by attempting to reduce costs, whilst waiting for an upturn in prices. Government assistance has also been sought. There is some hope that conditions may change due to unforeseen events on the international market. World sugar consumption is rising, so if the industry can survive the interim there could be future growth.

It has been recognised by the industry that environmental best practice will need to be incorporated into cane farming, for the best hope of gaining government assistance. This is due to a high level of public perception that cane farming has adverse impacts on the Great Barrier Reef.

Diversification, or value adding to cane has been proposed to help the industry. Unfortunately in 2003, some of the major avenues remained held back by market forces and regulatory conditions. Another problem with diversification is that new products will also be exposed to fluctuating markets.

- A 10% cap for ethanol content in fuel was set in April 2003, after significant delays that may have eroded consumer confidence in ethanol. The development of an ethanol industry has also been hampered by the

federal government's policy on fuel excise - although an indefinite exemption was promised for ethanol, this was reduced to a five year period - which has deterred significant investment in the industry. The Federal government has been lobbied to reinstate the indefinite excise. Alternate technologies to produce ethanol more cheaply are also being researched.

- Biodegradable plastics can be created from lactic acid produced from cane. Bundaberg Sugar has conducted studies in conjunction with Toyota Motor Co. into the feasibility of producing bio-plastics.
- Power Cogeneration into the grid is ongoing at the South Johnstone Mill. However, greater investment incentives are required before it is likely that this option is introduced at other mills in the region.
- Research and development continued into value adding to mill mud and ash. These can be reused as fertilisers, but are a problem to store and transport. Bundaberg Sugar is looking at creating a more manageable form.

Despite the financial benefits to the Mill from these types of diversification, not a great deal from value adding filters down to the farmer. Producing cane as fodder for stock may be a method that has some return to the farmer.

An analysis of the impact of a complete demise of the Sugar Industry was carried out in 2002 with a report, commissioned from Cummings Economics - "The Sugar Industry and The Far North Queensland Economy". The report reached a number of conclusions about potential impacts. The demise of the industry would cause a potential ~25% loss of economic activity in our Shire. Approximately 30% of jobs in the Shire would be lost.

Additional significant impacts would be on Mourilyan Harbour, which could close with the loss of export of sugar and molasses. Present cattle exports would be unlikely to sustain the costs of the harbour's operation.

Opportunities for farmers to switch to other industries are limited, due to limited market sizes for other crop types. No proven large-scale field crop appears to be currently available. Beef cattle production has a low value per hectare compared to sugar.

## Cattle

2003 was a reasonable year for the cattle industry. The Australian drought forced growers out west to reduce stock. This lowered prices nationally as there was an oversupply. Local growers in the wet coastal region were less affected by these conditions, as they were able to hold onto their stock. Cattle prices rose again by the end of the year. Locally, the dry weather somewhat affected productivity, but not to a great extent.

Price projections for 2004 are somewhat lower, due mainly to a high Australian dollar affecting exports, and concern over BSE (bovine spongiform encephalopathy) in America.

Downturns in exports have to date been balanced by an increase in domestic demand from Southern feedlots.

The cattle industry contributes a large amount of follow on revenue to the Shire. Principally this is through employment at the slaughter yards and meatworks. There is also an effect through accommodation – where members of the cattle industry stop in the region to attend sales.

Johnstone Shire has traditionally been a fattening area for cattle. Outside growers pasture cattle for a time to fatten the beasts before sales. This is changing, as the Shire has seen an increase in permanent growing areas for live export.



## Bananas

The banana industry began to face severe challenges in 2003. Since June there was an oversupply of bananas, the highest number of cartons per week on record, which resulted in a



price drop. The price has since hovered above and below the break-even point for most farmers. The problem is simply due to too much banana farming, as many growers have switched from cane.

Banana farming is further threatened by exposure to importation of Philippine bananas, which will undercut domestic banana prices. The Industry was hoping that an assessment of the risk of introducing exotic diseases such as moko disease, carried out by Biosecurity Australia, would convince the Federal Government to prevent the importation of bananas.

Efforts to combat the importation have been funded by a levee from growers. Another proposed effort is to heavily advertise Australian bananas, also funded by a levee from growers.

There are no real alternatives for banana farmers forced to leave the industry. There can be only limited expansion of the cattle industry, and cane farming also faces great problems. There are approximately 250-280 growers in the Johnstone Shire. They, their families, and all workers associated with bananas will face severe repercussions. Continued depression of the primary industries will create serious social hardships in the Shire.

Present issues for growers are the following, in order of concern to growers:

- The potential for imports
- Profitability
- Labour issues – getting and keeping skilled labour



- Achieving cohesive industry structure and representation
- Environmental issues

Regional Value of the Industry ~\$240 Million

There has been little diversification of products from the banana industry. Banana paper, although an excellent product, has faced distrust from growers due to heavy-handed promotion. Also, as the core of the plant is utilised, there are issues with nutrient export off-farm. These problems do not appear to be insurmountable.

Banana wine is a new product that has achieved success. Dried banana chips are also being produced.

Little research and development occurred in 2003. Only the Cavendish banana is grown in the wet tropics, due to a soil fungus that affects Ladyfinger bananas. There has been no research into overcoming this problem.

Organic bananas are being grown, and there is hope of an export industry to Europe – where organic products are in greater demand than on the domestic market.

Red tip bananas have also taken off successfully, on the basis that they are grown in an environmentally sustainable manner.

If the banana industry is to survive it will be in a much-diminished form. Present levels of competition are not sustainable economically, so some growers are likely to have to go. If the threatened import of Philippine bananas occurs the industry will be further downsized dramatically.

## Tropical Fruit

The tropical fruit industry benefited from the setting up of Australian Tropical Marketing. This is a grower-owned company formed to promote tropical fruits to the public on the domestic market. Tropical fruits are principally consumed by a limited Asian market within Australia, so campaigns for wider recognition are important for the industry to grow.

The industry continued to expand in 2003. It is expected that crops should double in 5 years

QLD Crop	Area (Ha)	Tree No.
Papaya	350	na
Rambutan	170	28,000
Mangosteen	100	14,000
Durian	100	13,000
Other Tropicals*	100	20,000

\* Pomelo, Jackfruit Dragon fruit, Carambola, Star Apple, Abiu.

(Source: DPI)

QLD Crop	Current Value	Approximate Projected Value (2010)
Lychee	\$30 M	\$50 M
Papaya	\$13 M	Not estimated
Rambutan	\$5 M	\$8 M
Longan	\$4 M	\$8 M
Mangosteen	\$0.75 M	\$4.5 M
Durian	\$0.5 M	\$4.5 M

Source: DPI Exotic Crop Review Workshop – Allan Zappala in ‘Summary of Proceedings and Outcomes of a Workshop held at South Johnstone 12-13 February 2003’ By Pedro O’Connor and Yan Diczbalis.

time. This may be a conservative estimate if there is a popular response to the fruit.

The nature of the industry has been undergoing a transformation and is becoming more commercially viable. This is supported by a wave of younger growers buying into fruit farming, with professional experience and energy to promote the marketing of the product.

The industry offers an avenue for diversification for some landholders. The Shire is ideally suited for high value fruit crops, as rainfall is usually dependable.

Tropical fruit has also proved to be an industry compatible with tourism. Examples include Farm stays, Tropical Fruit Wineries and tourism routes such as the Food Trails organised by Australian Tropical Foods. The ‘Taste of the Great Green Way’ is one such route, which includes stops within the Shire. There is potential for further participation.

2003 saw a poor harvest for the tropical fruits due to climate. Despite a good flowering in dry conditions, the lack of water caused a poor fruit crop. Then the sudden onset of rainfall in the wet season caused a 60% fruit drop. The cost of this

to farmers was offset by a corresponding market price rise because of the fruit scarcity. But the situation was counterproductive to the expansion of the industry, because quotas with new clients could not be entirely met.

After years of development to reach an established state, the industry now faces imports from Asia. Fortunately, the seasonality of the Asian industry is opposite to our Australian growers. As a result, imports will arrive in our off-season. This may have a positive result, as consumer awareness of tropical fruits may be better developed by the extra exposure. However, continuous exposure may reduce consumer reaction to the domestic harvest, and thereby lower fruit prices. Hopefully this will be balanced by the increased consumer base. Exports to Japan of tropical fruits have been successful, with a number of very good years. Present currency exchange rates have reduced the competitiveness of this, but the tropical fruits remain a successful export.

**Conclusion**

2003 was another year of tribulation for the major agricultural industries, with little hope of improvement in the situation likely.

On all other fronts the economic development of the Shire moved forward. A range of small industries achieved milestones during 2003. Tourism development has inspired a number of new avenues for diversification.

**Future Direction**

The completion of the Economic Development Strategy by Council will help integrate and prioritise directions in the growth of the Shire's economy. Alternate avenues will help buffer the Shire against future downturns in the primary industries.

**Report Card for Economic Development**

**OVERALL GRADE C**

Criteria	Grade	Recommendation	Explanation
Action on recommendations <b>19 of 22</b> recommendations actioned to date	<b>A</b>	-E.D. Strategy -Tourism -Retail -Primary Industries  -Manufacturing	-E.D. Strategy still pending. -All 2000 recommendations completed. -Developments have been attracted. -Efforts conducted towards diversification of cane products. -Farm forestry requires further investigation. -No goals set out in 2000.
Filling deficiencies in data	<b>D</b>	-All	-No information gathering occurred in 2003.
State of the Shire	<b>D-</b>	-Tourism -Retail -Primary Industries	-Tourism opportunity continued to grow. -Major retail developments were attracted. -The major primary industries continued to fail. Tropical fruits grew in capability. Fisheries will benefit in the long term from restrictions placed on resource harvest.
Goal Achievement	<b>C</b>	-Council  -Diversification	-Continued delays towards the completion of the Economic Development Strategy. -Continued exploration and success of new income avenues by small scale operations.
Community Awareness	<b>B</b>	-All	-Calender of events under development. -Active promotion by the Chamber of Commerce and other groups.

## COUNCIL ACTIVITIES

### Introduction

Johnstone Shire Council is committed to the provision of infrastructure and service to meet the needs of the community. Additionally, the Council is dedicated to maintaining the assets and liveability of the Shire.

### News

Environmental investigations continued—to establish guidelines for improving the sewage treatment plant in order to reduce nutrients entering the waterways. Once these guidelines are set, work can progress to redeveloping the plant to meet new target levels. This will involve the addition of tertiary treatment.

The development of sewage at Mission beach progressed during 2003, with contracts awarded for all works, the sewage treatment plant, and for the pump stations and all reticulation.

Overflows from the sewage reticulation system for Innisfail were a problem again in 2003. Infiltration of groundwater during wet weather is the major cause of sewage overflows. In total 31 overflows occurred during 2003.

The town's sewage system has had only relatively small upgrades since installation in the 1970's. Expansion of the town with new suburban areas has added further pressure on the system. While larger pumps were installed to cope, the reticulation piping itself was not upgraded.

Whilst a respite was experienced during recent dry years, the overflow problem has returned with the wet weather, with significant amounts of sewage contaminated stormwater being released into the urban environment and thence into the creeks and rivers.

Council is now making a response to the situation, with the first priority being repair and upgrade of the reticulation system. A four year plan will be developed in 2004, with a goal of preventing overflows, and the inclusion of tertiary treatment at the sewage treatment plant.



Flood mapping was developed and made available to the public for the Innisfail area. The maps describe the levels of water likely to be experienced during slight flooding (a 1 in 5 year event) through to severe floods (a 1 in 100 year event).

The development of the Cycleway & Shared Use Path Strategy progressed towards completion. The draft report is due for release in April 2004. The aim of the plan is to guide future planning of footpaths and cycleways and encourage more walking and cycling in the Shire.

### Pressure

- Council's role is to ensure service provision meets the requirements of the community, and;

To sponsor developments or services that increase the standard of living and opportunity in the community. This has to be balanced against the cost of maintenance of existing services and infrastructure.

To represent and support a diversity of viewpoints in the community. However, Council sets an example as a leader to private enterprise and the community and must determine the best direction in balance with these viewpoints.

To be environmentally responsible in with the goals of sustainability, to ensure that opportunities for future generations remain at the same or a better standard that they currently exist at.

**Council Employment – 194 Employees**  
(includes permanent, temporary and casual)

General Management	5
Corporate Services	20
Community Services	25
Environmental Services	33
Technical Services	111

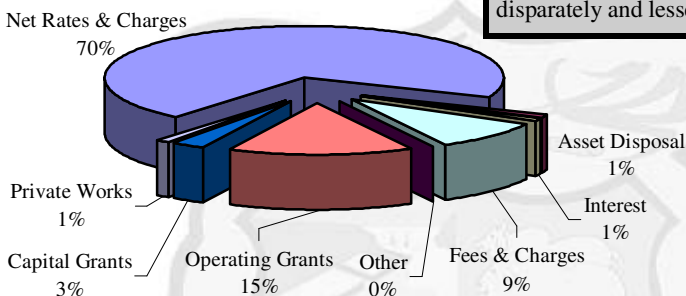
**Implications**

- Council facilitates the standard of living for the community through its services and controls. When this breaks down there can be inadequate infrastructure, potential health issues, lack of local law enforcement, and neglect of community issues and the environment.

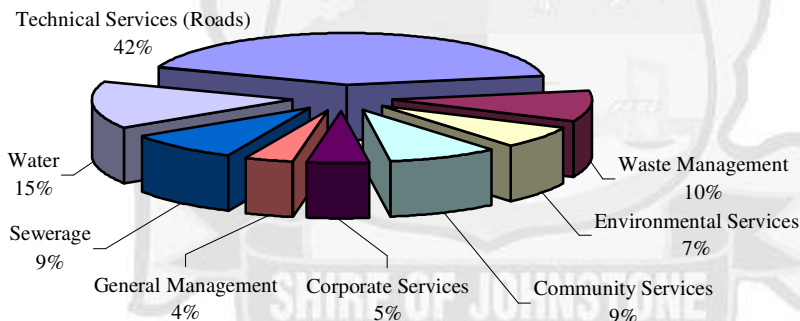
Rates and fees may also increase when Council is not able to manage its funds to meet its responsibilities.

Council also provides a central hub from which direction can be organised. Without this, community groups attempting progress may act disparately and lessen their achievements.

**Council Income**



**Council Spending**



Functions	Revenue		Total revenue	Total expenses	Net result	Assets
	Grants	Other				
General Management	58,812	316,913	375,755	701,915	(326,160)	1,110,714
Corporate Services	1,647,874	9,586,525	11,234,399	1,245,381	9,989,018	14,822,276
Environment Services	252,417	292,129	544,546	1,548,247	(616,116)	1,003,701
Technical Services	690,175	616,459	1,306,634	9,818,705	(8,512,071)	76,895,056
Waste Management	15,067	2,496,051	2,511,118	2,478,557	32,561	2,006,414
Water	-	2,622,441	2,622,441	3,461,634	(839,193)	45,541,093
Sewerage	-	2,020,225	2,020,225	2,215,578	195,353	18,438,894
<b>Total</b>	<b>3,991,848</b>	<b>18,150,041</b>	<b>22,141,889</b>	<b>23,612,904</b>	<b>(1,471,015)</b>	<b>163,240,059</b>

Further analyses of these figures are available in the JSC Annual Report 2002/2003.





## Conclusion

Council achieved positive progress in 2003 towards a number of new projects and initiatives. However, lack of maintenance of existing facilities has led to large expected costs over the next few future years.

## Future Direction

Council will require greater commitment to long term planning, to ensure that maintenance of important systems is not neglected. The cost of repair of the sewage reticulation will have some impacts on other service provision.

The range of services that Council provides will continue to improve—with the addition of sewage at Mission beach, and the recreational opportunities afforded by the Cycleway strategy.

State of the Shire went live to radio in 2003 – Council staff were interviewed by the ABC. Summaries from the State of the Shire sections were included in the Innisfail Advocate to increase the exposure of this information to the public, and to heighten awareness of the source.

Dry weather during the year tended to concentrate chemicals and metals emanating from Council's landfills and transfer operations to ground and surface waters. The following exceedences of licences limits were recorded, but no clear patterns have proved evident, and no impacts on wildlife (eg. fishkill) have been seen: Stoters Hill (3) - Iron (may be normal for area). Bells Creek (2) - Iron and Lead. Goondi (6) - Ammonia, Zinc and Turbidity. Monitoring continues; to determine if landfill remediation work may be necessary in the future.



## Report Card for Council Activities

**OVERALL GRADE**

**B-**

Criteria	Grade	Recommendation	Explanation
Action on recommendations <b>12 of 12</b> Completed	<b>A+</b>	All 2000 benchmark recommendations.	All have been investigated, and those practical have been acted upon.
State of the Shire	<b>D-</b>	-Development -IEMS -Maintenance	-Progress continued towards improving facilities around the Shire. -Some non-compliance, but this is due to past practices at the closed landfills. Monitoring will continue to determine the need for remediation work. -Council failed to conduct basic maintenance on the sewage system. This has led to great problems.
Goal Achievement	<b>B</b>	-All	Although work was conducted towards all recommendations, a few were impracticable.
Community Awareness	<b>B</b>	-Reporting	The annual report, and State of the Shire reporting continue as open sources of information to the community. The Council advertises important announcements in the Innisfail Advocate.

## SUMMARY OF PROGRESS

State of the Shire reporting has again demonstrated the community's commitment to helping to improve the Shire's environmental sustainability. We would like to thank all those people involved in projects to better the State of the Shire for their determination, and also for their help in providing their time to make this report possible.

In conclusion, the Shire continued to gradually progress towards integrating the three tiers of sustainability—Community, Economy, and Ecology. Most aspects of all the sections discussed in the report improved, although there is still much ground to cover.

The Update continued to describe the community's progress towards the goals set out in the 2000 Benchmark Report. The State of the Shire in 2003 can be summarised as follows:

	2001	2002	2003
<b>Biodiversity</b>	<b>B+</b>	<b>B-</b>	<b>B+</b>
Floral and faunal biodiversity remained stable in the Shire. Strategic plans for future management were completed and should result in the reduction of pressures on biodiversity, and the protection of significant areas. The plans also include means to gradually re-establish areas where important biodiversity has been lost. Better data is still required for fauna.			
<b>Land Management</b>	<b>C+</b>	<b>B</b>	<b>B</b>
Best practice land management was being gradually adopted by land holders. Financial challenges continued to slow this participation. Pest control was well managed and achieved good success.			
<b>Water and Atmospheric Management</b>	<b>B</b>	<b>B-</b>	<b>B</b>
The NPI database has greatly improved the information on pollution. Stormwater monitoring has similarly increased the information available. The state of the Shire's waterways, reef and atmosphere did not improve during 2003, but strategies for future management were completed.			
<b>Solid Waste Management</b>	<b>B+</b>	<b>B</b>	<b>B+</b>
Solid waste management continued to expand the scope of its activities, with exploration of sharps management and further recycling. Total wet waste volumes collected increased during the year.			
<b>The Shire Community</b>	<b>B-</b>	<b>B-</b>	<b>B-</b>
The community services continued to work to meet the provision required by the community. Approaches to increase the capacity for the community to help itself are being developed. Better coordination between services may also help.			
<b>Economic Development</b>	<b>B-</b>	<b>B</b>	<b>C</b>
Downturns in the major agricultural industries continued. The situation is not expected to improve in the short-term. Retail development helped improve Innisfail's attraction as the centre of a shopping catchment. Development of an Economic Development Strategy was still pending.			
<b>Council Activities</b>	<b>B</b>	<b>B+</b>	<b>B-</b>
Council planned expansion of its service provision with sewage at Mission Beach, and cycleways and shared use pathways. A lack of maintenance of some existing services was identified, which will lead to increased costs over the next few years.			

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### Government

- Australian Bureau of Statistics
- Australian Institute of Marine Science
- Bureau of Tourism Research
- Centre for Tropical Restoration
- Centrelink
- Department of Agriculture, Fisheries and Forestry—Bureau of Rural Sciences
- Department of Housing
- Department of Primary Industries (incorporating Queensland Fisheries Service)
- Department of Main Roads & Transport
- Department of Natural Resources, Mines & Energy
- Education Queensland
- Environmental Protection Agency (incorporating Queensland Parks and Wildlife Service)
- Far North Queensland Regional Organisation of Councils
- Great Barrier Marine Park Authority
- Local Authority Waste Advisory Committee
- Office of Economic and Statistical Research
- Productivity Commission
- Queensland Health
- Queensland Police Service
- Wet Tropics Management Authority

### Community Groups

- Community for Coastal and Cassowary Conservation (C4)
- Community Revegetation Volunteer Group
- The Innisfail Art Deco Society
- Johnstone Cultural Association
- Johnstone Ecological Society
- Johnstone River Catchment Management Association
- Landcare

### Business/ Industry

- Agforce
- Australian Rainforest Foundation
- Barramundi Waters
- Brothers Leagues Club
- Bundaberg Sugar
- Bureau of Sugar Experiment Stations
- CANEGROWERS
- Cassowary Coast Development Bureau
- Conservation Volunteers Australia
- Cummings Economics
- Innisfail Chamber of Commerce
- Innisfail Community Support Centre
- Innisfail Historical Society
- Innisfail and Mission beach Visitors Centres
- Johnstone College of TAFE
- Innisfail Youth and Family Care
- Mourilyan Cane Protection and Productivity Board
- Paronella Park
- PCYC
- Ports Corporation of Queensland
- Queensland Fruit and Vegetable Growers
- Tropical Fruits
- Wet Tropics Community Housing

### Council Departments and Staff from:

- Environmental Services
- Community Services
- Corporate Services
- Technical services
- Councillors

Thank you also to all those individuals who gave their time and effort to make the State of the Shire Update possible.



2003 — INTERNATIONAL YEAR OF FRESHWATER

