

## Summary Report – The State of the Johnstone Shire Year 2000 Benchmark

This is a summary of the Johnstone State of the Shire Benchmark Report Year 2000. The report aims to inform the community about local environmental (natural, economic and social) issues and actions completed or required in order to achieve ecological sustainable development.

State of the Environment Reporting is not yet a legislative requirement in Queensland, however the Johnstone Shire Council has been proactive in producing a year 2000 report to gauge its “environmental” performance and provide a benchmark for future performance reporting.

The report covers biodiversity, land management, water and atmospheric management, waste management, the Shire community, economic development, and Council activities.

### The Johnstone Shire in brief

The Johnstone Shire covers an area of 1,634 km<sup>2</sup> and is located in Tropical North Eastern Queensland, Australia. The major town of Innisfail is located approximately 90 kilometres south of Cairns. The Shire has a wet tropical environment receiving an average 3500mm of rainfall each year. At the time of the 1996 census the Shire population was 19,780, most of whom reside in Innisfail.

### Local Government’s Role

Local Government in Queensland is responsible for a wide range of operational and regulatory tasks, including planning, waste collection, maintenance of roads and parks, provision of water supply and sewage treatment infrastructure, and community services as well as implementation of environmental policies and programs. Johnstone Shire Council is committed to protecting and enhancing the natural, built, and social environment through effective and efficient environmental management.

The report has listed a number of recommendations that are aimed at reducing the pressures on the “environment” where required, or at maintaining the current state. This report provides a benchmark, and as such it is impossible to make comment on whether the Shire environment (economic, social and natural) is improving, maintaining a constant level, or deteriorating. Future reports will be able to measure performance against the benchmarks set in this report, to see if the implemented recommendations have reduced the pressures on the environment.

**Biodiversity – Flora and Fauna** – the Johnstone Shire is part of the Wet Tropics Bioregion of Queensland. It is home to a large but unknown number of flora and fauna species, a significant proportion of which are rare or threatened. The biodiversity of the area is subject to numerous threats, with protected area management being the most prominent initiative to address this concern. Recommendations include further studies, public awareness, and more sustainable management of existing resources.

**Land Management** – within the Johnstone Shire catchment management assists with managing the natural resource. Many disturbances are identified in the Johnstone River, Moresby River and Liverpool Creek Catchments, with the effects of adjacent land uses on waterway health being a significant issue within each catchment. Pest management, minimum-tillage cultivation, and best management practices are being established within the sugar cane industry to protect natural resources. In some locations urban land uses were also found to be degrading the surface waters, ground waters and floodplains. Recommendations include forward planning and management of waterways, improved sewage management throughout the Shire, and enhanced sustainability of primary production.

**Water and Atmospheric Management** – ground, fresh, tidal and estuarine, and coastal waters are valuable assets, contributing to the maintenance of many industries and natural resources. Many studies, and monitoring of these resources, have been undertaken, with results indicating that the quality of these resources is generally good. Limited information is available on atmospheric quality with no assessment undertaken, though, it is the belief of many that atmospheric pollution is not an issue in the Shire.

**Solid Waste Management** – Council currently operates a transfer station at Bells Creek, and a transfer station and dry waste landfill at Stoters Hill. Many initiatives have been adopted to reduce the amount of waste for disposal, including waste separation, composting, community education, waste management plans, vermiculture, drummuster, and pre-cyclone clean ups. In addition, a waste stream analysis, wheelie bin survey, and community attitude survey have also been conducted to identify areas for future improvement. Recommendations include establishment of a waste reporting system, monitoring and review, and further public education.

**The Shire Community** – at the time of the 1996 census, the Johnstone Shire had a population of 19,780 persons of varying age and background. These residents were well provided for with regard to housing, education, family support services, cultural and recreational organisations, and legal and public safety initiatives. Access to a greater range of health services is required. There is room for improvement within each of these services, especially in specialist care, and facilities such as youth recreation and specialised housing, with promotion of services available urgently needed. Recommendations include increased specialist care, the provision of culturally sensitive services, and the installation of unstructured youth recreational facilities.

**Economic Development** – economic and urban development in the Shire is built upon the agricultural, tourism and business industries. The Shire has been, and still is, reliant on agricultural industries, with movement toward expansion and creation of new industries. There is potential for increased tourism in the Shire, with existing and proposed attractions being more widely promoted to improve our market share. However, for these industries to prosper, the Shire must have adequate accommodation, retail, service and professional businesses to meet their needs. Expansion of economy should be matched by an expansion of urban development to cater for the increase in people and businesses. Recommendations include commissioning of a canopy walk, establishment of an ethanol industry, improved public recreational facilities, and establishment of strategies to attract more people to the Shire.

**Council Activities** – Council has in place many programs to manage and protect the environment and reduce environmental harm. Many of these activities are subject to strict monitoring and reporting requirements, with an assessment of Council activities showing a high level of compliance with licence requirements. Council has also assessed old landfill sites, with strategies proposed for remediation of these sites. Council's focus is now on maintaining its assets especially with a resealing program of the 500km of Council controlled roads in the Shire, replacement of timber bridges, and adoption of programmed building maintenance and total management programs for water and sewage facilities. Recommendations include that Council resource the revolving fund for voluntary acquisition of land with high conservation value, upgrade the Innisfail sewage treatment plant, install sewage collection and treatment for Mission Beach, continue to implement the road resealing program and landfill closure plans.

#### Further Information

This summary report is only one component of the whole reporting process. Other information/documentation includes:

- Main Report
- Technical Papers
- Forum Abstracts
- Website: [www.jsc.qld.gov.au](http://www.jsc.qld.gov.au)

Or contact Johnstone Shire Council customer service on 07 4030 2222.

The State of the Shire Report is a summary of the attributes of the Johnstone Shire environment and the human impacts on the environment within the Shire. The report provides a public record of the activities of State and Local government, industry and the community in protecting and restoring the environment. The State of the Shire Report examines issues identified within the Shire following the pressure-state-response-implications model of reporting. The model identifies the pressures on the environment, assesses their current state using a set of indicators, and proposes responses to reducing the pressures on the environment. At each stage of the cycle consideration is given to the implications of actions or inactions.

| <b>Pressure</b>   | <b>State</b>  | <b>Government/Industry Response</b>  | <b>Community Response</b>   |
|---|---|--|---|
| <b>Biodiversity – Flora and Fauna</b>   |   |  |   |
| <ul style="list-style-type: none"> <li>• Loss of biodiversity</li> <li>• Loss of threatened species</li> <li>• Loss of habitat</li> <li>• Habitat degradation</li> <li>• Alterations of water tables</li> <li>• Feral animals and plants</li> </ul> | <ul style="list-style-type: none"> <li>• 566 terrestrial vertebrate fauna (Wet Tropics region)</li> <li>• 23 % rare or threatened</li> <li>• 105 regional vegetation ecosystems (region)</li> </ul>   | <ul style="list-style-type: none"> <li>• Wildlife management on roads</li> <li>• Distribution of education material</li> <li>• Voluntary acquisition of critical habitat</li> <li>• Land rehabilitation</li> <li>• Monitor existing habitat</li> <li>• Management of pests on all lands</li> </ul>   | <ul style="list-style-type: none"> <li>• Reduce speed where wildlife cross road</li> <li>• Assist with community tree plantings</li> <li>• Contact Council prior to habitat removal</li> <li>• Responsible pet ownership</li> </ul>   |
| <b>Land Management</b>  |   |  |   |
| <ul style="list-style-type: none"> <li>• Catchment degradation</li> <li>• Increased soil erosion</li> <li>• Pest animals and plants</li> <li>• Climatic extremes</li> <li>• Economic pressures</li> <li>• Urban water pollution</li> </ul>          | <ul style="list-style-type: none"> <li>• Johnstone River wetlands reduced by 60% since 1952</li> <li>• 73% of wetlands in Moresby Catchment protected</li> <li>• Severe bank instability in the Liverpool Catchment</li> <li>• 26 200 ha cane production</li> <li>• 4 500 ha banana production</li> </ul> | <ul style="list-style-type: none"> <li>• Sustainable land use guidelines</li> <li>• Development of river management plans</li> <li>• Catchment monitoring</li> <li>• Catchment rehabilitation</li> <li>• Protection of wetlands</li> <li>• Pest control</li> <li>• Enhanced farming practices</li> <li>• Stormwater Management Plan</li> <li>• Upgrade Sewage Treatment</li> </ul> | <ul style="list-style-type: none"> <li>• Preservation of habitat</li> <li>• Control pests on own land</li> <li>• Leave vegetation on foreshores and creek banks</li> <li>• Test for acid sulphate soils before developing land</li> </ul>   |
| <b>Water and Atmospheric Management</b>   |   |  |   |
| <ul style="list-style-type: none"> <li>• Intensive grazing or agriculture</li> <li>• Nutrient and sediment discharges</li> <li>• Saltwater intrusion to groundwater</li> </ul>  | <ul style="list-style-type: none"> <li>• 4.7 million megalitres per annum discharged from the Johnstone Basin</li> <li>• 5160 hectares of crops licensed to be irrigated</li> <li>• Only point source data on atmosphere</li> </ul>   | <ul style="list-style-type: none"> <li>• Assessment of nutrient and sediment discharges</li> <li>• Instream flow values be established for water allocations</li> <li>• Regular water quality monitoring of major river systems</li> </ul>   | <ul style="list-style-type: none"> <li>• Appropriate stocking rates</li> <li>• Report pollution events</li> <li>• Put waste in the bins provided</li> <li>• Eliminate “pollutants” from domestic water run-off into drains</li> <li>• Pick up litter from drains</li> <li>• Keep our streams clean</li> </ul> |
| <b>Solid Waste Management</b>   |   |  |   |
| <ul style="list-style-type: none"> <li>• Unsorted wastes</li> <li>• Contaminated wastes</li> <li>• Quantity of wet waste</li> <li>• Throwaway society</li> </ul>  | <ul style="list-style-type: none"> <li>• Average 600 tonnes of wet waste a month</li> <li>• Average 400 tonnes of dry waste a month</li> </ul>  | <ul style="list-style-type: none"> <li>• Community awareness and education programs</li> <li>• Waste reporting, monitoring and review program</li> <li>• Incentives for waste separation and</li> </ul>  | <ul style="list-style-type: none"> <li>• obtain a compost bin or worm farm from Council</li> <li>• take clean chemical drums to transfer station</li> <li>• clean up Johnstone Shire by picking up</li> </ul>   |

|   |  |  |  |
|---|--|--|--|
|   |  | <ul style="list-style-type: none"> <li>reduction</li> <li>Enforce waste management regulations</li> </ul>  | <ul style="list-style-type: none"> <li>or eliminating litter</li> <li>deliver household waste oil to transfer station</li> <li>buy items with less packaging</li> <li>buy recycled material</li> </ul>   |
| <b>The Shire Community</b>  |  |  |  |
| <ul style="list-style-type: none"> <li>insufficient safe housing</li> <li>lack of awareness of support programs offered in Shire</li> <li>limited unstructured youth recreation facilities</li> <li>lack of some medial specialists</li> </ul>  | <ul style="list-style-type: none"> <li>19,780 persons in 1996</li> <li>43% living in Innisfail</li> <li>310 births, 127 deaths</li> <li>12.9% overseas born</li> <li>7.5 % indigenous</li> <li>179 “support” housing units</li> <li>reduction in reported property offences</li> </ul>   | <ul style="list-style-type: none"> <li>Investigate increased “support” housing</li> <li>Increase ear nose and throat specialist care</li> <li>Further promotion of support services</li> <li>Annual cultural forum be held</li> <li>Provision of unstructured youth facilities</li> </ul>  | <ul style="list-style-type: none"> <li>Access support services when require</li> <li>Become involved in a community group</li> <li>Support community events</li> <li>Get to know your neighbours</li> </ul>  |
| <b>Economic Development</b>   |  |  |  |
| <ul style="list-style-type: none"> <li>Adverse weather conditions for agriculture</li> <li>Declining CCS</li> <li>Insufficient facilities for large numbers of tourists</li> <li>People using retail outlets in Cairns</li> <li>Reduction in building industry</li> </ul>   | <ul style="list-style-type: none"> <li>low income for some agriculture</li> <li>South Johnstone Mill viability</li> <li>40 000 + people through Clump Point Jetty</li> <li>100 000 people through Paronella Park</li> <li>Pre-feasibility studies on Palmerston Canopy Walk</li> <li>Olympic Torch Relay</li> <li>Good retail except variety store</li> <li>247 buildings permits issued for a total value of \$10 419 846.00</li> </ul> | <ul style="list-style-type: none"> <li>Support for development of an ethanol industry</li> <li>Research into enhanced farming practices</li> <li>Facilitate the commissioning of Canopy Walkway</li> <li>Innisfail Scenic Route signage</li> <li>Establish a calendar of events for the Shire</li> </ul>   | <ul style="list-style-type: none"> <li>use best practice farming methods to maximise sustainability</li> <li>promote local tourist destinations</li> <li>friendly local assistance to tourists</li> <li>use local businesses</li> <li>support community events</li> </ul>                              |
| <b>Council Activities</b>   |  |  |  |
| <ul style="list-style-type: none"> <li>Clearing of critical habitat linkages</li> <li>Infiltration to the sewer system</li> <li>Sewage treatment effluent quality</li> <li>Contamination from on-site disposal of effluent at Mission Beach</li> <li>Meeting environmental licence requirements for Council facilities</li> <li>Contaminants leaching from old landfills</li> </ul> | <ul style="list-style-type: none"> <li>Voluntary conservation rate incentive covenants covering 1294 ha</li> <li>41 recorded sewage overflows</li> <li>estimated 39 t Nitrogen and 8 t Phosphorus, released from sewage treatment plant</li> <li>282 km of sealed roads</li> <li>212 km of unsealed roads</li> <li>estimated 10 tonnes of litter collected from roadsides</li> </ul>   | <ul style="list-style-type: none"> <li>provide a fund for voluntary purchase of critical habitat</li> <li>reline sewer pipes</li> <li>further treatment of sewage effluent</li> <li>establish sewage treatment facilities for Mission Beach</li> <li>consistent environmental management system for Council activities</li> <li>rehabilitation of landfill sites</li> <li>continue road resealing program</li> </ul> | <ul style="list-style-type: none"> <li>conserve existing habitat</li> <li>ensure stormwater is not released to the sewage system ie downpipes from roof</li> <li>support Council’s environmental initiatives</li> <li>provide feedback to Council regarding Council activities and programs</li> </ul> |