



state of environment Noosa State of Environment



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NOOSA STATE OF ENVIRONMENT REPORT

Noosa Shire Council

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with

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The Steering Committee members have been enthusiastic and willing participants in the development of the report, and their ideas, commitment and positive input is sincerely acknowledged.

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Dominic Newlands, Redland Shire Council, Peter Bek Environmental Protection Agency, and Evan Thomas, Gold Coast City Council participated in a workshop held at Noosa to discuss approaches to State of Environment Reporting.

Eve Fesl (Gubbi Gubbi elder) and Tony Dalton provided indigenous views on the environment for this report which are presented on the following page.

INDIGENOUS CONTRIBUTION

Contributions for this report were sought from a number of Indigenous Groups. The following is the only contribution that was received. It has been provided by Dr. Eve Fesl, a member of the Gubbi Gubbi group. The Gubbi Gubbi group is one of a number of groups claiming an association with the Noosa area.

"Noosa has always been a special place for Gubbi Gubbi people. We have strong spiritual as well as historical links with this area.

Our people view the natural environment from an holistic viewpoint, that is, all within the environment are interconnected and related rather than compartmentalised. We do not see it as being divided into "themes" as in this report, although we appreciate the intentions.

Caring for the environment is a part of our custodial duty and important to all living things, we believe. Education and cultural-environmental awareness are key factors in the understanding of our history and our care for the land.

We therefore, look forward to contributing to a section on Gubbi Gubbi cultural heritage in future State of Environment Reports for Noosa.

Eve Mumewa D. Fesl, Gubbi Gubbi Elder.

NOOSA

*The tide causes waves to rise and crash
Spewing foam in the air as though in anger
At being wakened from their reverie in the Ebb
The blowhole expels its steamlake breath,
But can't outdo the noise of lorikeets
Gorging themselves on eucalypt honey
In the early dawn of a sunblest day.*

*A goanna, waddles its speckled way downwards –
Lookout Warwun!!. Guard your eggs!
Warooee is hungry and so is Gubbi Gubbi!.
For a time the river flows backwards
Forced by the ocean's might bringing new life.
The lakes behind the dunes fill once more
In the endless cycle of Ebb and Flood.*

Eve Fesl

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REPORT SUMMARY

This section presents a summary of Noosa Shire's first State of the Environment Report. It describes and assesses

- the **condition** of the environment
- the **key pressures** upon it, and
- appropriate **responses** or actions.

The report is structured around six themes or elements of the environment::

- biodiversity
- catchments, rivers, and lakes
- coastal zone
- land
- atmosphere, and
- human settlements - waste and transport.

The SoE report follows an accepted structure that is adopted nationally and internationally. It is not a 'once off' project, but will be reviewed and updated approximately every two years.

Key indicators have been selected for each theme which are measurable and objective, and will assess environmental condition. Information has been collected and presented for each indicator. Regular measurement of these indicators will identify trends and changes – either as improvements or as a decline in the quality of our environment.

A summary of the indicators is listed for each theme below. A complete list of indicators is shown in the State of Environment report at Table 2.1 on Page 9.

Broad Groups of Indicators

INDICATORS
Biodiversity
<ul style="list-style-type: none"> <input type="checkbox"/> Regional Ecosystem <input type="checkbox"/> Vegetation area, rate of loss, significant species <input type="checkbox"/> Key fauna species <input type="checkbox"/> Area of rehabilitated land <input type="checkbox"/> Area of land acquired or protected for conservation
Catchments, Rivers and Lakes
<ul style="list-style-type: none"> <input type="checkbox"/> Water flow – extraction of surface and ground water <input type="checkbox"/> Water quality: key parameters <input type="checkbox"/> In-Stream, or aquatic ecosystems – fish catches per unit effort, area of seagrass and mangroves <input type="checkbox"/> Catchment condition - % vegetated, % in protected tenure, riparian buffer areas <input type="checkbox"/> Recreational use – motorised water craft <input type="checkbox"/> Implementation of, and community involvement in, catchment plans for the Noosa and Mary Rivers.
Land
<ul style="list-style-type: none"> <input type="checkbox"/> Land Use – area of main tenures, land use trends <input type="checkbox"/> Protection of Rural Conservation land values <input type="checkbox"/> Subdivision Growth – new allotments, dwelling approvals
Atmosphere
<ul style="list-style-type: none"> <input type="checkbox"/> Air pollution complaints, energy initiatives, renewable energy <input type="checkbox"/> Energy usage by Council <input type="checkbox"/> Energy reduction initiatives undertaken by Council
Human Settlements (Waste and Transport)

INDICATORS

- Area (%) of Noosa Shire covered by urban development
- Water use
- Waste generated and recycling efforts
- Number of licensed ERAs
- Noise complaints

The initial assessment for each theme is set out below. It has been developed following collation of information on the relevant indicators. The recent assessment of the Noosa River estuary as having an A- rating compared to other estuaries in South-east Queensland provides an initial benchmark for rating the other themes.

Biodiversity Assessment

Current Condition:

B

Reasons

- high species diversity.
- 50% of Shire area covered by native vegetation.
- extensive conservation reserves.

Pressure Rating:

Low

Reasons

- low level of clearing of native vegetation (4% loss since 1993).
- feral animals, weeds, increased fire.
- overall high level of protection for 32% of remnant native vegetation.

Many of the impacts are as yet unquantified, and pose less visible pressures than vegetation clearing.

Catchments, Rivers and Lakes

Current Condition:

A

Reasons

- good water quality in Noosa River estuary.
- healthy seagrass beds, mangroves.
- low levels of nutrient concentrations at estuary.
- good level of ecosystem health.

Pressure Rating:

Moderate

Reasons

- high turbidity after rain indicates erosion.
- intensification of landuses in catchment.
- longer term, incremental impacts from development, effluent disposal.
- studies indicate management of water quality and ecological health and waterways will require management of pollutant loads from catchments. This is essentially nutrient concentrations and suspended solids from stormwater runoff.

Coastal Zone

Current Condition:

B-

Reasons

- Good estuarine health (linked to River theme) indicated by presence of seagrass, mangroves, low nutrient concentrations and low levels of suspended solids.
- Large areas along the coast protected as National Park.
- Management of erosion prone areas.

Pressure Rating:

Moderate

Reasons

- Increasing access to, and use of beaches for recreation.
- Development in catchments and around estuary will increase pressures on estuarine habitat.
- Some degradation of coastal creeks of the southern coast with high Phosphorus levels.
- Water quality close to swimming areas occasionally does not meet guidelines after rain.

Land

Current Condition:

C

Pressure Rating:

Moderate

Reasons

- Turbidity of rivers increases markedly after rain, indicating high level of sediment in stormwater runoff.
- Large area secure in National Park/State Forest tenure.
- High estimated nutrient levels in certain sub-catchments which indicates potential to improve land management practices.

Atmosphere

Current Condition: **A**

Reasons

- Small number of industries to potentially pollute the air shed.
- Good air quality at present.

Human Settlements (population, waste and transport)

Current Condition: **C**

Reasons

- High growth in population.
- Increasing demand for material goods, larger vehicles.
- Number of licenced environmentally relevant activities.
- High car dependency – poor public transport provision.

Reasons

- Difficult to control land use practices, and therefore directly influence outcomes.
- Small areas of development proposed in areas vulnerable to acid sulfate soils.
- Number of approvals for residential development declining from previous years
- Some intensification of rural land use evident, with changes away from grazing and dairy activity.
- Areas vulnerable to landslip identified, with planning controls in place to reduce risk.

Pressure Rating: **Moderate**

Reasons

- Energy demand and consumption likely to increase, with a likely increase in greenhouse gas emissions.
- Some increase in frequency of fires.
- Some increases in road congestion and industries.
- High car dependency – poor public transport.
- Local increase in pressures, though impact on the regional air quality low.

Pressure Rating: **Low**

Reasons

- Innovative waste programs.
- Participation in Water Wise to reduce water usage.
- Monitoring of ERA's.
- Population capacity for the shire identified.
- Low % of shire's area with urban development.

Overview Findings of the Report

Overall, Noosa's environment is in a healthy state. This result largely stems from having large areas in critical locations (eg upper catchments, sensitive coastal areas) being protected as National Parks, and a high level of vegetation cover across the Shire.

The challenge is to retain these ratings. Recent and continued population growth, expansion of residential areas, and the intensification of rural activity suggests that incremental effects of these trends will place increasing pressure on the natural environment.

It is unlikely the current good condition will continue without some action by Council, State agencies and the community. Future challenges and key areas for action emerge as:

- Reduction of pollutant loads entering rivers and lakes from runoff in both rural and urban areas;
- Maintaining or reducing the low rate of vegetation loss (and possible loss of species and ecosystem diversity);

- Ensuring the Planning Scheme operates as an effective tool to manage development in sensitive areas (acid sulfate soils, areas vulnerable to landslip, riparian buffers, areas of rural conservation);
- Management of recreation use of lakes, rivers, National Parks and beaches to retain their social amenity and ambience, and natural values;
- Ensuring relevant State agencies with responsibility for a number of the actions are encouraged to act on the recommendations;
- Commence greenhouse gas emission reduction initiatives; and
- Providing alternative methods of transport to reduce dependence on the private motor car.

Future Directions

The next report will be issued around 2003. The collection and analysis of information for each of the indicators will further identify trends and changes in the health of Noosa's environment. Future reports will also contain a section on Cultural Heritage, which will explore both the indigenous and european history of the Shire.