

**NAMBUCCA
SHIRE
COUNCIL**

State of the
Environment
Report
2007/2008



Living at its best

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1.0 Introduction

This is the fourteenth consecutive State of the Environment Report (SoE) prepared by Nambucca Shire Council for the Nambucca Shire Local Government Area. The report covers the period from 1 July 2007 to 30 June 2008.

This report is a supplementary document prepared in accordance with the *Local Government Act 1993* that is designed to support the comprehensive document prepared for 2001 – 2004.

This supplementary report is an update of the eight environmental sectors: land, water, air, biodiversity, waste and resource recovery, noise, Aboriginal and non-Aboriginal heritage and human settlement. For more detailed information see the comprehensive State of The Environment Report from 2001-2004.

Key to Sustainability Indicators	
↑	Positive movement toward sustainability
↓	negative movement toward sustainability
↔	No progress toward sustainability
ND	Not determined

1.1 WHAT IS A SoE REPORT?

A State of the Environment (SoE) Report summarises the physical and social attributes of the Nambucca Shire environment while identifying the human impacts on our local environment in a financial year. It also provides information on activities conducted by council and the community to protect and restore the Nambucca Shire environment, and is essentially a mechanism for reporting on progress towards environmental sustainability.

Comparing SoE reports from year to year enables Council to see improvements and identify areas that need attention in all sectors of the local environment. This then assists Council to further protect the health and diversity of the environment for the benefit of current and future generations.

1.2 TOWARD SUSTAINABILITY

In consultation with community, regional, state and national agencies 43 (22 regional & 21 Shire wide) environmental indicators were developed to best represent and measure Council's progress in these key areas year to year. This year 25 more environmental indicators were added so we can monitor Council's movement toward achieving sustainability goals.

The legend positioned left shows the negative, positive and no progress towards sustainability for each of the indicators displayed throughout the SoE.

There are *NSW North Coast Regional Indicators* that are outlined throughout this report. These can be measured against other local government areas in the north coast region.

1.3 COMMUNITY VALUES

Community consultation is an integral component of SoE reporting. To assist with the development of this years SoE report, Council conducted a Customer Satisfaction Survey in November 2007, and called for submissions from community groups in July 2008.

These findings will not only assist council with its reporting requirements but will also help Council to develop suitably targeted environmental programs for local residents.

The major issues identified by residents include:

- Estuary management
- Environmental monitoring
- Environmental protection
- Weed control
- Footpaths and cycleways
- Stormwater runoff/pollution
- River pollution
- Garbage and recycling
- Water supply
- Sealed roads
- Sustainable development, and
- Youth activities



Side Show Alley, Macksville Show 2008
Photo J. Ashby

2.0 Human Settlement

2.1 INTRODUCTION

Creating a sustainable community which meets the lifestyle needs of all existing and new members of the community requires careful planning so that accessible community services and facilities contribute to support Nambucca Shires social fabric. To achieve this Council must ensure planning processes and strategies continue to the maintenance and improvement of our social, natural and physical environments for everyone to enjoy.

The linkage between Environmentally Sustainable Development (ESD) principals and the social factors of the Nambucca Shire is important in relation to the environment of an area. The social and economic attributes of the Nambucca Shire population are linked to impacts that the population has on the environment and their understanding of, and participation in, environmental issues.

2.2 PRESSURES ON OUR HUMAN SETTLEMENT

- Increase in aging population
- Housing affordability
- Lack of recreational facilities for young people
- Crime
- Community safety
- Mobility transport for senior citizens and the disabled

Human Settlement **	2003/4	2004/5	2005/6	2006/7	2007/8	Movement towards sustainability
Predicted Population**	18 432	18 525	18 618	18 735	18 829	ND
Population*	17 718	17 807	17 897	17 986	18 076	↔
Population Density (persons/km ²)	11.8	11.9	11.98	12.04	12.1	↔
Growth Rate %*	0.5	0.5	0.5	0.5	0.5	↔
Unemployment Rate %	18.3	18.3	18.3	11.6	10.4	↓
% of residents in urban areas	no data	no data	no data	no data	85.4	ND
Aboriginal and Torres Strait Islander %	5.4	5.4	5.4	5.7	6	↔
Non English speaking %	2.2	2.2	2.2	1.7	1.7	↔

* Denotes Regional Indicator ** Statistics from Australian Bureau of Statistics (ABS) www.abs.gov.au

Actual 2006 Census statistics

Predicted Population statistics from ABS that takes into account people who did not include themselves in the 2001 or 2006 census

Did you know.....

It is an offence to drink alcohol on any street or footpath where an Alcohol Free Zone (AFZ) exists, 24 hours a day, seven days a week whilst the AFZ is in place.

2.3 RESPONSE TO THESE PRESSURES

- Crime Prevention Plan 2008-2011 adopted by Council, is likely to be endorsed next reporting year.
- Responding to complaints from residents and police, Council has taken a comprehensive approach to tackling alcohol-related crime and anti-social behaviour by establishing an Alcohol Free Zone (AFZ) from the 11 January 2008 through to 10 January 2011 in the CBD and other key areas of Nambucca Heads.

The AFZ has been implemented in order to help create a safer environment for residents, businesses and visitors.

It is an offence to drink alcohol on any street or footpath where an AFZ exists, 24 hours a day, seven days a week whilst the AFZ is in place.

Alcohol Free Zones only apply to streets and footpaths where indicated by signage. Alcohol Free Zones do not apply to parks.
- Cameras have been installed in the Tourist Information office in Nambucca Heads for added security.
- 5 new street lights were added to Bent Street, Loftus Street and Main Beach at Nambucca Heads to increase safety for both beach users and motorists.

- Council's Disability Action Plan 2001 was revised and amended in March 2008.
- The Council's beach wheelchair was loaned out 6 times over the reporting year.
- For International Day of People with a Disability (3 December 2007) the General Manager, Michael Coulter, opened the wheelchair accessible boardwalk in Gordon Park rainforest to allow access to Pioneer Well and into the rainforest itself. Interpretive signage has been erected along the pathway.
- Burrupine Hall and Warrell Creek Hall were refitted with accessible toilets, while the Missabotti Hall and Grants Hall in Bowraville were improved to allow wheelchair access.
- Council continues to host the 'Tree of Life' a community project to celebrate new beginnings and past roots for our multicultural community. This tree is displayed in the Council Administration building foyer.
- 14 people became Australian Citizens during the reporting year.
- Nambucca Shire boasts 20 community committees.
- Seniors Week 6-13 April 2008 celebrated with an intergenerational concert in partnership with Macksville Schools and ran concurrently with Youth Week.
- Nambucca Shire's libraries are part of the Clarence Regional Library Network. In the reporting year there were 18,000 old books weeded out of the system and replaced.

Automatic doors and air-conditioning were added to Nambucca Heads and Macksville Libraries to allow for easier access and a pleasant environment.

At the Macksville library a young adults space was installed with funky youth inspired furniture, lots of magazines all surrounded by young adult books and information.

The libraries continue to provide activities for children and youths, such as story-time for children and hosting the youth week photography competition.



Youth Week 2008 photography competition winning entry "Energy" by Patrick Foley

- A Customer Satisfaction Survey was conducted in November 2007 and the final report released in December 2007. This survey was designed to help Nambucca Shire Councillors and Management understand the local communities satisfaction towards, and importance of Council-run facilities and services. Goals included assisting Council plan future service priorities and allowing it to benchmark customer satisfaction for internal management purposes.
- Council continued its Resilient Young Peoples Program (RYPP) in conjunction with Reconnect. RYPP is a 6-7 week program targeting young people in Years 8 or 9 at school. Information is given to young people participating, on: Relationships, Drugs & Alcohol, Sexual Health, Sexual Violence, Conflict Resolution, Bullying, Self Image and Mental Health. The program is about harm minimisation. It has been running for 4 years in the 3 local high schools, Bowraville Central (Term 1), Macksville (Term 2) and Nambucca Heads (Term 3) and is a partnership between Council and Reconnect. The program is for up to 30 young people at each high school, who volunteer for the program. At the end of the program there is an all day excursion for the participants where they go to an activity, such as Nine Pin bowling, have a barbecue lunch and presentation of certificates and a bag of useful information given to them. Guest speakers are invited to come and talk to the young people, eg Ted Noffs Foundation, Mental Health. Evaluations from the young people have been very favourable and feedback from the high schools is great. RYPP has been very successful in reaching young people who might not approach a service if they have a problem.
- Council continued with its School Holiday Activities program.
 - July 2007 holidays attracted approximately 220 young people aged 12-18 years over the two week period. Activities included; Ten Pin Bowling in Coffs Harbour with lunch supplied, Trial Bay Gaol picnic and activities day including guided tour around the gaol, beading and fashion workshop in Bowraville and a screening of Harry Potter and the Order of the Phoenix at the Nambucca Heads Cinema.
 - October 2007 holidays attracted 230 young people aged 12-18 years over the two week period. Activities included; ice skating in Coffs Harbour with lunch included, nine pin bowling with lunch included and a mobile climbing wall set up at the Donnelly Walsh playing fields in Macksville.
 - January 2007/08 holidays attracted 120 young people aged 12-18 years over the four week period. Activities included; internet games at Bowraville CTC High Street Bowraville, Digital Micro Movie Making Workshop – Nambucca Valley Youth Services Centre, Nambucca Heads with the final product screened afterwards, Sewing and Beading Workshop with lunch included in Bowraville, Surf School at Scotts Head run by Paul Evans with lunch included and a Disco in conjunction with Bowraville Youth Group at Grants Hall in Bowraville.

Did you know.....

The major hobbies and interests for 12-24 yrs olds in the Shire are; listening to music, swimming and surf related activities and computers, of those who use computers ¾ use chat/blog sites like My Space.



Youth Week 2008 photography competition Peoples Choice Award 'Unite' by Daniel Barnes

Did you know.....

72% of local youth play some kind of sport, with the top sports being football (soccer), swimming, netball, tennis, rugby league and cycling.

- Youth Intensive Planning For Education & Employment Program is a 6 week program that was developed as a one off at Macksville High School. It ran from mid September and ended beginning of November 2007. The Aboriginal Education Assistant approached Council's Youth Development Officer and asked about developing a program for at risk aboriginal young people in Year 9 (11 in total) to talk to them about the advantages of staying in school. The program involved getting mentors in every week to talk about how they got to where they are now. The program also dealt with how unique everyone is, the good things about themselves, things they like to do and how this might relate to employment and what sort of jobs they are interested in.

Favourable feedback was received from the school and students who participated. At least 3 of the students who attended have gone on to Year 10.

- Artstart 2007 Youth Arts And Skills Festival was run in conjunction with Council and the Nambucca Valley Youth Services Centre (NVYSC) with the aid of a funding grant. Council's involvement in the program was: advising NVYSC of the funding opportunity, being a part of the assessment committee of funding applications, with other LGA Youth Development Officers, promotion of workshops, accompanying the young people to the exhibition of works at Coffs Harbour Education Campus. The project involved conducting a 5 day drawing and sculpture workshop at the Youth Services Centre in Nambucca Heads for 15-24 year old young people at risk and who are unable to access cultural activities through schools, TAFE and/or local art groups. The workshops were held in October 2007 with the exhibition being held in December 2007.
- Youth Week 5-13 April 2008 was launched with a photography competition which attracted 44 entries from around the Shire, other activities included; Band Night at the Nambucca Entertainment Centre with 3 local bands and 2 bands from Newcastle playing, Youth week and Seniors week concert at Macksville High School and many other activities hosted by the schools in the Shire.
- In November and December 2007 an online Youth Survey was conducted. The youth survey was designed to capture the views of residents aged 12-24, test assumptions about their behaviour, attitudes and interests, and gain ideas on how they would like to see the Shire progress. It was conducted as an online poll accessible through the Nambucca Shire Council website home page. The final report released in January 2008 found that "bringing more entertainment options to the Shire" was their main priority, followed by "more job opportunities for youth" and the building of a skateboard park at Nambucca Heads. What they loved most about living in the Shire is the beach culture, natural beauty, sense of community and friendliness.



*Beach Wheelchair
Photo NSC*

3.0 Land

3.1 INTRODUCTION

The Nambucca Shire Local Government Area (LGA) is located between Kempsey and Bellingen Shire Councils on the Mid North Coast of NSW, approximately 500km north of Sydney and 480km south of Brisbane. The shire is 1492.8km² and is situated between 30°30'S and 30°56'S and 152°18'E and 153°01'E. The terrain is steep intersected by small streams nestled between the foothills of the Great Dividing Range and the coastline of the Pacific Ocean. The Nambucca River drains the shire and is 47km long.

The main localities of the Shire include Nambucca Heads, Macksville, Bowraville, Valla Beach and Scotts Head with many smaller villages and rural settlements. The Shire has a

population density of 12.1 people per km².

Since the 1830's an increase in agriculture, logging and population has brought with it extensive land degradation in the floodplain and coastal zones from adverse impacts such as land clearing, destruction of native vegetation, wetlands and introduction of exotic weed species, erosion and increased urban and agricultural runoff.

In response to these pressures Council continues to develop environmental strategies within planning documents, policies and environmental planning instruments that will ensure these impacts are minimised and the state of our environment is preserved for present and future generations.

3.2 PRESSURES ON OUR LAND

- Urban development
- Rural residential development
- Land degradation
- Contaminated sites
- Soil erosion
- Visitation
- Beach, river bank erosion
- Shoreline erosion

Land Indicators **	2003/4	2004/5	2005/6	2006/7	2007/8	Movement towards sustainability
Per capita of open green space (ha)	no data	no data	no data	no data	0.022	ND
Number of Development Applications submitted	541	512	321	305	301	↑
Number of Development Applications Approved by Council	no data	no data	no data	289	291	↔
Potentially Contaminated Land Sites	18	18	18	18	18	↔
Population Density (persons/km ²) ***	11.86	11.86	11.86	11.98	12.61	↔

** Statistics from Councils Environment and Planning Department *** Statistics from ABS

Forestry Indicators **	2003/4	2004/5	2005/6	2006/7	2007/8	Movement towards sustainability
Area of LGA occupied by State Forest (ha)*	28 156	28 156	28 156	28 088	28 088	↔
% of LGA occupied by State Forest*	18.9	18.9	18.9	18.8	18.8	↔
Native Forest logged on State Forest land (ha)*	241	205	405	0	120	↓
Area of State Forest selectively logged (ha)*	316	122	410	800	811	↓
Non-dedicated State Forest land (ha)*	207	260	260	260	260	↔

* Denotes Regional Indicator ** Statistics from State Forests NSW

Did you know.....

The word "Nambucca" originates from the Aboriginal word ngambugka. It has been variously translated as 'winding or crooked river' and as 'entrance to the waters' (Townsend 1993)



Unstable Cliff, Bellby's Beach, Nambucca Heads. Photo M. Bryen

3.3 RESPONSES TO THESE PRESSURES

- An asbestos register was developed for all public Council owned buildings in the Shire.
- Works completed by Council in the reporting year were;
 - Rural roads construction
 - Nursery Rd
 - Old Coast Road
 - Bridge reconstruction
 - McGuigans
 - Carsons No.2
 - Carsons No 3
 - Stormwater drainage
 - Dudley Street
 - Adam Lane (stage 1)
 - Cycleway River Drive (Stage 4)
 - Continued, upgrade and maintenance of amenities and infrastructure.

- The Draft Nambucca Shire Rural Residential Land Strategy was prepared and placed on public exhibition in May 08. It is expected to be finalised in late 08.

The purpose of the Rural-Residential Land Strategy is to stage the release of rural-residential land based on current best planning practice. Only those areas already identified in the Nambucca Local Environment Plan 1995 (LEP) were considered as candidate areas in the strategy.

- Council's Development Control Plan (DCP) No. 10 Exempt and Complying Development was reviewed and adopted 20 December 2007.
- Council reviewed DCP No 3 (Residential Development) and a draft plan was prepared by Sutherlandandkoshy and adopted September 07. A specific Urban Strategy for 3 precinct areas of Nambucca Heads was endorsed for exhibition by Council March 08. The final DCP 3 will be adopted in the next reporting year.

As part of the DCP 3 review a number of recommendations were made in regards to certain height limits in precincts within Nambucca Heads, these being corner of Bowra and Ridge Streets, Liston Street and Wellington Drive.

- The Nambucca Shire Council Structure Plan was adopted by Council in September 07. The Structure Plan is a strategic Planning document designed to guide their management of land use, tourism, economics, environmental attributes and social and cultural aspects of the Nambucca LGA.
- There were several amendments to the LEP 1995 in the reporting year. These were:
 - Amendment 64 proposed various amendments to the Nambucca LEP 1995 which has been incorporated into the preparation of the Comprehensive Nambucca LEP 2008 which is currently being prepared.
 - Amendment 66 proposed a commercial zone on the corner of Cooper St and Boundary St Macksville has been referred to the Minister of Planning with a recommendation for approval.

- Amendment 67 resolved to prepare a draft LEP to allow urban uses on part of the Valla Urban Growth Area at Boggy Creek
- Nambucca Valley Landcare in partnership with landowners and through grant money, fenced off 7 km of river bank from stock along Newee Creek and planted over 300 plants.
- At Taylors Arm 1.5 km of new fencing was erected with 12 water points added to the existing 6 km of protection fencing. Weed control measures were implemented in 40, 000 m² and 100 trees were planted.
- Nambucca Valley Landcare inc. hosted many field days, workshops and fairs during the reporting year for issues on the land.
 - September 07 - Farm Machinery and the Small Farm Management field days. The farm machinery day with Carol Rose from NSW DPI showed and discussed the pro's and cons of various soil preparation and sowing methods using different machinery. The Small Farm Management day consisted of an opportunity to learn how to manage a lifestyle block in the Nambucca Shire, soil health, pasture management, animal health and land care were discussed.
 - November 07 - Biological Farming field day. Biological farming is a chemical free method of farming that focuses on improving the microbiology as a way of increasing plant growth and produce yield. Biological farming includes, organic farming and biodynamic farming.

Did you know.....

The area of newly cleared land in Australia every year is almost 196,000 hectares, back in 1990 it was almost 455,000 hectares!



Example of poor sediment control on a building site. Photo K. Williams



*Storm approaching Nambucca Heads
Photo J. Ashby*

4.0 Aquatic Systems - Water

4.1 INTRODUCTION

Aquatic resources form an integral part of the environment in the Nambucca Shire LGA. Not only do these provide the scenic backdrop which is integral to the character of the Nambucca Shire, these resources also provide habitat for a diverse variety of flora and fauna species, provide water for urban and agricultural supplies and allow important economic and social activities to take place, such as aquaculture, fishing and boating.

There is a diverse range of aquatic systems that occur naturally in the Nambucca Shire, these include the Pacific Ocean and associated coastline and beaches, the Nambucca River and its tributaries, intermittently closed and open lakes and lagoons (ICOLL's), wetlands and groundwater aquifers.

The Nambucca River drains its 1,330km² catchment that is mostly contained within the Nambucca Shire LGA. Warrell Creek and Taylors Arm are the 2 main tributaries of the Nambucca River.

Since the commencement of European settlement, the Nambucca River has been altered substantially, the entrance and main channel have been trained with breakwalls and some dredging. The majority of the waterways have been affected by the process of accelerated erosion and deposition, gravel extraction and riparian vegetation removal.

One of the greatest pressures on aquatic systems is urban and agricultural stormwater run off. Stormwater is the untreated run off from hard surfaces and agricultural lands. The stormwater traditionally contains pollutants such as nitrogen, phosphorous, metals (lead, zinc, copper), hydrocarbons, faecal bacteria and grease, not to mention the sediment loads from denuded areas and eroded banks. This all has adverse impacts on the health of the aquatic systems including direct affects on the fishing and oyster industry of the Nambucca River.

Human impacts within the catchment have increased the amount of litter, nutrients, bacteria, heavy metals and sediment being discharged into the receiving waters, thus degrading the quality of our local aquatic systems.

4.2 PRESSURES ON OUR AQUATIC SYSTEMS

- Degradation of Shire waterways
- Macksville, Nambucca, Scotts Head and Bowraville Sewage Treatment Plants
- Septic overflows
- Environmental impacts from businesses
- Quality of stormwater
- Increased development and reduction of pervious surfaces
- Loss of biodiversity
- Pollution incidents

Gross Pollutant Traps (GPT's) **	2003/4	2004/5	2005/6	2006/7	2007/8	Movement towards sustainability
Number of GPT's in Nambucca Shire	no data	no data	no data	no data	11	ND
Amount of waste diverted from the Nambucca River (tonnes)	no data	no data	no data	no data	30	ND

** Statistics from Councils Engineering Department

Source of Water Pollution **	2003/4	2004/5	2005/6	2006/7	2007/8	Movement towards sustainability
Construction (sediment, gravel, mud)	3	3	0	1	1	↔
Chemicals (pesticide spills, other spills)	0	2	1	2	4	↓
biological (septics, animals, offal)	2	3	3	4	9	↓
Total Complaints	5	8	4	7	14	↓
Complaints to DECC ***	no data	no data	no data	no data	11	ND

** Statistics from Councils Customer Service Requests ***Statistics from Department of Environment and Climate Change (DECC) www.environment.nsw.gov.au

4.3 RESPONSE TO THESE PRESSURES

- The Nambucca River Estuary Management Plan (NREMP) was adopted by Council on the 6 February 2008.

The objectives of the NREMP are based on community uses and values associated with the estuary and the technical reviews completed as part of the development process. These objectives form the 'goal posts' for estuary management and will serve as a benchmark as to which assessments and the success of the plan will be measured.

The NREMP objectives include:

- Protecting and enhancing the existing uses and values of the estuary in both the short and long-term by adoption of best practice land use planning and development controls.
- Maintaining navigation within the lower estuary for shallow draft vessels, consistent with current use, to maintain user amenity, safety and aesthetics, within the natural constraints of ocean and fluvial processes.
- Encourage waterway use that causes a minimum of environmental and social impact, and where possible,

enhances user amenity through improved safety controls and reduced conflict. Improve the safety of swimmers of all ages within the estuary.

- Maintain and improve water quality within the estuary to support ecosystem function, commercial fishery/oyster production and tourism, and other forms of human recreation including swimming.
- Protect and enhance habitats to improve the health and biodiversity of the Nambucca River Estuary.
- Improve overall riverbank condition on all major streams and waterways of the Nambucca Valley to limit further bank erosion and sedimentation.
- Consider the potential implications of sea level rise on the estuary and its surrounds as a result of global scale climate change.
- Protect areas and items of Aboriginal and European cultural heritage within the estuary.
- Maintain open lines of communication with the community and local Aboriginal groups in relation to the ongoing management of the estuary.
- Maintain and improve the viability of existing (and potential future) types of ecologically and commercially sustainable estuary-based aquaculture industries and enterprises.
- Maintain and improve the recreational and amenity values of the Nambucca River estuary, without resulting in deleterious impacts on the natural environment.

There are 25 prioritised management strategies that will be implemented as funding becomes available. Funding for the NREMP strategies will be from the Environmental levy and matched one to one from avenues for source funding from various agencies.

- In December 2007 Management Strategy 3 of the NREMP was completed. This was to reinstate the tidal flow through the Stuarts Island Causeway. A twin box

Did you know.....

The Drain is just for Rain and that all stormwater pits and gutters drain directly to the Nambucca Shire's rivers, creeks and tributaries.



Melaleuca Swamp and wetland on private land near Macksville. Photo J. Ashby

culvert was built into the existing causeway to improve the tidal flushing through the causeway quality, fish passage and sustaining Aboriginal Culture, without risk to swimmers at the Bellwood swimming area.

- Phase One of the Newee Creek Water Quality Monitoring Project was completed with the final report released on 18 January 2008.

The findings indicated that most of the water samples collected were outside the acceptable range of ANZECC 2000 guidelines for Fresh and Marine Water Quality. It is noted that the greatest bacterial contamination was measured just upstream from the confluence of Newee Creek with the Nambucca River.

The water quality in the Newee Creek catchment strongly suggests that faecal contamination is occurring and is impacting on receiving waters, particularly in wet weather.

Phase two of the Newee Creek Water Quality Monitoring Project recommends further water quality testing and monitoring with a faecal sterol analysis to confirm the source of the faecal contamination. This testing occurred in the second half of the reporting year and will continue through the 2008/2009 reporting year.

- Council was represented with 3 delegates attending 16th annual Coastal Conference in December 2007 in Yamba. The main themes discussed were; climate change, sea level rise, coastal development, coastal management, estuary management and natural resource management.
- Council was represented with 4 delegates attending the Floodplain Management Authorities of NSW 48th Annual Conference hosted by Wollongong February 2008. The main theme was Hazard – Risk –

Did you know.....

That 4 truck loads of sediment can escape from a development site in a single rain fall event if not controlled effectively. This sediment then ends up in the Nambucca Shire's waterways.

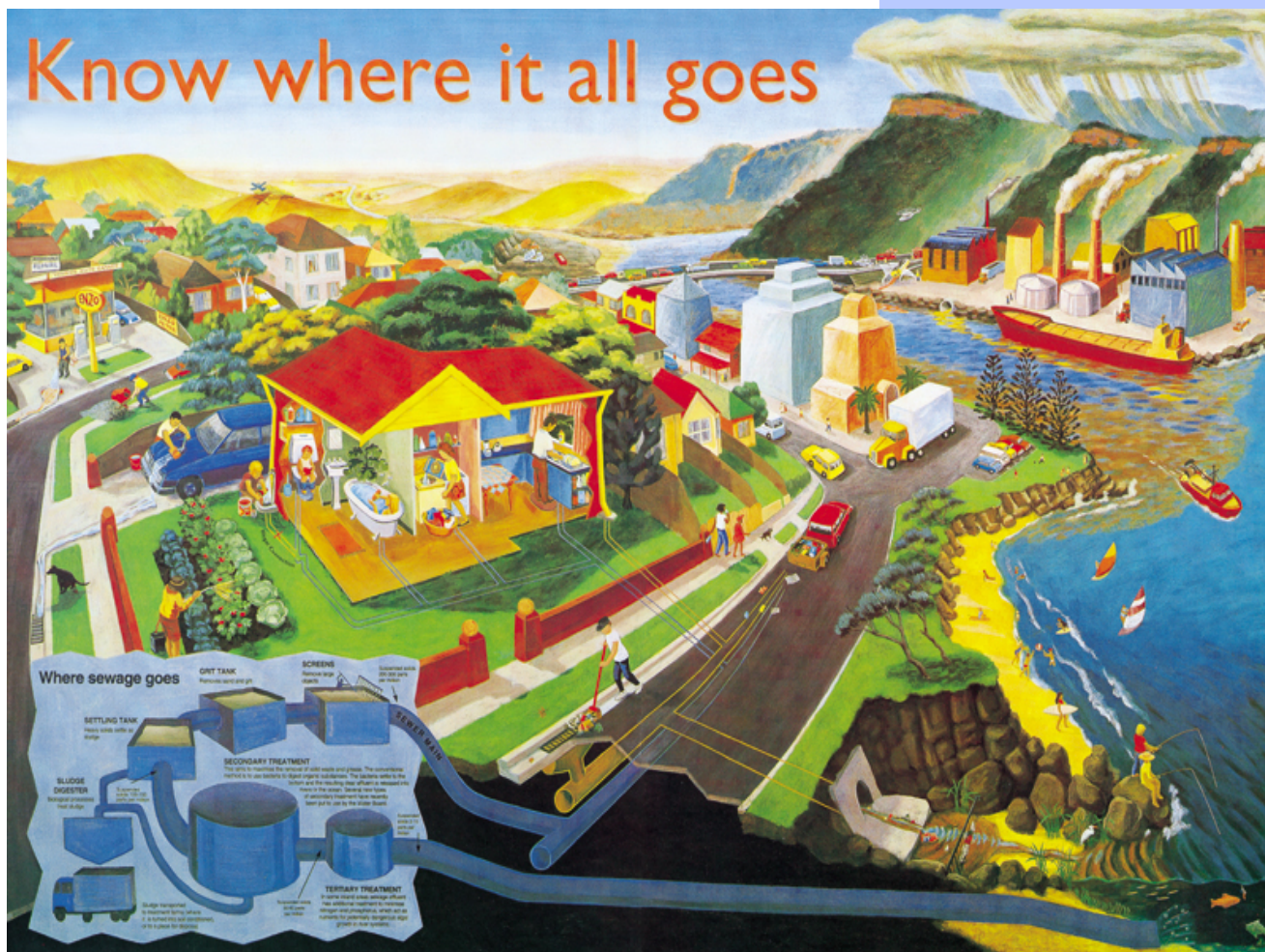


Image courtesy of DECC

Did You Know.....

Our toilets use 23% of the total amount of water used in the average home. 20% of our water use is spent in the shower. 10% is used in the kitchen and 16% is used in the laundry.



South Valla Beach looking towards Nambucca Heads. Photo J. Ashby

Response. Other points of discussion were; climate change, 1:100 yr flood levels, planning flood levels, sea surges and localised storm flooding.

- Council's Environmental Compliance Officer attended Exercise Oily Carp in the capacity of an observer held in Coffs Harbour in March 2008.

The main aim of the exercise was to assess the capability of the NSW emergency management arrangements to respond to a Tier 2 marine oil spill on the North Coast of NSW. It also familiarised regional agency staff, local emergency personnel and local government with the resources and equipment available for a tier 2 incident

- The Macksville River bank Stabilisation Project phase 2 the area along River Street was completed in December 07.
- A Gross Pollutant Trap (GPT) was installed in Council's works depot in River Street in May 08 to prevent pollutants from the depot entering the Nambucca River.
- A 240 000 L rainwater reuse tank was purchased for installation at Council's works Depot to reduce the use of potable water for road construction and maintenance.
- A rainwater tank was installed at E.J. Biffin Playing Fields in May 08 to capture rainwater off the amenities block for re-use for

watering. This was made possible with a Federal Government Water Initiatives Grant.

- Ongoing provision of 'doggie poo' bags and waste bins at popular parks and Shire walks to reduce the amount of dog waste entering the Nambucca River.
- Council continues to protect the environment whilst conducting works with the appropriate sediment control devices. Large floating booms with silt skirts are utilised when working near the river. Works staff are trained in the use and implementation of an array of sediment control devices.
- Gumma Gumma Wetland project in conjunction with Wetland Care Australia, Dept. Environment and Climate Change and Nambucca Valley Landcare is to turn the circular swamp that had significant acid sulfate scalds into a productive eleocharis wetland. Council completed stage 1 by building a main dropboard weir into the Gumma Gumma Creek in December 07. This was completed just before the rain began to fall, by February 08 the Gumma Wetland had filled up and local oyster farmers have noticed a difference in the water colour and higher pH than in the previous years. Work will still progress through the next reporting year.
- Wetland Care Australia in conjunction with Landcare, Northern Rivers Catchment Management Authority and local land holders under the *Coastal Floodplain and Acid Sulfate Soil Management Project - Part G Nambucca Floodplain* was able to fund the process of the Wirimbi Park Wetland near Newee Creek. The 37 ha site historically contained a large freshwater wetland system that drained into nearby Newee Creek. This wetland system had been considerably altered through farming practices and has been predominately cleared of the Melaleuca and Swamp Oaks once prevalent. A drain had been constructed along the natural depression line and a one way floodgate culvert had been constructed. The site has a very high probability of Acid Sulfate Soils and has developed many scalds.

Works done include;

- Re-design of the floodgate to achieve efficient agricultural drainage and exclusion of tidal

water and maintenance of water quality and fish passage.

- Exclusion of stock by fencing off the highly eroded modified drainage system.
- Planting of 500 native plant species.
- Construction of a low level water control structure with a dropboard weir in the existing drain, that allows fresh water to be held back over the floodplain on a seasonal basis.

The area will be fenced off from cattle until the wetland vegetation is well established and thereafter the area may be heavily grazed for short periods during dry times providing a valuable drought reserve.

*Did you know.....
Water dissolves more substances than any other liquid. Wherever it travels, water carries chemicals, minerals, and nutrients with it.*

Water Consumption Indicator	2003/4	2004/5	2005/6	2006/7	2007/8	Movement towards sustainability
total reticulated water consumption in LGA (ML)* **	1 812.8	1 878.6	1 750	1 806	1 658	↑
per capita reticulated water consumed in LGA (kL/person)* **	148.5	158.3	145.1	145.1	122.2	↑
daily per capita reticulated water consumed in LGA (L/person)* **	405.7	433.7	397.5	397.5	335	↑
reticulated water daily demand peak (KL)* **	7 087	7 900	6 700	7 928	6 600	↑
Population % connected to reticulated water* **	67	67	67	68	72	↔
total reticulated water consumption by Council (KL) **	no data	no data	27288	19543	20310	↓
Number of surface water licences***	no data	no data	no data	193	197	↓
Number of bore water licences***	no data	no data	no data	546	562	↓

* Denotes Regional Indicator ** Statistics from Councils Engineering Department *** Statistics from Department of Natural Resources (DNR) www.naturalresources.nsw.gov.au

Waste Water Indicator **	2003/4	2004/5	2005/6	2006/7	2007/8	Movement towards sustainability
Wastewater treated at STP's (ML)*	1 420	1 418	1 567.8	1 385.8	1 424.0	↔
waste water treated to tertiary level (ML)*	1330 (93.4%)	1323 (93.3%)	1468.2 (93.6%)	1308.1 (94.4%)	1340.0 (94.1%)	↔
wastewater treated at treatment plants to secondary level (ML)*	90 (6.6%)	94 (6.7%)	99.2 (6.4%)	77.9 (5.6%)	84 (5.9%)	↔
population % serviced by sewage system*	64	64	64	64	64	↔
population serviced by on-site effluent disposal systems*	36	36	36	36	36	↔
Number of approved existing on-site effluent disposal systems in the LGA*	12	no data	576	37	636	↑
Number of existing on-site effluent disposal system inspections*	958	no data	958	449	643	↑

* Denotes Regional Indicator ** Statistics from Councils Engineering Department



*Stinkhorn Fungus in Gordon Park Rainforest
Photo J. Ashby*

5.0 Biodiversity

5.1 INTRODUCTION

'Biodiversity' is defined as the variety of life forms found within an area, such as the different plants, animals and micro-organisms, the genes they contain, and the different ecosystems in which they are found and form part of.

The biodiversity of an area is constantly changing and is enhanced by genetic change and evolutionary processes, and is reduced by extinctions and habitat degradation.

It is important to conserve biodiversity to protect the life-support systems on earth. These systems include; fresh water provision, climate regulation, the creation of soils, and the natural disposal of pollutants. They are fundamental to our quality of life and our economy.

The climate and geographical lay out of the Nambucca Shire results in a diverse range of sub-tropical and temperate faunal and floral communities, and the conservation of this biological diversity is essential to

the health and productivity of the LGA.

Clearing for agricultural purposes since the 1800's has greatly altered the Shire's vegetation. The main areas are along the flood plains and the coastal fringe. The riparian zones are vital to the functioning of stream ecosystems, however the majority of these areas of emergent aquatic, semi-aquatic and over and understorey plants within the Shire have been extensively altered since European settlement.

Due to their accessibility, the riparian zones of the region were originally cleared for their high quality timber, particularly red cedar. The Cedar getters were followed by the pioneers who extensively cleared the alluvial floodplains for agriculture.

Weed infestation into remnant vegetation communities in the Nambucca Shire are of an increasing concern. The main source of these weeds are from urban gardens, where they establish, dominate and then escape into neighbouring green space

land where they once again dominate the native vegetation.

The loss of essential sea grasses in the Nambucca River and Deep Creek from sedimentation and damage from boats is cause for concern as these seagrass beds are essential fish breeding and nursery grounds.

5.2 PRESSURES ON OUR BIODIVERSITY

- Noxious weeds
- Land clearing
- Stormwater pollution
- Fragmentation of remnant bushland
- Garden escapees
- Illegal dumping
- Feral animals
- Threatened EEC

Status of Flora and Fauna in Nambucca LGA **	2003/4	2004/5	2005/6	2006/7	2007/8	Movement towards sustainability
Number of Threatened Flora Species*	14	14	17	16	16	↔
Number of Threatened Fauna Species*	66	66	65	67	53	↑
Number of Endangered Ecological Communities	no data	no data	no data	no data	7	ND
Number of Native Fauna Species in Shire	no data	no data	no data	no data	421	ND
Number of Native Flora Species in Shire	no data	no data	no data	no data	1018	ND

* Denotes Regional Indicator ** Statistics from Department of Environment and Climate Change (DECC) www.environment.nsw.gov.au

Declared Noxious Weeds under the Noxious Weeds Act 1993 **	2003/4	2004/5	2005/6	2006/7	2007/8	Movement towards sustainability
Number of Noxious weeds reported for Nambucca LGA*	40	42	99	98	104	↓
Number of weed notices to residents	no data	no data	no data	63	27	↑

* Denotes Regional Indicator ** Statistics from Department of Primary Industries (DPI) www.dpi.nsw.gov.au

Did you know.....

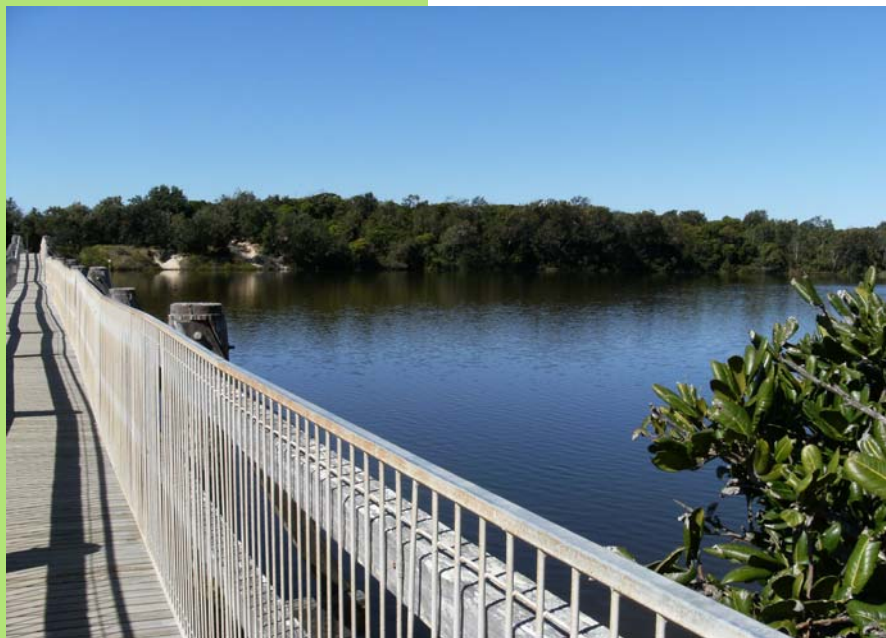
There are 6 more noxious weeds now affecting our Shire since July 2007.

5.3 RESPONSES TO THESE PRESSURES

- The Nambucca Shire has representatives on the North Coast Weeds Advisory Committee, which cooperatively develops regional weed management plans in conjunction with all stakeholder groups. The committee has recently developed and endorsed the Northern Rivers Invasive Plants Action Strategy in conjunction with the Northern Rivers Catchment Management Authority (CMA), which provides the framework for weed management across the Northern Rivers CMA region.
- Shire staff worked in conjunction with the CMA in a widespread riparian weed control project in the Taylors Arm / Thumb Creek area in the south western area of the shire. This project has seen approximately 17 lineal kilometres of river treated for Madeira Vine and Angels Trumpet infestations. Both of these environmental weeds have the potential to displace desired native species in this highly sensitive riparian zone.
- A very successful tree weed control program was conducted by Council in conjunction with the local Landcare, CMA and Green Team group that controlled a large amount of Camphor Laurel trees in the Deep Creek catchment of the Nambucca

Shire. This project has been extremely successful through a very high participation rate by many land owners/managers whose properties are adjoined, which has greatly increased the efficacy of the project.

- Council recently selected and changed herbicides used for weed control to ones that had a lower environmental impact, with preference for "Frog Friendly" glyphosate product Weedmaster Duo. This product is used wherever possible. Low impact techniques such as stem injection, and cut and paint control are also utilized where applicable.
- Nambucca Valley Landcare inc. hosted many field days, workshops and fairs during the reporting year.
 - July 07 - in conjunction with Wetland Care Australia was the Gumma Gumma Field day where an overview of the works undertaken at Gumma Wetland and outlined other work that was happening in the Nambucca Valley such as Newee Creek and Wirrimbi.
 - September 07 - Farm Machinery and the Small Farm Management field days. The farm machinery day with Carol Rose from NSW DPI showed and discussed the pro's and cons of various soil preparation and sowing methods using different machinery. The Small Farm Management day consisted of an opportunity to learn how to manage a lifestyle block in the Nambucca Shire, soil health, pasture management, animal health and land care were discussed.
 - October 07 - Tree Fair which was run to inform the community on funding and natural resource management. The fair also exhibited local produce suited to the Mid North Coast. This fair works towards a sustainable future for the Nambucca Valley and assists land holders with NRCMA applications for funding and training.
 - November 07 - Biological Farming field day. Biological farming is a chemical free method of farming that focuses on improving the microbiology as a way of increasing plant growth and produce yield. Biological farming includes, organic farming and biodynamic farming



*Valla foot Bridge over Deep Creek, Valla
Photo J. Ashby*

- February 08 - Lantana Control field days that demonstrated Lantana control using the "splattergun" method which is cheap, easy and effective in the fight against Lantana infestations.
- March 08 - Tree Fair.
- June 08 - Missabotti Creek Restoration Farm Walk. Walk and talk about the historical gravel extraction, including bank and river bed erosion and the progression of head cuts up the river system. The group was shown an example of river ramp and grille that had been installed on the creek at Jeff and Lee Unwin's property. Landcare had placed a rock girdle and toe protection, 1500 m of riparian zone weeded and 1 km of river bank planted with riparian vegetation.
- Nambucca Valley Landcare received approx \$200,000 in funding in the reporting year aimed at projects dealing with regeneration and education for the Nambucca valley. Projects included:
 - Upper Missabotti Reach Plan completed year 2 – bed controls, repair and an insert, 2 ha planted 2 km river native vegetation enhancement (weeding),
 - Newee Creek Reach Plan completed year 1 - 7 km river protection fencing,
 - Upper Taylors Arm Reach Plan completed stage 2 – 1.5 km of new fencing with 12 water points and began stage 3,
 - Deep Creek 10 km of riparian zone weeded,
 - \$9000 worth of plantings in coastal areas and;
 - Continued funding of landholder voluntary revegetation.
- Council in conjunction with Nambucca Valley Landcare ran a successful Indian Myna Trapping Program and Workshop on 20 February 2008. This workshop session discussed the best practice in trapping and the humane disposal of Indian Myna birds. There were 200 Indian Myna birds removed from the local environment during the reporting year. Funding has been sort for continuation of the project through 2008/09.
- Council planted a mix of 25 mature age trees consisting of Red Flowering Gums and Ivory Curls in Princess Street, Macksville, Mann Street and Riverside Drive

The Indian Myna is an introduced pest



Nambucca Heads. The survival rate was 100%.

- During the construction and maintenance of timber bridges, Council is now using lanolin as a timber preservative due to its low environmental risk and is regarded as a good quality product
- Valla Nature Reserve is an area of littoral rainforest listed as an Endangered Ecological Community (EEC) under the Threatened Species Conservation Act. In a partnership with the Department of Environment and Climate Change, Ngambaga Goori Green Team and Valla Beach Bushcare group a restoration project was undertaken in June 08. Works included weed control with eradication of lantana, bitou bush, morning glory and many other weeds. Valla Nature Reserve features large Brush Box, strangler figs, woody vines, epiphytes and ferns and is home to rainforest birds, gliders, possums, flying foxes and other native animals. Continued weed control and regeneration work will continue into the next reporting year.
- In July 07 the Crosswinds Wetland Reserve under the *Community Economic Development Project* had a face lift. The aim of the project was to encourage travellers to stop and rest in Macksville and enjoy the parks and other facilities on offer.

The first step of the project was to identify all of the environmental species within the reserve, building on the previous work of several community groups. The second was to build a boardwalk and

Did you know.....

22 Australian mammals have become extinct since European settlement - which is one third of the world's recent mammal extinctions - with 8 other species remaining only on islands.

Did you know.....

67% of the diversity in ecosystems is captured by national parks and formal reserves, with a further 5% captured by other protected areas and covenants on private land.

interpretive signage to encourage visitors to appreciate the river and emphasising the importance of the wetland bird and wildlife that exists in the valley. Seating and a carpark were also installed.

- Scotts Head Dune Care Group remains active in weed management and rehabilitation of the coastal vegetation. Works are supported by volunteers and some paid work from the Scotts Head Reserve Trust. Members have attended various workshops on the control of coastal weeds and the Coastal Conference on the Central Coast which was hosted by Wyong Council.
- During the reporting year the Ngurrala Aboriginal Corporation Nyambaga Green Team completed many projects from weed management, river restoration to boardwalk construction. This was funded by many sources including, private landholders, NRCMA, Council, Nambucca Valley Landcare, Envirofund and Valla Lions.

Weed Management work was done at:

- Thumb Creek – 1.5 km removing Small leaf Privet

- Taylors Arm – 2 km removing Small Leaf Privet, lantana, vine weeds and Blackberry
- Valla Reserve – 0.5 ha
- Jagun Reserve – 1 ha
- Yarriabinni Reserve – 1.5 ha this is an EEC (Ecological Endangered Community)
- Deep Creek on 4 properties - 3.7 km removal of Camphor Laurel
- Nambucca River – 1.5 km also Gross Pollutant Removal
- Taylors Arm - Gross Pollutant Removal and weed management – 2.5 km. This was done with support from Council who provided signs, plants, herbicide spraying and technical advice to the group, that is dedicated to eradicating weeds in the region.

Revegetation at North Arm of mixed open forest – private property - 1 ha.

River Restoration and Realignment was done on 2 private properties at Taylors Arm – 300 mts.

Boardwalk construction – 400 mts at Nambucca Heads.

Boardwalk and beach access construction - 50 mts at Valla Beach



White-faced Heron at Weir Reserve, Scotts Head. Photo J. Ashby

6.0 Atmosphere

6.1 INTRODUCTION

Air pollution typically results from a range of human activities. The primary source of air pollution in Nambucca Shire is burning vegetation followed by motor vehicles and woodfire heaters. Other sources are industrial processes, construction and demolition, incineration, solid waste disposal and domestic heating.

The effect of air pollution can be far reaching and may impact on climate, human health, visibility, property, flora, fauna and water quality.

Nambucca Shire's air quality is perceived to be quite good, although during the winter season (low fire risk)

the air quality is lower with rural burning and extensive bushfire hazard reduction in rural areas.

It is the urban and rural residential areas that are increasingly subject to air pollution associated with illegal backyard burning, bushfire hazard reduction and internal combustion heaters.

Other areas of concern are from the dust disturbance from unsealed roads in the shire, particularly after a long dry spell.

Air pollution issues may increase in the shire in direct correlation with population increase and the already

heavy dependence on the motor vehicle for transport.

6.2 PRESSURES ON OUR ATMOSPHERE

- Motor vehicle emissions
- Commercial business operators (saw mills, quarries, food shops)
- Wood fire heaters
- Construction and demolition
- Pollution

Source of Air Pollution **	2003/4	2004/5	2005/6	2006/7	2007/8	Movement towards sustainability
Smoke	1	14	17	8	13	↓
Odour	10	5	10	8	9	↓
Dust	10	5	3	3	2	↑
Total Complaints	21	24	30	19	24	↓
Complaints to DECC ***	25	27	20	6	13	↓

** Statistics from Councils Customer Service Requests ***Statistics from Department of Environment and Climate Change (DECC) www.environment.nsw.gov.au

Greenhouse Indicators **	2003/4	2004/5	2005/6	2006/7	2007/8	Movement towards sustainability
Council electricity usage (GJ)	no data	no data	no data	8550	9012	↓
Total greenhouse (CO ₂) emissions produced by Council operations (tonnes)	no data	no data	no data	2496	2631	↓
Number of Vehicles in Council's Fleet	no data	no data	no data	68	68	↔
Number of Vehicles that are powered with gas/hybrid	no data	no data	no data	4	4	↔
Total greenhouse (CO ₂) emissions produced by Council fleet (tonnes)	no data	no data	no data	900	793	↑
Number of vehicles registered in Nambucca Shire Council Area ***	no data	no data	15 788	16 142	18 401	↓
Total km of cycleways in LGA	no data	no data	no data	no data	3	ND

** Statistics from Councils Engineering Department *** Statistics from NSW Roads and Traffic Authority (RTA) www.rta.nsw.gov.au

Did you know.....

During winter, wood heaters can produce up to three times more particulate pollution than cars, and.....

It takes at least a year to season firewood properly. Well-seasoned or dry firewood can give up to 40% more heat and reduces the amount of wood smoke emitted when burnt.

6.3 RESPONSES TO THESE PRESSURES

- Council adopted its Sustainable Fleet and Plant Policy in March 2008. The objectives of this policy is to:
 - 1 Encourage the procurement of smaller, cleaner and less polluting vehicles.
 - 2 Reduce fuel consumption and reduce greenhouse gas emissions,
 - 3 Save both vehicle and running costs,
 - 4 Utilise renewable energy sources such as bio-diesel where it is available and compatible with engine warranty.
- A Fleet Improvement Plan for the reduction of Greenhouse emissions was drafted in December 2007, this plan aims to consider the options available to Nambucca Shire Council for the reduction of Greenhouse Emissions associated with the motor vehicle and major plant fleet.

This plan considered 8 options assessed against a base year of 2006/07. Guidelines for greenhouse emission reduction is set out by the NSW State Government.

- Hazard reduction in urban areas at the interface of Crown Land is done mechanically to reduce air particle pollution and in the long term the risk of fire.
- On October 4 2007 Council signed up to the ICLEI 'Cities for Climate Protection Program'. This program is committed to reducing greenhouse gas emissions and support earth friendly energy initiatives.

Council created milestones to reduce emissions and identifies ways to reach the set targets. These targets ideally match up to the Kyoto Protocol. Council hopes to reach Mile Stone 1 in the next reporting year.

- The Department of Environment and Climate Change (DECC) revised and repealed the *Protection of the Environment Operations (Control Of Burning) Regulation 2000* and incorporated its provisions as Part 2A of the *Protection of the Environment (Clean Air) Regulation 2002*.

Council has adopted Schedule 8 Part 2 of the Regulation that deals with burning of vegetation.

Council has applied the controls on burning vegetation only to the areas within towns and villages and known urban zonings.

- Council continues to work closely with the Rural Fire Service to reduce air pollution from burning off in the Shire.
- Council is a member of the Sustainable Choice Program.



Kookaburra

Photo by J. Ashby

7.0 Waste & Resource Recovery

7.1 INTRODUCTION

As people buy and consume more products, the rate of waste generation increases. This general trend places pressures on the environment and Council's waste management systems.

People who reside, visit or work in Nambucca Shire, can reduce this impact by taking more responsibility for their waste. This involves actively avoiding waste generation, recycling more, and disposing of non-recyclable materials responsibly. This includes utilising councils green waste service as apposed to illegally burning off in urban and rural – residential areas which increases air pollution.

Council is constantly improving its capacity to handle waste effectively and to reduce the initial generation of waste by implementing various plans, policies, strategies and education programs.

Council regards a large percentage of waste as a valuable resource, and is constantly increasing efforts to divert waste from landfill by improving resource recovery throughout the LGA.

The landscape, streetscape, mix of housing types and the characteristics of residents, visitors and businesses are not uniform across the Shire, neither are the waste avoidance and resource needs and challenges.

7.2 PRESSURES ON OUR WASTE SYSTEMS

- Population increase
- Littering
- Illegal dumping
- Increased generation of waste
- Decrease in availability of landfill
- Disposal costs
- Cost of managing negative environmental impacts from landfill sites (leachate, greenhouse gasses)
- Reduced life span of goods especially electrical goods (E Waste)
- Increased packaging of products
- Increased economic growth and consumption of goods

Environmental Indicator **	2003/4	2004/5	2005/6	2006/7	2007/8	Movement towards sustainability
Municipal waste disposed to landfill (tonnes)	15457.98	14663.41	13598.14	12459.3	9578.55	↑
Recyclables diverted from landfill (tonnes)	no data	no data	no data	no data	123.3	ND
Greenwaste diverted from landfill (tonnes)	388.44	759.97	613.98	335.35	671.85	↑
Scrap metal diverted from landfill (tonnes)	392.6	320.65	437.78	276.78	194.64	↓
Batteries diverted from landfill (tonnes)	16	8.67	8.17	6.81	8.12	↑
Motor oil diverted from landfill (litres)	2100	2400	2500	1600	7500	↑
E-waste diverted from landfill (tonnes)	no data	no data	no data	no data	1.166	ND

** Statistics from Councils Engineering Department

Nambucca Shire LGA Generated Kerbside Waste* **	2003/4	2004/5	2005/6	2006/7	2007/8	Movement towards sustainability
Recycling (tonnes) (commenced Sept 07)	no data	no data	no data	no data	1984.5	ND
Organics (tonnes) (since July 07)	no data	no data	no data	no data	2668.86	ND
General Waste (tonnes) (commenced Dec 07)	no data	no data	no data	no data	2127.08	ND

* waste is processed at the Coffs Harbour Transfer Station **Statistics from Coffs Coast Waste

Did you know.....

Council's waste facility recycles not only plastics, metals and paper but also green-waste to be made into quality compost for use in gardens, building materials such as bricks, windows, mattresses and e-waste to be broken down and recycled. The facility also sells re-use building materials, quality compost and runs a re-use second hand shop right there on the site!

7.3 RESPONSES TO THESE PRESSURES

- October 07 saw the implementation of Council's Liquid Waste Policy. This policy strives to assist Council to achieve sound, efficient and responsible management and pricing of liquid trade waste and to comply with Dept. of Water and Energy's Best - Practice Management of Water Supply and Sewerage Guidelines.

This policy requires identified Liquid Trade Waste dischargers to gain formal approval from Council for discharge to the sewerage system. Such approval is subject to specified conditions and the provision of appropriate pre treatment infrastructure.

Inspections of properties have been undertaken to explain the process to the affected property owners or tenants and to ensure that all pre treatment infrastructure satisfies current standards.

- Drum muster was run in May 08

- There has been a decrease in the number of dumped and abandoned cars in the Shire since the last reporting period due to the higher price of steel, potential dumpers are getting some value back on their vehicles.
- 250,000 L of effluent was collected from the sale yards in 2007/08. The effluent was re-used as fertiliser on agricultural land in the Shire.
- Council's new landfill site has one artificial wetland to capture and filter surface water run off from the site and one leachate pond that captures the leachate from the landfill.
The ponds leachate level is controlled by irrigating on capped/rehabilitated landfill cells to stop any overflow.
Council continues to monitor water quality under their DECC Licence conditions
- Over 80% of household waste from the Shire was diverted from landfill in the form of recyclables (plastics, paper and steel), metals, greenwaste and assorted e-waste, batteries, oils and chemicals.



*E-Waste at Council's Transfer Station
Photo J. Ashby*

8.0 Noise

8.1 INTRODUCTION

Noise pollution can be defined as unwanted or offensive sounds that unreasonably intrude into our daily activities. It has many sources, most of which are associated with urban development such as roads, air, transport, industrial noise, neighbourhood and recreational noise. The impact of noise in our community can reduce public amenity, and adversely affect health and communication.

Noise pollution can cause a major reduction in the quality of life. However, some unavoidable activities, such as demolition, construction and excavation, are inherently noisy and need to be well managed rather than prevented.

The Department of Environment and Climate Change (DECC), the NSW Police Service, and Council all play a part in monitoring and regulating noise control.

The *Protection of the Environment Operations Act 1997* and the *Protection of the Environment Operations (noise Control) Regulation 2008* are the principal legislation applied throughout NSW to address environmental noise issues.

8.2 PRESSURE ON OUR ENVIRONMENT FROM NOISE

- Increased population
- Barking dogs and crowing roosters
- Traffic and transport
- House and car alarms
- Swimming pool pumps
- Mechanical ventilation systems (air conditioners)
- Parties
- Public events
- Construction noise
- Garbage collection
- Licensed venues



Rooster

Photo courtesy of Google Images

Source of Noise **	2003/4	2004/5	2005/6	2006/7	2007/8	Movement towards sustainability
Commercial & construction	5	8	2	4	10	↓
Dogs	18	20	35	31	26	↑
Roosters	7	3	5	10	11	↓
Other	7	10	4	14	16	↓
Total Complaints	37	41	49	59	63	↓
Complaints to DECC ***	2	3	6	7	0	↑

** Statistics from Councils Customer Service Requests *** Statistics from Department of Environment and Climate Change (DECC) www.environment.nsw.gov.au

Did you know.....

Complaints about barking dogs generally occur when dogs experience insufficient space, provocation, lack of exercise or adequate shelter, ill health or an unsuitable diet.

8.3 RESPONSES TO THESE PRESSURES

- In the reporting year there were 63 noise complaints received by Council. Council responded by carrying out inspections and taking the appropriate regulatory action. Most complaints were resolved at this stage.
- Nearly half of all noise complaints were attributed to barking dogs (26). This is a significant reduction from last years reporting period. Dogs bark usually due to insufficient space, provocation, lack of exercise or adequate shelter, ill, or an unstable diet. The majority of these complaints were resolved through mediation and negotiation. However, in the case of ongoing problems, Notices of Intent to issue Nuisance Orders, and Dog Nuisance Orders were issued under the *Companion Animals Act 1998*.
- Complaints about roosters crowing have been steadily rising since 2004. The custom of keeping fowl for eggs and meat in previous years is now creating a nuisance in the built up urban areas. Roosters create problems of noise in the early hours of the morning. To abate the crowing, owners must build completely dark chook pens or dispose of the rooster all together.
- The Protection of the environment Operations (Noise Control) Regulation of 2000 was repealed and the new *Protection of the Environment Operations (Noise Control) Regulation 2008* came into effect on 1 March 2008. There are now new provisions for musical Instruments and sound systems, vehicle noise and heat pump water heaters (changes to water heaters come into effect in Sept 08).
- Council continues to work closely with police to reduce noise complaints from licensed premises and parties.



Barking Dog, Photo courtesy Google Images

9.0 Aboriginal & Non-Aboriginal Heritage

9.1 INTRODUCTION

Heritage is defined as a place, object, custom or culture that has historic, scientific, cultural, social, archaeological, aesthetic, natural or Aboriginal significance. Heritage consists of those places and objects that we as a community have inherited from the past and wish to hand on to the future generations.

Our heritage gives us a sense of living history and provides a physical link to the work and way of life of earlier generations. It enriches our lives and helps us to understand who we are today.

Nambucca Shire's heritage is diverse and includes buildings, objects, monuments, Aboriginal places, gardens, bridges, landscapes, archaeological sites, shipwrecks, relics, bridges, streets, industrial structures and conservation precincts.

Aboriginal sites are the physical remains of a culture that is more than 40,000 yrs old. It is important that Aboriginal sites are recorded, studied and preserved as part of the cultural heritage of the Aboriginal people in the Nambucca Shire and as part of the wider communities historic and cultural heritage.

It is very likely Nambucca Shire supports far more unknown or unlisted sites throughout the Local Government Area.

9.2 PRESSURE ON OUR ABORIGINAL AND NON-ABORIGINAL HERITAGE

- Lack of enforceable maintenance provisions for listed sites
- Insufficient expertise in dealing with listed items
- Cultural change in favour of replacement rather than maintenance of built fabric
- Lack of understanding and recognition of Native Title rights and interests
- Erosion and damage of sites from wind, water, sun and human activities
- Environmental performance and access legislation



Dancers

Image courtesy Google Images

Heritage Sites **	2003/4	2004/5	2005/6	2006/7	2007/8	Movement towards sustainability
Aboriginal Heritage Sites	143	154	154	169	169	↔
Non-aboriginal Heritage Sites	37	37	37	37	37	↔
Conservation Areas	2	2	2	2	3	↑

** Statistics from Department of Environment and Climate Change (DECC) www.environment.nsw.gov.au

Did you know.....

Aboriginal heritage can include natural features such as creeks or mountains, ceremonial or story places or areas of more contemporary cultural significance such as Aboriginal missions or post contact sites.

9.3 RESPONSES TO THESE PRESSURES

- An Aboriginal Cultural Heritage Management Plan was adopted by Council on the 5 June 2008. This plan sets out to develop and present standards and guidelines which promote the identification and conservation of known and unrecorded Aboriginal sites, places and landscapes in the Nambucca Shire.

The Plan is intended for use by those council staff who are required to address the assessment and management of Aboriginal cultural heritage in the LGA. The plan may also be used by the Local Aboriginal Land Councils (LALC) in the LGA (i.e Nambucca, Unkya and Bowraville) in their roles in working with council and landowners to achieve positive conservation outcomes for sites in their area. Land owners and developers can use the plan to get an idea of issues and processes that relate to their proposed land uses and the conservation of Aboriginal heritage sites and places within the LGA.

The document provides a framework for the conservation and assessment of Aboriginal heritage sites and places within the LGA. It should be read in conjunction with any specific requirement or guidelines produced from time to time by the Department of Environment and Climate Change (DECC) and/or in conjunction with the Director-General's (NSW Department of Planning) requirements in relation to any Environmental Impact Statement (EIS) under preparation.

- Council maintains a register of known relics in the Shire. There are procedures in place to ensure that all proposals on land that have the potential to contain a relic or Aboriginal Conservation Area are referred to both DECC (Culture and Heritage Division) and the relevant Local Aboriginal Land Council (LALC) for comment.



*Sullivan's Bowra Hotel, Bowraville
Photo NSC*

10.0 References

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