

# Ballina Shire Council

## State of the Environment Report

### 2009-2010



*Reported in relation to*  
Ballina Shire Council's  
Community Strategic Plan



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### Forward

Ballina Shire Council acknowledges the guidelines set by the NSW Division of Local Government in relation to the Integrated Planning and Reporting Framework and the State of the Environment Reporting requirements. This report has been aligned to the objectives of Ballina Shire Council's Community Strategic Plan and as a result will synchronize with Council's annual reporting.

It is also noted that Councils in the Far North Coast Region have been working together with a view to consolidating their respective State of the Environment Reports into a single regional document. These discussions have been coordinated by the Department of Premier and Cabinet through its regional office.

## Introduction

Ballina Shire Council continues to play a leadership role in both monitoring and protecting the state of the environment. Ballina Shire enjoys a diverse natural landscape of coast lines, lowland heath, flood plains and forested hinterlands which all exist in the traditional Country of the Bundjalung people. Whilst the shire's natural environment is beautiful and valued by many, our villages, towns and agricultural practices place pressure on our ecological systems in a variety of ways.

Each year the way we live imposes an impact on our environment. Key impacts arise as a result of air and noise pollution from industry, pollution of water ways due to excess nutrient runoff, the illegal dumping of waste, excessive resource use (such as water and energy) and the destruction of native habitat via clearing. In addition, the Ballina Shire is at risk of climate change impacts including sea level rise which will potentially become an increasing threat in coming years.

Council has been working to reduce some of the effects of these impacts with a variety of projects and actions throughout the year. This document is a "snapshot" summary of the state of the environment of the shire for the financial year period 2009-2010 and includes documentation of data collected over the previous seven years. The provision of data from preceding years allows for comparison and the visualization of trends occurring from year to year.

Each year local governments throughout NSW report on the current **state** of the environment via specific indicators and data trends. In addition, the Council identifies key **pressures** on maintaining the integrity of the environment and the associated **responses** that Council and the community have taken to mitigate these pressures.

This year the state, pressure and responses have been reported under each objective heading of the Ballina Shire Community Strategic Plan in an effort to streamline Council's integrated planning and reporting framework and provide feedback on the way Council is meeting its community objectives.

## Objectives

The Ballina Shire Council Community Strategic Plan (2010-2025) outlines the community's priorities for the shire over the next ten (10) years. The plan has eight key objectives which are detailed below and form the chapters for this State of the Environment Report. These objectives were developed in collaboration with the community during the "*People, Place, Prosperity: a framework for a more sustainable Ballina Shire 2025*" project which worked toward defining our collective ambitions for the future. They are now being used to more fully reflect our entire environment which includes our built, social, economic and natural environments.

The objectives are:

1. a built environment contributing to health and wellbeing
2. a diverse and prosperous economy
3. a healthy natural environment
4. a diverse and balanced use of our land
5. people attaining health and wellbeing
6. resilient and adaptable communities
7. responsible and efficient use of resources
8. transparent and accountable governance

# 1. a built environment contributing to health and wellbeing



*“Our built environment includes our urban areas, which are a mixture of residential, commercial and industrial, our individual houses and neighbourhoods, and our infrastructure of roads, water, power, lighting and sewerage. It also includes the boat ramps, wharves, parks, playgrounds, and sporting fields that we use. For us, achieving this vision means dealing with some challenging issues, including housing affordability, transport, and the rise in single-person households.”*

*(Ballina Shire Council Community Strategic Plan)*

## Indicators and trends

Indicator	2004	2005	2006	2007	2008	2009	2010
New home applications (new residential houses, flats, dual occupancies or duplexes)	348	317	162	175	134	-	139
Noise complaints	67	81	95	87	87	81	100
No. of licensed premises <sup>1</sup>	29	-	9	1	17	24	28
No. of septic system approvals (to install)	11	54	66	42	39	38	37
Barking dog complaints	77	137	97	20	26	-	109

1. Prior to 2008 reported as No. of licensed discharge points to water.

Indicator	National	NSW	Ballina
Average number of persons per bedroom	1.1	1.1	1.1
Average household size	2.6	2.6	2.4

## Pressures on achieving this objective

### Urban Stormwater

Contaminants such as lawn clippings, pet droppings, sediments, rubbish, oils and grease from urban stormwater place stress on our waterways. These contaminants can cause water quality problems, reduce visual amenity and impact adversely on aquatic flora and fauna. Preventing these contaminants entering our waterways is an ongoing challenge for the community and Council.

### Air and Noise Pollution Complaints

Council receives many complaints about air and noise pollution each year. Air quality complaints include smoke from wood heaters, dust from construction projects and offensive odours. Noise related complaints include barking dogs, noise associated with parties and vehicle noise.

### Highway Noise and Pollution

Residents of Ballina Shire have expressed concern regarding the increasing levels of traffic congestion and associated noise from vehicles on the Bruxner and Pacific Highways. Concern has also been raised due to increased traffic resulting from new residential subdivisions. Vehicles can impact on noise and air quality for residents.

The completion of the Ballina and Alstonville Bypasses is likely to improve the associated traffic issues through these urban centres.

### Increasing Vehicle Usage

Over eight in ten workers in the shire travel to work in a car. The nature of our region means that there is a continuing trend towards increasing numbers of vehicles on our roads. This in turn will lead to increased emissions of gases such as carbon dioxide into our atmosphere. Such emissions can result in a reduction of our air quality and contribute to climate change.

### Housing Style

The majority of housing stock in the LGA is currently made up of separate houses (62.6% - ABS 2006).

The dominance in this form of housing may well be challenged in years to come. The high percentage of older people living in Ballina Shire will increase the need to have alternative types of housing, such as villas or units, to meet the changing needs of our current and future residents. This is a challenge that warrants detailed future consideration.

### On Site Sewage Management Systems

Approximately 4,300 onsite sewage/septic systems (OSSM) are in use in the rural areas of Ballina Shire. Poorly maintained, failing and illegal discharges from OSSMs have been blamed for causing pollution of ground and surface waters, for the generation of odours and for posing risks to human health. It has been estimated that up to 50% of all systems are failing or at risk of failing, with many OSSMs found to be associated with structures converted to residential or other land uses without approval.

As a result, Council has recently approved new OSSM enforcement procedures to address the high percentage of land use issues encountered during the OSSM inspection program. Problematic OSSMs identified will continue to be followed up by Council's OSSM Officers, with land use issues identified during the OSSM inspection to be passed onto Council's compliance staff for further investigation..

### Licenses to Pollute

Premises in Ballina Shire which are licensed under the Protection of the Environment (Operations) Act include quarries, sewage treatment plants, concrete batching plants and pig production. They are licensed to operate within defined controls to minimize their detrimental environmental effect. Details of current licenses can be found on the DECCW public register.

### Provision of Water and Waste Water Services

As the population of the shire continues to grow there will be an increasing need to provide potable water and subsequently deal with the waste water produced. Ensuring that the public infrastructure is available and appropriately sized to meet this need will be a growing issue.



## Responses to these pressures

### Urban Water Management Strategy

In July 2003, Council adopted the Urban Water Management Strategy (UWMS), which provides a 'blueprint' for the management of water supplies, wastewater and stormwater in Ballina Shire. The strategy commits Council to actions that will result in progressive improvements in line with best practice in these areas. Council is continuing to implement the strategy which includes initiatives relating to use of reclaimed water and dual reticulation systems:

- Reclaimed water is currently being used for irrigation on sporting fields, on the Ballina Golf Course, Ballina Race Track and the Wardell Turf Farm and other agricultural reuse purposes. It is part of the UWMS that this network continue to be expanded to replace the need for drinking water to be used for these purposes during dry weather.

- Council is continuing to facilitate the installation of dual reticulation in new residential estates in the East Ballina, Ballina Heights, Cumbalum and Lennox Heads areas. Recycled water will be delivered to households through a second set of water pipes that are colour coded and can be used for purposes other than cooking and bathing such as in the yard and for toilet flushing. Current information indicates that these purposes are utilizing 40% of demand during dry weather in the Ballina Heights subdivision. Whilst this supply is currently being provided with drinking water, the information means that once the new treatment plants are commissioned at West Ballina and Lennox Head, Council will be able to significantly reduce the demand for drinking water in these and newer subdivisions.

- In order to reduce the level of salt water infiltration and subsequently the amount of effluent being processed at the treatment plants Council has undertaken an infiltration and inflow reduction program involving camera monitoring of the insides of the various sewer pipes within the shire. From this investigation a program of works has been implemented which should lead to reduced infiltration. This program will continue into the future.

- Council is currently undertaking trials with Wide Bay Water to examine pressure in the potable water mains with a view to reducing pressure where high pressure currently exists in order to reduce losses. Trials to date have indicated that significant opportunities exist which have lead to reduced water losses. This program will be used to substantiate expansion of the water loss management program to complete the network.

### Water Sensitive Urban Design

Council has been implementing a specific Development Control Plan relating to stormwater management since March 2004.

This has resulted in more stringent stormwater management measures over time. For example, new allotments within several new residential subdivisions are required to have dual water systems installed, allowing for the provision and use of recycled water.

### Trade Waste

Council's Trade Waste Policy has been aligned with the Department of Water and Energy's model policy to ensure Ballina Shire Council's performance in this area meets the NSW standard.

Council's Trade Waste Policy requires those generating liquid trade wastes to have appropriate pre-treatment systems. The policy aims to protect Ballina Shire's sewerage system in a sound and efficient manner.

### Ballina-Byron Gateway Airport Aircraft Noise Review

Council has completed a review of aircraft noise in relation to the Ballina-Byron Gateway Airport. The review informed the update of Council's Development Control Plan Chapter 4 – Aircraft Noise which aims to maintain appropriate separations between land uses and the airport, including aircraft flight paths.

### Responding to Air and Noise Complaints

Council continues to respond to noise and air complaints as part of its responsibilities under the Local Government Act. Council generally responds to complaints regarding noise and air quality by undertaking inspections and monitoring (noise) to determine if the complaint is verified. Where a complaint can be verified, Council may issue Notices or Orders to have an activity cease or to otherwise resolve the matter.

### Ballina Bypass Pacific Highway Upgrade and Alstonville Bypass

The initial stage of construction of the Ballina Bypass has been completed and further works are progressing steadily.

Construction of the northern section (Ross Lane – Cumbalum) of the Ballina Bypass is due for completion by the end of 2010, with the completion of the southern section (Cumbalum – Bruxner Highway) due by approximately the end of 2012. This project is likely to considerably mitigate the congestion between local and highway traffic which currently occurs.

The 6.2 km Alstonville Bypass will commence at Sneaths Road, Wollongbar and rejoin the highway near the Tropical Research Station at Perry's Hill, east of Alstonville. The project is due to be completed by early 2011, weather permitting. Once completed, the bypass will relieve traffic commuting between Lismore and Ballina and split the internodal and local traffic within Alstonville, thereby relieving the congestion at peak times.

### **Walkways and Cycleways**

Council selected a preferred option for the Coastline Shared Pathways project. The proposed design will include a commuter cycleway on the western side of the existing Coast Road and a shared pedestrian/recreational cycle path between the Coast Road and the coast.

### **Emigrant Creek Water Catchment**

Funding provided by Rous Water has allowed Council to commence an accelerated program of inspections of On-Site Sewage Management Systems (OSSMs) within the Emigrant Creek Dam catchment area. This program has been implemented in addition to Council's regular OSSMs inspection program.

Approximately 250 land parcels exist within the catchment. Each land parcel will be inspected by the project officer to determine whether there is an OSSMs present, and if so whether it is adequate and working properly. Unsatisfactory OSSMs will be required to upgrade to the standard specified in Council's On-Site Sewage & Wastewater Management Strategy 2008 and the Rous Water Guidelines. The aim of the program is to safeguard the drinking water catchment from microorganisms harmful to humans.

As at 30 June 2010 approximately 16% of the land parcels had been inspected and 31% of these did not have any improvements on the land.

The other land parcels inspected were found to have 1, 2 or 3 OSSMs per lot. Of the 28 OSSMs inspected, 15 were operating satisfactorily, 8 had failed and 5 had other irregularities.

The program has identified unsatisfactory and unauthorized works that presented a hazard to both public health and the environment. This program will continue to progress during the next financial year.

### **Sediment and Erosion Control Project**

During 2009 Council's Public & Environmental Health Section held an Erosion and Sediment Control Training Program for local builders, developers and Council's operational and enforcement Staff.

The objective of the training was to raise participants' awareness and develop their knowledge and skills in implementing effective erosion and sediment controls.

The program received an excellent response with the attendance of close to 100 people over the three days.

Subsequent to this training, Council's Public & Environmental Health Section has implemented an Erosion and Sediment Control Education and Enforcement Program.

The objective of this program is to protect our local waterways and environment by educating the community, builders and other trades people along with Council's staff on the importance of erosion and sediment control on construction and development sites.

Delivering such educational and enforcement programs is likely to produce improved erosion and sediment controls on our shire's building and development sites, including Council managed job sites, leading to the further protection of our waterways and environment.

## 2. a diverse and prosperous economy

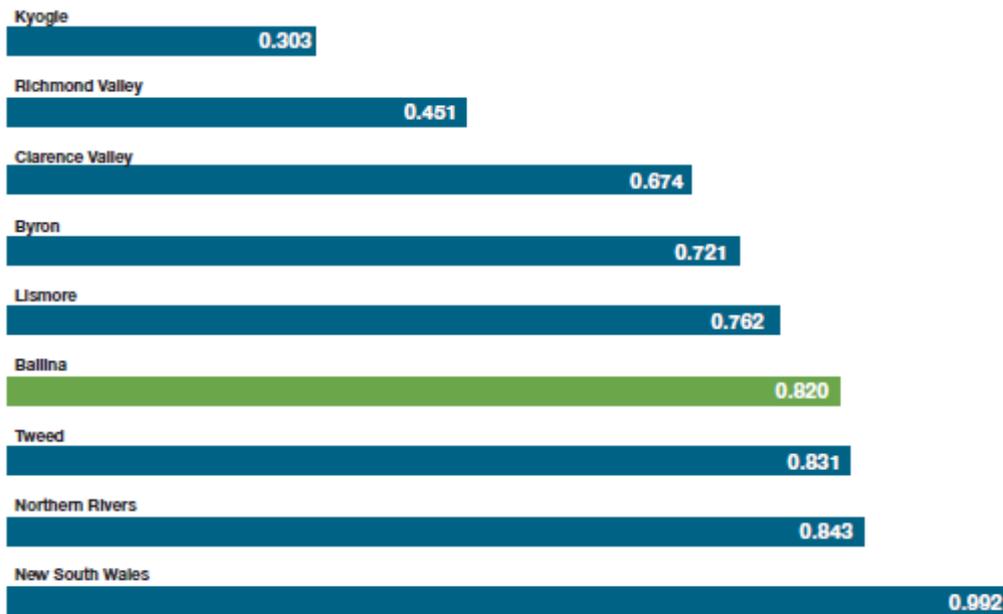


*“Our economy is very different now to what it has been in the past. In the past, agriculture and timber were very important contributors to both our Gross Regional Product and employment.*

*We are typical now of the so-called seachange economy. We need to create a more diverse economy and our collective levels of education and training and the average age of the population are critical economic issues. For us, achieving this vision means dealing with some challenging issues, including the structure of the economy, the distribution of wealth, and our level of education.”*

*(Ballina Shire Council Community Strategic Plan)*

### Index of Economic Diversity



*(Source: Lawrence Consulting Pty Ltd, 2010)*

The index of economic diversity (see graph above) for Ballina Shire when compared to the national economy is 0.820, which ranks second of the seven Local Government Areas in the Northern Rivers Region. The index aims to compare the level of diversity of industries present in a local economy with another local economy or the state as a whole. Ballina Shire is one of the most diverse economies of any non-metropolitan/metro fringe regions across New South Wales and Australia. Whilst Ballina Shire enjoys significant comparative advantage in some industries, the local economy is also well balanced and able to withstand global downturns whilst maintaining healthy business conditions and, consequently, quality-of-life.

## Small & Micro Businesses

Industry	Small businesses (<20 employees)		Micro businesses (<5 employees)		Average workforce (all businesses)
	No.	% of total	No.	% of total	
Agriculture, Forestry & Fishing	672	18.2	612	18.8	3.5
Mining	3	0.1	3	0.1	2.0
Manufacturing	213	5.8	168	5.2	5.6
Electricity, Gas & Water Supply	9	0.2	9	0.3	0.0
Construction	645	17.4	588	18.0	2.3
Wholesale Trade	135	3.6	120	3.7	2.0
Retail Trade	408	11.0	330	10.1	3.7
Accommodation, Cafes & Restaurants	123	3.3	66	2.0	7.8
Transport & Storage	141	3.8	132	4.1	3.0
Communication Services	15	0.4	15	0.5	0.4
Finance & Insurance	144	3.9	123	3.8	2.2
Property & Business Services	810	21.9	753	23.1	1.9
Education	12	0.3	12	0.4	7.8
Health & Community Services	183	4.9	159	4.9	5.4
Cultural & Recreational Services	93	2.5	84	2.6	1.5
Personal & Other Services	96	2.6	84	2.6	2.2
<b>Total</b>	<b>3,702</b>	<b>100.0</b>	<b>3,258</b>	<b>100.0</b>	<b>3.1</b>

(Source: Lawrence Consulting Pty Ltd, 2010)

### Pressures on achieving this objective

A challenge will be to ensure that our population growth and the structure of our community can be maintained in proportion.

Analysis of the economic environment will assist to understand our economic diversity, allowing suitable projects and initiatives to be identified for strategic growth and development.

As with all regions, a competitive advantage is crucial to maintaining or enhancing a diverse and prosperous economy.

## Response to achieve this objective

### Ballina Shire Council Online Community Profile

This online tool aims to simplify and collate Australian Bureau of Statistics data relevant to the Ballina Shire Community. Ballina Shire Council Community Profile includes results from the 1991, 1996, 2001 and 2006 Censuses of Population and Housing.

Ballina Shire Council Community Profile is designed to inform community groups, investors, business, students and the general public. To achieve this, the Profile is formatted to present the data in simple, clear tables and charts with concise factual commentary. This online resource will be available on Council's website [www.ballina.nsw.gov.au](http://www.ballina.nsw.gov.au).

### Ballina Boost

Ballina Boost, which stands for "Business Options, Opportunities and Sustainability Toolkit", is a project initiative co-ordinated by the Ballina Shire Economic Development Unit and funded by Ballina Shire Council in partnership with the NSW Industry & Investment (formerly NSW Department of State and Regional Development) and the Ballina Chamber of Commerce & Industry Inc.

This initiative has been designed to provide business and industry stakeholders, Ballina Shire Council, business support professionals and the community with key decision making information and knowledge transfer opportunities for the betterment of business growth and sustainability.

### Ballina Investment Prospectus

The Ballina Investment Prospectus is aimed specifically at any person or business wishing to have an investment interest in the Ballina Shire. At a glance investors can gain an overview of Ballina Shire's landscapes, life styles and localities as well as detailed information on the shire's:

- Local economy
- Competitive advantage
- Labour market
- Workforce development
- Industry concentration and
- Economic diversity

### Ballina Business Focus (website)

This website will be the first point of call for business with an investment interest in the Ballina Shire. The website will bring together much of the work of the Ballina Shire Economic Development Unit and house all of the above mentioned initiatives.

In addition the website will also provide information for business on resources available, a business directory and regular newsletters.

The website is intended for implementation during early 2011 and will be available at:

[www.ballinabusinessfocus.com.au](http://www.ballinabusinessfocus.com.au)



### 3. a healthy natural environment

*“We are proud of our beautiful and diverse landscape but we do not know a lot about the plants and animals we share it with. We need to know more about our natural habitat areas. Our waterways, from the small creeks on the plateau to North Creek and the Richmond River, are especially important to the local ecology and our enjoyment of it. This is true too of the plants, animals and habitats of the escarpment from the Blackwall Range to Newrybar, which links the plateau to the coastal lowlands and the ocean.*

*We are fortunate in having access to rivers and creeks, the ocean, forests and heathlands. Managing this access so that we can continue to enjoy our natural environment without damaging it is important to us.*

*For us, achieving this vision means dealing with some challenging issues, including our natural vegetation, development pressures and the potential impacts of climate change.”*

*(Ballina Shire Council Community Strategic Plan)*

#### Indicators and trends

Indicator	2004	2005	2006	2007	2008	2009	2010
No. of water pollution complaints received by Council	65	59	52	28	71	55	68
No. of days Lake Ainsworth closed to swimming	65	71	0	25	64	8	0
Endangered and Vulnerable Flora Species <sup>1,2,3</sup>	12	13	22	-	27	40	38
Endangered and Vulnerable Fauna Species <sup>1,2,3</sup>	13	13	82	-	86	94	87
Endangered Ecological Communities <sup>1</sup>	3	8	9	10	10	10	11
Hours spent by volunteers working on Landcare sites <sup>4</sup>	7 757	11 775	11 715	10 583	10 497	11480	10986
No. of air quality complaints	21	48	41	42	77	61	88

1. As listed under the Threatened Species Act 1995. 2. From 2006 includes figure for species classified as Vulnerable and Endangered. Previous years have reported only on Endangered Species. 3. Figures not available for LGA for 2007. 4. Does not include hours spent on rehabilitation projects on private lands and non-Council trustee Crown Lands.

## Pressures on achieving this objective

### Water Quality

Factors affecting water quality in the Richmond River include acidic water associated with acid sulfate soils, sewage discharge (especially from poorly managed onsite systems), sediment loads and the release of deoxygenated water into the river from the deterioration of inundated vegetation particularly in back-swamp areas.

Many of the water quality issues relate to land use management practices in the catchment. Reducing the impacts of some land use activities on aquatic environments will help to maintain healthy aquatic ecosystems.

The NSW Department of Industry and Investment identified that deoxygenated water leaving flood plains and poor management of flood gates as a main contributor to fish kills.

### Aquatic Weeds and Blue Green Algae

Many aquatic weeds or blue green algae live on enhanced nutrient loads in still or slowly moving waters. Use of detergents high in phosphorus and fertilizer runoff are two common sources of nutrients affecting our waterways in Ballina Shire.

For the first time in five years Lake Ainsworth was not closed to recreational activities at any time. Blue green algae was found to be present in the lake however the levels were not high enough to prohibit or limit recreational activities within the lake.

### Clearing of Vegetation and Degradation of Natural Areas

Any land use that involves or has involved clearing of native vegetation has an effect on biodiversity. Five of the forest ecosystem types occurring in Ballina Shire and which mainly occur on the Upper North Coast have been greater than 60% cleared. This includes the Big Scrub which has been more than 99% cleared. Approximately one third of the remaining area of the Big Scrub occurs in Ballina Shire in Nature Reserves or in Lumley Park and other remnants. Many examples of rare and endangered forest ecosystems occur on privately held land, which increases the complexity of attempting to manage this issue. Unauthorized clearing of vegetation on public land adjacent to residential properties in particular continues to place pressure on our natural ecosystems by further fragmenting native vegetation.

### Weeds and Feral Animals

The invasion of weeds and feral animals continues to place significant pressure on our natural environment. Both terrestrial and aquatic weed species impact negatively on many native plant and animal species and can significantly reduce habitat diversity, particularly Bitou Bush and Camphor Laurel. Feral animals are also causing damage to our native wildlife and ecosystems in the shire. In particular; unsupervised domestic animals, pigs, feral dogs and cats continue to place pressure on our natural heritage. Council is working with the National Parks and Wildlife Service and the local community to control the feral pig population in the Newrybar Swamp. Hares have been of concern in some shire locations this year, such as South Ballina.

Weeds invade much of our native vegetation and may often limit native growth and recolonise areas as a monoculture. Bitou Bush, Lantana and exotic vines and scramblers including Madeira Vine, Asparagus Vine and Coastal Morning Glory all exhibit this behaviour. The aquatic weed, *Salvinia molesta*, has also been identified in some of our waterways during the last year, such as at Lake Ainsworth.

Other key threatening processes of particular concern in Ballina Shire at present include the alteration of the natural flow regimes of rivers, streams, floodplains and wetlands, bush rock removal, cane toads, clearing of native vegetation, entanglement in or ingestion of litter in marine and estuarine environments, exotic vines and scramblers, climate change, infection of native plants by *Phytophthora cinnamomi*, loss of hollow bearing trees and the removal of dead wood and dead trees.

### Bushfires

Vegetated areas in the Ballina LGA are susceptible to bushfires that can cause extensive damage to ecosystems.

New residential development and the need for the safety of homeowners also places pressure on vegetated areas as bushfire hazard reduction clearing often necessitates the removal of native vegetation. Balancing the demand for new areas of urban development and the safety of homeowners in a bushfire with environmental protection is an ongoing challenge.

## Responses to these pressures

### Pollution Incidents

In the 2009/10 financial year, Council responded to 68 complaints about water pollution incidents, mainly from concerned members of the public. The complaints ranged from washing of vehicles in streets, fuel spills to oil leaks from vehicles. To determine the extent and nature of any possible pollution incident, Council officers monitored on site water parameters and, if necessary, took water samples to be analysed at a laboratory. Council continues to educate members of the public to prevent pollution incidents from occurring.

### Ballina Flood Study Update

Following the announcement of the 2009 NSW Sea Level Rise Policy Statement, Council remodeled the 1 in 100 year flood to incorporate the NSW Government's 2100 planning benchmarks (90cm sea level rise by 2100) and commenced the preparation of a Floodplain Risk Management Study and Plan.

The Floodplain Risk Management Plan will draw together the results of the flood studies and data collection to provide a strategic assessment of management options including emergency management, structural solutions and planning measures. Work required to complete the Floodplain Risk Management Plan is likely to take until at least the end of 2010.

In the interim, however, it was considered prudent that Council apply the results of the remodeled 1 in 100 year flood to "greenfield" development in the floodplain and introduced an amendment to the Ballina Combined DCP to this effect in September 2010.

### Water Quality Monitoring

A comprehensive study of post-flood water quality in the Richmond River has been completed by Southern Cross University. The research compares conditions after the floods in May 2009 and January 2008. It pinpoints the cause of fish kills following summer floods. Studies during the past 20 years have shown that a large amount of deoxygenated water flows into the Richmond estuary system as floodwaters drain away, but its source has been unclear.

Acid run-off from oxidized acid sulfate soil had been suspected of causing the kills. Evidence now shows this is not the case. A two year study, led by

Southern Cross University environmental scientist Dr Vanessa Wong, is complete and the results are due to be published in the coming months. (Source Richmond River County Council)

### Beachwatch Monitoring

Ballina Shire Council monitored nine locations over the 2009–2010 summer swimming season. These were the ocean beaches of Seven Mile and Shelly Beach, three sites in Lake Ainsworth, one site at The Serpentine and three sites in Shaws Bay. All locations have been monitored since summer 2002–2003 and the results are in the Beachwatch Partnership Program 'State of the Beaches' report each year. Our beaches recorded high levels of compliance with guidelines.

Faecal coliform and enterococci samples were collected to assess compliance with the National Health and Medical Research Council (NHMRC) (1990) swimming water quality guidelines.

### Landcare and Native Vegetation Restoration Projects

Volunteer Landcare and Dunecare groups are very active in Ballina Shire and work in many different areas across a range of native vegetation communities. Council actively supports these local volunteers through provision of training and resources to assist in the rehabilitation projects on and around Council managed lands. Some restoration projects of significance include:

- The Lennox Headland restoration project
- Ballina Coastal Reserve restoration and rehabilitation
- Marom Creek weir restoration project
- Lake Ainsworth aquatic and terrestrial restoration project
- The Big Scrub remnant restoration project

Council recently conducted a study and submitted a development application and Environmental Impact Statement to undertake hydrological and ecological restoration of the Chickiba Wetlands

Council has also supported many other volunteer restoration groups and non government organizations to obtain restoration funds for Council managed lands.

## **Planning Review of Vegetation Management Framework**

As part of the preparation of a new Local Environmental Plan for Ballina Shire, Council has been reviewing the planning controls that apply to vegetation management. Although the planning framework is complex, Council aims to establish a balanced and simplified approach to vegetation management in the shire for the future that reflects State vegetation management laws, contemporary planning and conservation principles and community values.

## **Noxious Weed Control**

Far North Coast Weeds (FNCW) is responsible for administering the Noxious Weeds Act 1993 on behalf of local government in northern NSW. FNCW is primarily concerned with control of noxious weeds on public lands (roadsides, parks and reserves and other Crown Lands). It also undertakes inspections of private property for the presence of noxious weeds and provides advice and guidance to landowners on the most appropriate methods of control.

Where appropriate, FNCW has the powers to issue penalty notices and on-the-spot fines to landowners for failure to control noxious weeds.

FNCW reports a very high level of voluntary compliance from rural property owners in Ballina Shire. Most landowners are aware of the problems caused by weeds and take a responsible approach towards keeping their properties clean. Where notices are issued to landowners to control particular weeds, most do so promptly and FNCW has not issued any fines to landowners in Ballina Shire for failure to control weeds in the past year.

## **Newrybar Feral Pig Control**

An integrated feral pig control program was implemented in May 2010 in an effort to make a significant impact on feral pigs in the Newrybar Swamp near Ballina.

National Parks and Wildlife Service (NPWS) acknowledge that feral pigs are causing considerable environmental damage in Newrybar Swamp which is partially located within Ballina Nature Reserve.

Through assistance received from the Catchment Management Authority, National Parks and the Newrybar Swamp Feral Pig Management Committee a baiting program using helicopters was implemented.

## **Native Vegetation Management**

Council has progressively been examining vegetation communities within the shire with its available resources. Mapping associated with this process has been utilized to assist in the identification of areas for application on environmental protection zones under the comprehensive LEP renewal program. The Draft Ballina LEP 2010 as exhibited proposes a 1.8% net increase in the total area of the shire zoned for environmental protection (or 6.5% net increase in environmental protection zoning). The approach taken in the Draft Ballina LEP 2010 may be further supported in the future through the completion of a biodiversity strategy or similar document to guide long term planning policy associated with the ecological attributes of the shire.

The Ballina Shire Urban Garden Guide is an example of a proactive initiative for encouraging the use of native species in our shire as replacements for popular, but sometimes weedy, exotic species.



## 4. a diverse and balanced use of our land

*“We have a diverse landscape, encompassing the ocean and beaches, the coastal lowlands, the escarpment, and the plateau. We have several urban areas, with Ballina becoming a regional centre.*

*Agriculture is a major land use and also contributes to a sense of openness in our landscape.*

*Areas of natural habitat are important elements of our landscape, with the Richmond River, Lennox Head, the Plateau, the Coolgardie Scrub, the Ballina Nature Reserve, Lake Ainsworth, the heathlands and Victoria Park amongst the many areas that contribute to the diversity of our place.*

*Resource availability and carrying capacity of our land are important constraints to current and potential land uses. We need to avoid irreversible land use decisions that could sterilize land-based resources in areas where these capacities are not known.”*

*(Ballina Shire Council Community Strategic Plan)*

### Indicators and trends

Indicator	2004	2005	2006	2007	2008	2009	2010
Percentage of shire zoned for agricultural purposes	63%						
Percentage of shire zoned for urban purposes <sup>1</sup>	Trend Increasing			4.29%	4.94% <sup>2</sup>		
Medium density housing applications (residential flat units)	78	243	46	16	28	-	18
Hectares under conservation management	2058						
Hectares zoned Environmental Protection <sup>3</sup>	12 478	12 495	No change		13 613		

1. Includes land zoned for residential, industrial and commercial purposes. 2. Figure also includes area used for open space. 3. This includes land zoned for Environmental Protection under Council's LEP as well as National Parks and Reserves.

Land Use Areas in 2010	Hectares
Agricultural Purposes	31210
Environmental Protection <sup>4</sup>	13613
Urban	1829
Open Space	353.9
Industrial	168.8
Business	86

4. Under the new LEP Environmental Protection will include: wetlands, water catchments, scenic/escarpments, coastal lands, urban buffer, and habitat. Also included in this figure are national parks and nature reserves.

## Pressures on achieving this objective

### Rural Land Use

Almost 20% of the shire population live in rural areas outside our towns and villages. Generally, land use in these areas is largely agriculture. Economically important agricultural activities in the Ballina LGA include sugar cane, macadamias, avocados and dairy farms with blueberries, coffee and stone fruit appearing as emerging industries. Farming is a very important part of the local economy and the history of Ballina Shire, although issues such as acid sulfate soils, fertilizer runoff and noxious and nuisance weeds create problems for farmers and the community alike.

### Urban Growth

Approximately 80% of our population live in an urban area, whether this is in the coastal settlements of Ballina and Lennox Head, the river village of Wardell or the plateau townships of Alstonville and Wollongbar. The benefits of a highly urbanized population include containment of urban sprawl and enhancement of lifestyle by ensuring people live close to amenities. The disadvantages include management of stormwater, provision of appropriate levels of key infrastructure, traffic management and conflicts between differing land uses.

### Land Use Conflict

Land use conflict occurs where there is a difference of opinion about how land should be used or where certain land uses have impacts on adjoining areas. Incompatibility between land uses is often the source of conflict, with conflicts relating to noise, views, odours, light, spray drift and traffic. Planning to avoid and minimize land use conflict along with measures to manage differences of opinion and impacts from one land use on another are central to achieving diverse but balanced land use outcomes.

### Environmental Attributes and Hazards

Ballina Shire has significant biodiversity attributes and environmental values including those associated with remnants of the Big Scrub, wetlands and the Richmond River escarpment areas. These attributes and values contribute to the land use diversity in the shire but are often under pressure from competing activities such as green field development.

Ballina Shire is also subject to a variety of environmental hazards including acid sulfate soils, coastal erosion, flooding and soft soils. These determine the type and extent of land uses that are suitable in certain areas.



## Responses to these pressures

### Ballina LEP Renewal Process

Council is undertaking a comprehensive review of the Ballina Local Environmental Plan (LEP) and associated planning documents. This review will update the planning framework in Ballina Shire to address contemporary issues, reflect current planning principles and community visions and needs, and guide land use management in the shire into the future. Council has completed the public exhibition of the Draft Ballina LEP 2010. The next step is the review of submissions received. For more information, go to <http://newlep.ballina.nsw.gov.au>.

### West Ballina Planning Study

Council completed the West Ballina Planning Study and Structure Plan in early 2010. The study and plan examined the characteristics of the land in the West Ballina area between the Ballina Bypass alignment, North Creek Canal and the existing arms of the

Pacific Highway. The study and plan aimed to identify the desired long term planning outcomes for the land so as to guide future land use in the Ballina locality. The study and plan includes consideration of ecological, agricultural, transport, infrastructure and flooding attributes amongst a range of other matters. The outcomes of this work will be used in formulating Council's Local Growth Management Strategy. Council is still considering how best to use the results.

### Acid Sulfate Soils

Council's Local Environmental Plan (LEP) requires development consent to be obtained for most works occurring in land identified as having the potential to expose acid sulfate soils. In the development assessment process factors are considered to minimize and manage any potential environmental impacts from disturbed acid sulfate soils. Farmers can obtain advice from NSW Department of Industry

and Investment on best practice management of acid sulfate soils within their properties. The sugar cane industry has developed industry guidelines to minimize any environmental damage to aquatic ecosystems due to disturbance of acid sulfate soils through their normal farming activities such as drain cleaning.

### **Ballina Shire Coastline Management Studies and Management Plan**

Council, in conjunction with the Department of Environment, Climate Change and Water, has prepared the Ballina Coastline Management Study. Part one of the study (Values Assessment) identifies the ecological, cultural, heritage, recreational and economic values of the Ballina Shire coastline. Part two of the study (Management Options Assessment) identifies where coastal values may be under threat from coastline erosion and outlines various management options. Council is now engaged in the preparation of the Ballina Coastline Management Plan. The plan will define the optimal combination of options and actions from the Management Study in order to deliver the desired outcomes and achieve the management objectives in regard to protection and preservation of beach environments and beach amenity; emergency responses during periods of coastal storms and beach erosion; management of long term erosion threats; and the continuing public access to our coastal environment.

### **Industrial and Commercial Land Use Review**

Council prepared an audit of industrial and commercial land in the shire to inform its comprehensive LEP review process. The audit found that there is adequate supply of both industrial and commercial land in the shire with existing zoned land and planned expansion areas, until 2028.

## 5. people attaining health and wellbeing

*"We are facing a range of health challenges over the next 20 years. Our ageing population is contributing to some of these.*

*We have relatively high rates of some infectious diseases and mental illness. We have fewer health care workers (including doctors, dentists, physiotherapists, councilors, and so on) for our population than other areas do. We do have a natural environment that is suitable for doing things that contribute to health and wellbeing. We have access to beaches, rivers and lakes, parks and walkways. We have sporting facilities, many different sporting clubs and a range of cultural activities such as galleries. Our sub-tropical climate also means that we can do things outdoors for most of the year."*

*(Ballina Shire Council Community Strategic Plan)*

### Indicators and trends

Indicator	2004	2005	2006	2007	2008	2009	2010
No. of companion animals identified in Ballina Shire <sup>1</sup>	5 248	5 916	6 611	7 459	8 420	-	10690
Population (ERP <sup>2</sup> )	39 566	39 841	40 266	40 836	41406	41860	42432

Indicator	National	NSW	2009	2010
Median age of persons	37	37	43	
Median individual income (\$/week)	466	461	397	
Median family income (\$/week)	1171	1181	1017	
Median household income (\$/week)	1027	1036	779	
Median housing loan repayment (\$/month)	1300	1517	1290	
Median rent (\$/week) <sup>3</sup>	190	210	210	365

1. Companion animals refers to cats and dogs registered and identified (i.e. those animals micro chipped). This figure has doubled over the last six years and may be partially attributed to deceased animals not being removed from the register.

2. ERP – Estimated Resident Population

3. Source Department of Housing rent sales reports issue 91 for June 2010 - 3 bedroom dwelling

## Pressures on achieving this objective

### Demand for Services

The continuing ageing of our population is likely to increase the demand for an array of community services including financial planning assistance, home modification assistance, health care and social and recreational activities.

As people age they often experience deteriorating health and reduced mobility. The ageing of the local population is likely to increase demand for health services. The demand will include an increase in the use of community health services as well as inpatient services in hospitals.

### Housing Affordability

Housing affordability is a national issue that requires a broad response. Many households in Ballina Shire are either in home purchase stress or rental stress. Over the region as a whole, approximately 22-23% of all households were paying 30% or more of their gross household income on housing (DOH, 2006).

### Transport

Rising fuel costs have significantly increased the cost of running a motor vehicle. Providing alternative transport options for local residents would assist in alleviating the cost to families and individuals. The limited public transport options and the associated costs of using the system have been identified as being a significant impediment for some in fully engaging in the community of Ballina Shire.



## Responses to these pressures

### Wardell Community Centre

The Wardell Community Centre is operated by Council. The centre is open three days per week and provides a range of community services to Wardell and the surrounding rural area. The centre is utilized by a number of local groups and service providers such as Alcoholics Anonymous, Knit 'n' Knat, Tax Help, Centrelink and Medicare. The centre also continued to provide services including a community newsletter, free computer and internet access, as well as providing the community with information on a range of local services and programs.

### Housing

The Ballina Shire Council Affordable Housing Strategy was adopted in March 2010. The strategy aims to engage in affordable housing policy, consulting with appropriate stakeholders to identify and develop opportunities to increase the availability of affordable housing. The strategy also seeks to improve Council's systems, procedures and frameworks to facilitate better affordable housing outcomes. A number of community workshops were held with various stakeholders to identify the preferred options.

### Ballina Bike Sunday

To celebrate NSW Bike Week in 2010, over 80 people participated in organized rides as part of Ballina Bike Sunday. NSW Bike Week seeks to raise the profile of cycling as a healthy, easy, low cost and environmentally friendly alternative to driving for short trips in the local community.

### Pedestrian Access and Mobility Plan Review

The review examined pedestrian areas and the routes people travel along using non-car methods. It assessed their use, with the aim of improving how the pedestrian network functions. The pedestrian network is defined to include shared paths, footpaths and cycle ways.

Strong community interest and participation produced close to 240 suggestions for improvement; 31 of these suggestions were raised previously when the first PAMP was completed in 2004. These items were reassessed, and any incomplete items from the last PAMP had their scoring adjusted to be included in the current review.



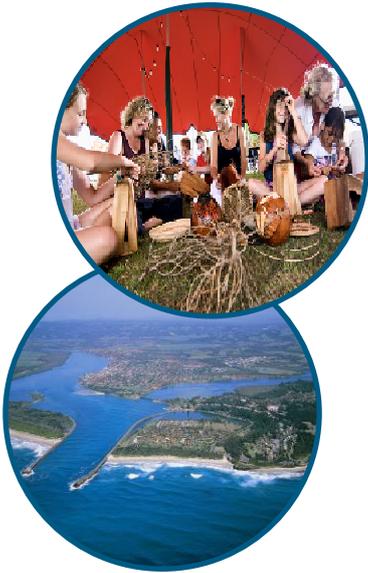
### **Far North Coast Regional Strategy**

The Far North Coast Regional Strategy was released by the NSW State Government in March 2007 and establishes a framework for the future development of the region. It aims to provide for another 32 500 jobs and 60 400 residents over the next 25 years, and Ballina has been identified as a third regional centre alongside Lismore and Tweed Heads. This document is currently under review.

### **Northern Rivers Community Gallery**

The Northern Rivers Community Gallery is a new community exhibition space created through the refurbishment of the heritage listed former Council Chambers in Ballina.

Developed by Council in partnership with the community, the gallery provides a centre for the arts and crafts in the region, with four gallery spaces that can be rented for exhibitions and cultural activities, and a learning centre.



## 6. resilient and adaptable communities

*“We now have a population of approximately 40,000 people. By 2025 we are likely to have a population in excess of 50,000. The population increase, both past and expected, will occur more in some areas than others. The expectations of the newer arrivals, many from the city, can be very different from long-term residents. The distribution of wealth is uneven across the shire, but in general we don't have high-income levels. That said, we tend to say that we are reasonably happy.”*

*Supporting a larger population will involve challenges. A healthy population needs a healthy natural environment and population growth may be constrained by resource availability and the need to protect natural and cultural assets. For us, achieving this vision means dealing with some challenging issues, including population growth, health and education.”*

*(Ballina Shire Council Community Strategic Plan)*

### Indicators and trends

Indicator	2004	2005	2006	2007	2008	2009	2010
Aboriginal Sites known (listed DEC's AHIMS database) <sup>1</sup>	173	94 <sup>2</sup>	94 <sup>2</sup>	94 <sup>2</sup>	116 <sup>3</sup>	-	146
Local Heritage Significance – no. of items listed	56	69 <sup>4</sup>	70 <sup>4</sup>	70 <sup>4</sup>	70 <sup>4</sup>	-	196
Local Items on State Heritage Register	2						
No. of vehicles registered in Ballina Shire	-	25168	25554	26598	27583	28404	29004

1. AHIMS (Aboriginal Heritage Information Management System). 2. There may be multiple features attached to one site. 3. Figure includes 29 Potential Archaeological Deposits (PAD's). 4. As of 2005 figure includes 23 Aboriginal Sites (also included in AHIMS figure).

## Pressures on achieving this objective

### Managing Heritage in the Ballina Shire

Council is responsible for the management of items and places of local heritage significance. As of 2005, Council has employed a part-time Officer (formerly Heritage Officer and now Cultural Development Officer) to advise Council on its heritage management responsibility.

Despite this, the management of heritage items and places continue to face pressures that are broad ranging, including pressures from development that leads to loss of items or unsympathetic development (including Aboriginal and other cultural heritage). Further significant issues include a lack of understanding of the values of heritage and the resistance of owners to list items and places identified as having local heritage values. In the case of Aboriginal heritage also, cultural heritage sites remain under represented, as (until recently) the listing of Aboriginal sites and places in the shire has not been based on a comprehensive shire-wide evaluation.

### Limited Opportunities to Promote the Shire's Aboriginal Heritage

To date, very little resource material has been compiled into a single document outlining the Aboriginal heritage values of the shire and in collaboration with the shire's Aboriginal community. This lack of information has led to a poor recognition of the shire's Aboriginal heritage values by limiting what is available to promote awareness in the community and to develop promotional material that recognizes/celebrates the shire's Aboriginal people and their heritage/history.

### Extreme Weather Events

Parts of the Ballina Local Government Area are susceptible to a number of natural disasters such as flood, fire and storms. The Lennox Head tornado in

June 2010 is an example of an extreme weather event causing significant damage to private and public infrastructure and threatening lives.

Emerging issues that are less immediately obvious are coastline hazards such as storm surge and the effects of climate change. Reducing the community's vulnerability to such natural disasters is one of Council's important roles.

### Energy Security

The rising cost of electricity and fuel is a pressure on many communities across Australia and Ballina Shire is equally affected. With much of our way of life depending on the availability of cheap accessible energy our community is at risk of large price rises and supply shortages. To enhance the resilience of our communities into the future, efforts into diversifying our energy sources will be required.

### Transport Choice

The ability for people to move in and around the shire is dominated by individual motor vehicle use. The limited public transport options reduce the choices available to the community for transport, especially for work and study.

### Food Security

The ability for a region to economically source diverse and nutritious food is paramount for the long term prosperity of a community. Food security in the Ballina Shire is threatened by loss of agricultural land and the reduced connection between producer and consumer. Most of the food that is consumed in the shire is transported over long distances before being sold at our local supermarkets. With the potential above mentioned energy security threats, it will be important to enhance the shire's ability to produce its own food.

## Responses to these pressures

### Northern Rivers Carpool Project

Ballina Shire Council, along with 5 other local government areas, Southern Cross university and North Coast Area Health Service partnered together to develop an internet-based carpool matching

service. The initiative was founded in an effort to create more sustainable travel options in the shire.

Members of staff or the community can use the website to find other people travelling in a similar direction for work and study. Currently there are over

550 members using the site. The website is free to use and can be accessed via [www.nrcarpool.org](http://www.nrcarpool.org).

### **Solar Power for Council buildings**

Council has been looking at opportunities to install renewable energy in the form of solar power on its buildings as part of its Sustainable Urban Business Project. Funding for two 10KW solar systems for the Ballina Library and the Ballina Community Services Centre has already been approved and installation complete.

### **Foodlinks – Food Security Project**

The Northern Rivers Food Links Project is a council cooperation initiative of the 7 Northern Rivers Councils and Rous Water. The collaborative partnership aims to work together to secure a sustainable food future for the region.

The Northern Rivers Food Links Project seeks to mitigate climate change impacts associated with food production and distribution, and strengthen community resilience to climate change and peak oil impacts.

### **Community Gardens**

Council has allocated land for the development of a community garden in Ballina. Community gardens provide an opportunity for residents to grow their own food and reduce their carbon footprint through the reduction of food miles associated with the transportation of food not grown locally. Community gardens can also provide social interactions and a chance to share gardening advice and experience.

### **Emergency Risk Management Strategy**

The Emergency Risk Management Strategy documents the hazards/sources of risk (severe storm, flood, bush fire, transport accident etc) which would require a significant and coordinated response. The strategy includes information relating to sources of risk/hazards which have resulted in large emergency events and which have occurred in or around the Ballina local government area.

### **Growth Management Strategy**

Council is undertaking a review of its Growth Management Strategy. This strategy analyses and forecasts population growth throughout Ballina Shire, and provides the framework for infrastructure planning and for Council's consideration of rezoning requests.

### **Community Donations**

Council allocated approximately \$87,000 in the 2009/10 Operational Plan for the community donations program. Council considers applications for assistance under this allocation in accordance with the following financial assistance policies:

- Community Groups Financial Assistance
- Community Halls Capital Works Assistance
- Council Fees for Community Groups
- Australian Representation

### **Managing Heritage in Ballina Shire**

Council's Cultural Development Officer assists in the management of heritage items and places in the shire by undertaking various heritage related projects in association with a number of community organizations. The officer works with both the Aboriginal and non-Aboriginal community to foster and facilitate improved heritage management.

Council's Cultural Development Officer also provides free advice to owners and developers as well as to Council with regard to development proposals and development applications.

Council provides financial assistance to owners of heritage items and places through its Local Heritage Fund and promotes awareness of the importance and values of heritage through its Heritage Festival program and other heritage promotion projects.

### **NSW National Trust - Heritage Festival**

Council participates in the NSW National Trust's Heritage Festival as an opportunity to promote and raise awareness of the shire's heritage. Each April Council co-ordinates a program of events in association with the shire's heritage organizations and in accordance with the National Trust's festival theme. The Heritage Festival Program is also supported through activities held in the Northern Rivers Community Gallery; a council owned and operated community facility

### **Shire Wide Aboriginal Heritage Study**

In 2007 Council received funding from the Commonwealth Department of Environment Heritage and Water Resources to undertake a Shire Wide Aboriginal Heritage Study in partnership with JALI Local Aboriginal Land Council. Significantly, the Aboriginal Heritage Study will review and update Council's records of Aboriginal heritage items/places in the shire, Council's protocols for managing Aboriginal heritage items/places and identify appropriate ways and resource materials with which



to promote the shire's Aboriginal heritage. Consequently, it is anticipated that new listings on DECCW's AHIMS database will be updated.

### **Establishing Protocols With The Aboriginal Community**

In addition to the above, Council has commenced working with the shire's Aboriginal community to develop protocols across all areas of Council business that implicate the shire's Aboriginal community. It is anticipated that developing protocols with the shire's Aboriginal community will open up a range of opportunities for promoting the shire's Bundjalung cultural heritage through measures such as signage, heritage trails and/or publications and place naming.

## 7. responsible and efficient use of resources

*"We are fortunate to have direct access to important resources within our shire: significant farmland, good soils, surface and groundwater, and extractive resources, like sand and rock. However, unless we plan carefully and protect the long-term viability of these resources we are likely to experience local shortages and higher costs, especially for extractive resources."*

*"As we are located in a coastal sub-tropical area, with good rainfall, lots of sunshine and access to the ocean, we are able to explore ways of taking greater responsibility for our water and power generation."*

*(Ballina Shire Council Community Strategic Plan)*

### Indicators and trends

Indicator	2004	2005	2006	2007	2008	2009	2010
Total bulk water consumption for Ballina shire (ML/yr)	3414	3984	3989	3887	3422	3448	4030
Per capita water consumption (kL/yr)	-	-	99 <sup>1</sup>	-	-	-	131 <sup>2</sup>
Total volume of wastewater treatment (ML/yr)	3642	3920	4257	3834	4225	4538	4006
Total volume of waste managed at Ballina WMF <sup>3</sup>	55212	54393	68475 <sup>4</sup>	62785	43402 <sup>5</sup>	70309	48747
Tonnes to landfill total	29640	28796	49363	30468	24988	22876	19645
Tonnes to landfill per capita	0.77	0.7	n/a	0.78	0.61	0.57	0.46
Tonnes recycled <sup>6</sup>	8318	10974	6328	4861	5619	5531	11635
Tonnes reused	19863	14623	12784	27456	12795	41902	17467
Total waste diverted from landfill	0.54	0.47	0.28	0.515	0.425	0.67	0.6
Total commercial passengers using Ballina Airport	84374	189202	265481	319579	312548	159821	271615

1. Figure calculated using statistics from 2006 data. 2. Figure obtained from Council Civil Services Records. 3. WMF – Waste Management Facility. 4. Ballina Shire Council imported waste during 2005/06 for capping of the WMF. This figure therefore includes more waste than was generated in Ballina Shire itself. 5. Reduced waste volumes for 2008 are possibly attributed to substantially increased tip fees. 6. As of 2007, this figure is only for Ballina Shire Council; previously it also included recycling from Byron, Lismore and Richmond Valley Councils.

## Pressures on achieving this objective

### Demand for Water

Expected population growth in Ballina Shire will result in additional urban development, increasing the demand for water resources. This in turn places pressure on our waterways and requires planning for a balance between the provision of adequate water supplies and environmental management of aquatic ecosystems.

Water is also extracted from creeks, rivers and groundwater systems for irrigation, stock and domestic purposes. During dry periods, this extraction can prolong periods of low flow, impacting water quality, habitat and downstream flows.

The consumption of bulk water increased by 582ML during 2009-2010 financial year. It is expected that this was due to the relatively dry weather conditions experienced, with only 1314mm of annual rainfall received compared to 2133mm experienced in the 2008-2009 period.

### Waste Generation

A range of waste is generated from within the Ballina Shire community through a variety of activities including those in the household, the commercial and industrial sectors and agricultural operations. It is very important to sort waste from recyclables as much as possible at home as material goes directly from garbage bins to landfill.

The Ballina Waste Management Facility's landfill area has been the subject of a range of difficulties

associated with birds accessing and living amongst waste that has entered the landfill. Difficulties have included potential strike hazard for aircraft, spreading of diseases and eutrophication of adjacent waterways.

### Waste Contaminants

Council's recycling program continues to experience difficulties with contaminants in the recycling waste stream. Correct sorting of recyclables from non recyclables at the source is crucial to the efficient functioning of Council's recycling system.

### Littering and Illegal Dumping

Littering and illegal dumping continue to be problems that require ongoing effort by Council, although the level of these problems is reducing over time. Littering hot spots include boat ramps, parks and beaches.

### Hazardous Waste Storage

A range of hazardous materials are generated in our shire that require appropriate disposal. Materials such as asbestos, contaminated water, paints, medicines and chemicals are common wastes that require specific methods of disposal to ensure the safety of the environment, our community and waste management workers.

## Responses to these pressures

### Resource Recovery

Ballina Shire achieved significant resource recovery over the last year, including: 880 tonnes of mulch, 313 tonnes of scrap metal, 13 tonnes of used oil, 4 tonnes of tyres, 8 tonnes of batteries, 4,599 tonnes of co-mingled recyclables, 452 tonnes of separated paper and cardboard and 2.8 tonnes of wooden pallets.

### Ballina Integrated Waste Management Strategy

Council has prepared the Draft Ballina Integrated Waste Management Strategy which outlines Council's strategic vision for waste management

over the next 8-10 years. The strategy includes a detailed action plan and prioritizes the following key areas: waste capacity of the landfill and the landfill levy in the short term; the future of organics and residual waste in the medium to longer term. Council is currently investigating options for processing of organics, including a pyrolysis plant.

### Green Waste Management

Council's WMF continues to incorporate the recovery and reprocessing of green waste. These resources are mulched on a regular basis. The material is then screened into one product that is then sold to the public and used in works on site and in reserves.

The quality of the mulch material has been substantially improved as a result of new management practices.

Investigation has begun into the feasibility of establishing a regional biochar facility at Ballina Shire Council's Waste Management Facility, involving Pacific Pyrolysis, Ballina Shire Council and Department of Industry and Investment. The introduction of a Pyrolysis process to produce biochar has the potential to divert all organic material from landfill thus reducing Council's waste to landfill significantly. Preliminary estimates are for a plant to process 25,000 wet tonnes of organic material annually.

### **Management of Land Contamination**

Council has a policy in force in relation to the management of land contamination in the shire called "Management of Land Contamination". The aim of this policy is to clarify, strengthen and broaden the management of land contamination within the shire.

### **North East Waste Forum Initiatives**

The North East Waste Forum (NEWF) is a regional waste management organization that provides waste management advice for the Northern Rivers Region in NSW. The forum looks at the broader issues of waste management and minimization whilst maintaining a local focus and developing locally based solutions. Council continues to be an active member of NEWF.

In 2009, NEWF undertook a source-based waste audit in which it was found that Ballina Shire residents generated 14.77 kg of waste per household each week. Other NEWF activities include: sustainable procurement initiatives for councils, establishment of e-waste and fluorescent lamps/tubes collection contracts, chemical 'drum-muster' program, business waste reduction project, waste wise events project, and the early childhood waste wise project involving the delivery of waste reduction and education programs into a total of 37 early childhood centres.

### **Sustainable Urban Business Project**

The Sustainable Urban Business (SUB) Project, run in collaboration with Lismore City and Richmond Valley Councils has focused on improving energy, water and resource use in local businesses. The Project was successful in engaging 309 businesses across all business sectors. Of these, many made substantial improvements in environmental performance. Post surveys found that 74

participating SUB businesses made at least one change to improve their environmental sustainability as a direct result of the project.

The rest of the business and industry sector were also engaged in the project through a more widely targeted education and awareness campaign, which involved the promotion of outstanding participating businesses and the development of education materials aimed at improving business and industry practices that impact negatively on the receiving environment. Independent research found that the media and education campaign was successful in reaching the wider business and industry sectors and that 24 out of 225 (or just over 10%) of randomly surveyed businesses made at least one direct change due to the educational material.

In addition, Council has a free sustainability resource kit for homes and local business to give away as part of the Sustainable Urban Business Project.

### **Power-Mate Energy Monitor**

There is much talk about conserving energy but many people are not aware of how much energy they use in their homes. A Power-Mate energy Monitor is a useful tool that measures the energy consumption of household appliances eg: televisions, fridges and microwaves. Residents can borrow a Power-Mate from one of the Ballina Shire Libraries.

### **Climate Change Mitigation**

#### *Reducing Community Emissions*

- Council has been involved in a number of projects that aim to reduce carbon emissions at a community level. This includes Northern Rivers Foodlinks, aimed at increasing the consumption of locally grown food to reduce emissions associated with food transportation, the Power to Make a Difference Program that has provided secondary schools across the region with tools, educational materials and support to improve their energy efficiency and the Sustainable Urban Business Project.

#### *Reducing Council's Emissions*

- Ballina Shire Council introduced B20 fuel to its fleet in March 2010. B20 is a blend of conventional diesel and 20 percent biodiesel. Although the B20 fuel costs around five cents more a litre it is a cleaner burning fuel, reduces particulates in the atmosphere and the production of the fuel comes from renewable sources. Council has resolved to introduce B20 biodiesel for all of its

operations provided the blend meets the Australian Diesel Fuel Standard and the Australian Biodiesel Standard, and that all biodiesel is sourced from Australian feedstock.

### **Waste Water Treatment Initiatives**

The area of wastewater treatment is rapidly evolving. Some new and unconventional technology recently installed in the shire includes membrane filtration, worm farm composting systems, treatment mounds and vetiver grass based land application areas.

New technology and methods of dealing with effluent via On Site Sewage Management (OSSM) are numerous and continually growing. Legislation supports innovation in this field, however systems need to be designed and installed based on good science and best environmental outcomes. Constrained sites often lend themselves to innovation and the use of new technologies.

The new Ballina Waste Water Treatment Plant will involve membrane bio-reactor with reverse osmosis to be included if salt levels cannot be reduced to acceptable levels for reuse purposes.

### **Alternative Daily Cover Trial**

At the Ballina Waste Management Facility Council is currently testing an alternative daily cover material, which consumes less space than conventional daily cover, hence enhancing landfill life while also contributing to a reduction in bird hazard, odours, vermin and litter. Traditionally, fill has been used to cover the landfill face at the end of each day. Under

this trial a spray on slurry is being used which produces a better seal and is thinner than using fill thus extending landfill life.

### **Clothes Swap**

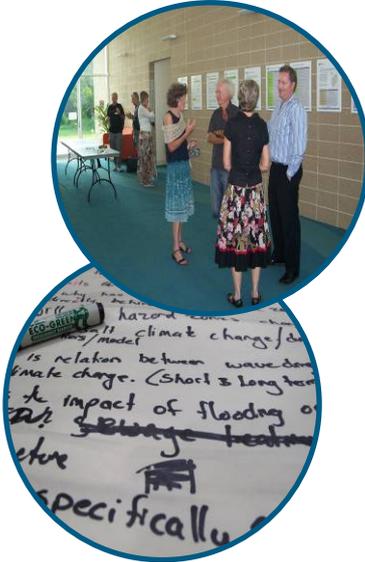
Council staff held a clothes swap during March 2010 at which people were encouraged to bring in their unwanted clothing and swap it with others. Each person got a ticket for each piece of clothing and could then go 'shopping' amongst those clothes available for swap. There were lots of clothes and shoes and accessories and it was held one morning tea/lunch time. The left over clothes were given to a local op shop.

### **Sustainable Procurement Procedure**

Council now has a Sustainable Procurement Policy. This policy is to provide a purchasing framework that will advance the sustainable use of resources within the organization. Sustainable procurement refers to the purchase of goods or services that have a lesser or reduced effect on human health and the environment (over the entire life cycle of the product i.e. production, distribution, usage and disposal) when compared with competing products or services that serve the same purpose. Examples of where Council has applied this policy include the purchase of biodegradable crockery and cutlery for events and the purchase of recycled star pickets.

Ballina Shire Council now uses recycled plastic street furniture and decking in some of its public parks. Seating made of recycled plastic has been installed in caravan parks such as Lake Ainsworth and Shaws Bay.

## 8. transparent and accountable governance



*“Ballina Shire is our local government area and we sit within the Ballina and Clarence State Electoral Districts, and the Richmond and Page Commonwealth Electoral Districts.*

*We have a wide range of community service, sporting and other community organizations. These provide a significant community benefit and most rely on volunteers. There are high expectations for the standards and accountability of these organizations.*

*For us, achieving this vision means dealing with some challenging issues, including our differences in what we think is important, the generalized lack of trust in government, the importance of volunteering and the lack of investment in developing the skills of volunteers. We also need to work on how we engage with the other communities, councils, and organizations within our region.”*

*(Ballina Shire Council Community Strategic Plan)*

### Indicators and trends

Indicator	2010
No of documents exhibited related to the environment	14
No of new or reviewed policies/procedures adopted in relation to the environment	11
No of subscriptions to e-news	415
No of complaints in regard to Council processes	0
No of code of conduct breaches investigated and resolved	1

## Response to achieve this objective

### LEP Exhibition

In an effort to fully engage the community in the development process of Ballina Shire Council's new Local Environment Plan Council has used a variety of consultation techniques to gain input. Key engagement measures used have included:

- Exhibition launch event
- Formal exhibition locations
- Exhibition display panels
- Project website
- Dedicated telephone line
- Counter enquiry system
- Media engagement
- Exhibition summary guide
- Project branding
- Stakeholder briefing sessions
- Street stalls
- Interactive mapping
- Direct correspondence to particular stakeholders and groups

The aim of such an extensive engagement process was to both inform people about the LEP and seek comment, ideas and feedback on the content of the draft plan.

### Climate Action Plan

Ballina Shire Council received \$40 000 of funding to develop a Climate Action Plan from the DECCW's Estuary Management Fund. Council took great care in planning the best way to engage with the community to capture residents' thoughts and opinions on such a complex issue.

Council held a "World Café" on 8 July 2010 and had over 120 randomly selected community members attend. Outcomes showed great interest in the issue and a range of views on how the issue could be managed. The use of this first step to deliberative democracy is one Council hopes to enlarge upon in coming years, to be more inclusive in its consultation.

### Community Strategic Plan and Integrated Planning & Reporting Framework

The Integrated Planning & Reporting Framework was introduced by the Department of Premier & Cabinet (Local Government), and aims to draw Council's various plans together. The framework has four key elements:

1. A ten-year Community Strategic Plan (CSP), which outlines Ballina Shire's broad vision for the future
2. A four-year Delivery Program, accompanied by a full budget, that details what Council will do to implement the CSP
3. An Operational Plan, which will record the planned activity and expenditure for each year and
4. An Annual Report, which provides the community with a detailed account of what Council has achieved each year and the progress made towards the implementation of the Delivery Program and CSP.

### Council news and information

Council aims to better inform the community about its activities. A number of avenues are used to communicate and engage residents of Ballina Shire, these include:

- **Council's notices** are published weekly in the Advocate (and on occasions in the Northern Star), with Community Notices published in the Advocate on the fourth Thursday of the month.
- **Media releases**, general advertisements and documents on exhibition are available under the Noticeboard Banner on Council's website.
- **Community Connect** Quarterly Newsletter is distributed to all residents on a quarterly basis and is also available to download from Council's website.
- **Community Connect e-News** is our new monthly electronic newsletter and is distributed via email. It contains information about issues raised at the monthly Council meetings, documents on exhibition and other items of general interest.

### Complaints Regarding Council Processes

During 2009-2010 Council received nil complaints, as defined in Council's Complaints Policy, regarding Council's environmental processes. There were requests for information and services, clarification of information but no explicit expressions of dissatisfaction in relation to Council processes with respect to the environment.



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