

BALLINA SHIRE COUNCIL

Environmental Action Plan Outcomes 2012

why an environmental action plan?

Council uses its environmental action plan (EAP) as a tool for continuous improvement across its operations. Sustainability is integral to the vision and objectives of our Community Strategic Plan. The EAP documents Council's contribution to a sustainable Ballina Shire across these areas.

The EAP itself is a working document that is reviewed annually. This update is intended to provide an overview of some of the projects substantially completed or progressed during 2012. These projects occur within the wider framework of Council's more traditional activities and complement and add value to these activities.

our vision

A shire that provides a healthy lifestyle, a prosperous natural environment and a community with a strong sense of place.

our objectives

In order to achieve our vision Council has identified eight objectives that will deliver that vision.

These objectives are:

- 1. A built environment contributing to health and wellbeing
- 2. A diverse and prosperous economy
- 3. A healthy natural environment
- 4. 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

All of the work Council undertakes contributes to the above eight objectives. This booklet outlines just some of the sustainability initiatives that seek to achieve these objectives.

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Governance

coastal zone management plan for the richmond river estuary

This plan was gazetted in February 2012. Thirteen strategies have been prioritised to assist Council to work with other Councils, NSW government agencies and other organisations to improve the health of the Richmond River.

An implementation group has been formed and is working on funding options for addressing the strategies identified in the plan. An agreement for standardising water quality monitoring across the catchment is in the final stages. A cost-benefit analysis of management options for backswamp areas contributing to 'blackwater' events is also nearing completion. The plan will continue to be implemented as funding arises.

climate action plan

The Climate Action Strategy is a strategic level document that outlines Council's current thinking in relation to appropriate climate change initiatives. It documents key strategies and opportunities that Council has identified as important considerations in order to respond both efficiently and practically to the challenges posed by a changing climate.

Importantly, the Strategy focuses on Council's business and recognises that responsibility for responding to climate change lies with all levels of government and the community.

The preparation of the Climate Action Strategy was informed by recommendations and ideas put forward by members of the community through the Climate Ballina Conversation Café and Citizens' Forum events held in 2010. This valued input has provided Council with an understanding of the community's expectations in regard to climate change responses.

regional state of the environment report

In 2012, the first Regional State of the Environment (SoE) report for the North Coast has been prepared by the Northern Rivers Catchment Management Authority. Council has previously prepared an annual State of the Environment report for Ballina Shire and previous reports are available for review on Council's website. The Regional SoE report will provide comparisons with neighbouring local government areas and neighbouring catchments with regard to various environmental issues. Advantages of this approach include the ability to access a greater range of information from NSW Government agencies and corporations.

revolving energy fund

Council uses monies saved by the implementation of energy efficiency projects to identify and implement further energy efficiency projects. At this time, savings generated are 'paying off' the capital costs of installation of energy efficient street lighting.

Energy efficiency projects will still be undertaken where there is a short payback period. Funds generated after the capital outlay for street lighting will be utilised for projects with a longer payback period.

environmental education



The engagement of a part-time Sustainability Planner has provided Council with a range of new skills in this area. Various environmental education activities have been undertaken across a range of Council responsibilities to date, including erosion and sediment control, sustainable business practices and energy efficiency. This position adds value to existing activities in this area as well as providing specialist education expertise.

The benefits of education and promotion of environmental programs is shown by shown in the Home Power Savings Program. Council assisted the NSW

Government program with promotions aimed at increasing energy efficiency and reducing household bills. Information from the Office of Environment and Heritage (OEH) indicates that 739 home assessments have been undertaken in Ballina Shire under these programs.

In conjunction with this program Council staff ran a series of cross-promotional activities promoting the energyanswers energy efficiency program provided by Essential Energy. These activities included radio and media promotion, workshops, noticeboard pinups and targeted displays particularly in locations such as Centrelink where those who would most benefit from a reduction in energy bills could view the information.

stormwater management

Ballina Shire Council recently adopted an updated Ballina Urban Stormwater Management Plan. The aim is to improve the sustainability of the shire's urban stormwater infrastructure and to protect the health of our waterways for future generations. The new management plan focuses on reviewing Council's management and planning processes to ensure that stormwater systems are designed, constructed and maintained to best practice standards.

Energy Efficiency

monitoring our usage

Energy data is collected for all council sites and reported to staff in a format that highlights anomalies or abnormal usage. This assists staff to manage sites appropriately to maximise energy efficiency and also to identify sites with the potential for energy savings.



streetlighting



Streetlights across Ballina Shire have been retrofitted with an energy efficient light fitting. These fittings are projected to use approximately 44% less energy to operate, compared to the previous fittings.

Where a new streetlight is installed these are now required to be energy efficient.

alternative energy sources powering our community assets

Council has installed solar energy on assets such as the Ballina Library, Alstonville Leisure and Entertainment Centre, Ballina Waste Management Centre and Kentwell Community Centre. A 40 kilowatt solar installation was also included in the requirements for the Lennox Head Cultural and Community Centre.

More efficient solar traffic information signs are now being utilised which have no need for generator backup, and operate quietly where required.

small but significant change

A number of small projects to save energy and money have been completed during 2012. These include projects such as:-

- Automatic afterhours shutdown of overhead monitors at the Airport Terminal Check-In counters.
- Installation of workstation power isolation in Council's Customer Service Centre where multiple appliances using standby power are located.
- Purchase of computer hardware with lower wattage power supplies.
- Assessment of information technology hardware solutions for their green credentials and commitment to materials recovery of redundant hardware.

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 Review of hot water storage at Council's Customer Service Centre to ensure most efficient system.

Waste

chemical handling storage area

An area for storage and handling of chemicals has now been established at the Ballina Waste Management Facility, both for the use of Council as well as the public. Not all chemicals are accepted and chemicals are not stored long term at the Ballina Waste Management Facility but are transferred to the Lismore Regional Waste Facility. However, this storage area reduces the potential for movement of inappropriate materials into groundwater as well as addressing Workplace Health and Safety issues.

public recycling bins in village centres

Public recycling bins have been installed in all village centres. They are located adjacent to general waste bins to make it easy for them to be used. There have been some problems with contamination of the recycling stream, as some users dispose of items that cannot be recycled, in the recycling bins.



Worm farms and compost bins are available at cost price to the public to assist in diverting organics from landfill. This program is ongoing and complements the 3 bin urban waste system which is effectively diverting up to 5876 tonnes of organic waste from landfill per annum.

Water

water efficient fittings in Council's buildings

All showers and taps in Council operated buildings are fitted with flow restrictors. Water efficient hardware is replacing old hardware as required. Council's caravan parks have also been fitted with water efficient fittings.



completion of sewer backlog program

The program connected groups of unsewered properties which are located near existing urban sewered areas to Council's sewer system. This addressed both public and environmental health issues, as well as being a more efficient was to manage sewage. All properties which can be connected under this program have now been connected.

Depot

a greener fleet

Council has been progressively improving efficiencies in its motor vehicle fleet through the ongoing introduction of 4 cylinder and LPG passenger vehicles. Council has also introduced two bicycles to its fleet to enable staff to take up a more active and fuel efficient mode of transport for short work related trips. Over 60% of Council's passenger vehicle fleet is comprised of 4 cylinder cars. Lifecycle costing is used to determine the most appropriate vehicle for the usage to ensure best value for money as well as best performance.



biodiesel

In 2010 Council introduced B20 biodiesel for Council's fleet. Biodiesel is a non-toxic and renewable fuel made from vegetable oil or animal fat and reduces toxic exhaust emissions related to sulphur, hydrocarbons, carbon monoxide, aromatics and particulate matter. As of June 2012 Council has abated 333.59 tonnes of CO2 by using B20 to power a number of large plant vehicles.

chemicals storage

An audit of chemical storage at Council's works depot was undertaken to ensure chemicals are being safely stored. A safe chemical storage is currently available, but construction of a specialised chemical store is scheduled for 2016/17.

Natural and open space management

street tree planting program

An "Urban vegetation and tree management on public lands" policy is now in place and implementation is underway. Native trees are preferred under this policy, particularly those endemic to the Ballina Shire (although they must also be suitable for the use for which they are being planted). Park and gateway plantings are undertaken in accordance with the policy.

Council's nursery assists with this policy as well as now having the capability to sell native plants to the public.



herbicide usage and spray policy

This policy was developed to reduce the usage of herbicide and areas of overspray, and define areas where mowing is the preferred outcome. Both environmental and health and safety issues were integral to the development of this policy.

off-road beach access

Beach access points have been finalised and a permit system is now in place to manage numbers of vehicles on beaches as well as their access to reduce damage to dunal areas. A code of conduct has been established in partnership with those accessing the beach with their vehicles. Access points are constructed using recycled plastic and are very robust, ensuring beach accesses can be easily repaired after storms and erosion events.

want to know more?

This document is a summary of our annual report on the Environmental Action Plan (EAP). The EAP is available on our website. Follow the links from the Environment tab to view the full EAP which includes progress on our current actions as well as new Ideas for Action.

like to contribute?

The EAP is an evolving document and serves also as a central database of ideas for further actions. Councillors, staff and the community are encouraged to provide ideas for improving our shire's environmental sustainability. Although not every idea can be resourced, ideas and input will help Council in considering which areas to focus on. Please forward any ideas you may have via email to greenbea@ballina.nsw.gov.au with the subject heading Environmental Action Plan.







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Attachment 2: Environmental Achievements 2012

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Action	Benefits	Measurement	CSP Outcome	Progress Report
Adoption of Companion Animals Management Plan.	Assist pet owners and wider community to manage expectations about rights and responsibilities of pet owners.	Preparation and adoption of plan.	Clean beaches and foreshores.	Plan adopted, implementation underway.
Assess hardware solutions for their green credentials and commitment to materials recovery of redundant hardware.	Improved lifecycle analysis both pre and post purchase.	Include assessments in EOI and quotation processes.	Efficient production systems that minimise and reuse waste.	State Government contract includes these parameters as part of consideration – all IT equipment is purchased through this process.
Audit adequacy of chemical storage controls at the Depot.	Reduce the risk of the pollution. Improve Workplace Health and Safety.	Audit complete.	Socially and environmentally responsible business.	Audit complete. Currently have a safe chemical storage area for Water and Sewer. Construction of a specialised chemical store scheduled for 2016/2017.
Beachwatch WQ monitoring program for 2011/2012.	Public health and environmental information provided to the public regarding water quality.	Weekly updates in newspapers, annual 'State of the Beaches' report from Office of Environment and Heritage.	Clean beaches and foreshores.	Most beaches and swimming areas are good to excellent ratings, with the exception of Shaws Bay East which has poor drainage and significant adjacent urban development.
Complete Sewer Backlog Program.	Connects groups of unsewered properties which are located near existing urban sewered areas to Council's sewer system. Addresses public and environmental health issues.	All suitable properties connected.	Clean beaches and foreshores.	All properties which can be connected under this program have now been connected.
Construction and chemical handling storage area for waste management facility for public use as well as Council's own operations.	Reduce amounts of toxic materials being sent to landfill.	Groundwater monitoring bores onsite, EPA licence conditions.	Socially and environmentally responsible business.	Chemical handling is available at the landfill with some closets put in. The material is then transported to the regional facility at Lismore for disposal. Not all chemicals are taken as no adequate provision to ensure safe handling and disposal practices. Council's policy is to rely on the regional facility at Lismore for these.
Council supporting and enabling community gardens, school gardens, farmers markets, and backyard vegetable gardens.	Reduce food miles associated with food production and consumption, community cohesion benefits.	Numbers of sites nominated and supported for this type of activity.	Individual and collective action to mitigate the risks posed by a changing climate.	Have supported the development of the Ballina Community Garden and markets selling local produce within the shire. New markets supported include Ballina Twilight Markets and Alstonville Farmers Markets (to open soon).

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Action	Benefits	Measurement	CSP Outcome	Progress Report
Council to plant more native trees but not in places where they create a bushfire hazard.	Provides habitat, limits soil loss, stores carbon.	Number of revegetation sites, number of trees planted per year.	Individual and collective action to mitigate the risks posed by a changing climate.	Council's new Street Tree Planting program underway supporting this action. Council's nursery and own park and gateway plantings also support this action.
Develop a Climate Change Adaptation and Mitigation Action Plan.	An adaptation and mitigation plan will ensure Council has a strategic approach to combating the impacts of climate change.	Plan developed.	Individual and collective action to mitigate the risks posed by a changing climate.	Ballina Shire Council Climate Action Strategy 2012 -2020 endorsed by Council in December 2011. Implementation of actions required through the Environmental Action Plan.
Develop a system and methodology for financial monitoring of spending on environmental actions and savings gained through sustainability actions.	Highlight the cost-effectiveness of environmental activity.	System implemented.	Socially and environmentally responsible business.	A revolving energy fund has been set up that is currently receiving funds generated from feed-in tariffs for solar electricity on Council's facilities as well as expected savings on electric streetlights after retrofitting program. Savings are currently 'paying off' capital costs of installation.
Engage a Sustainability Environmental Education Officer.	Specialist community engagement and education skills held in-house.	Environmental Education Officer employed.	Continuous improvement in the condition of our environment in all areas of the Shire.	A part-time Sustainability Planner with these skills has now been employed. Planner has significant corporate history in environmental education in local and regional area.
Ensure environmental information on website is accurate and current.	Information accurate and timely.	Regular update of environmental information.	Continuous improvement in the condition of our environment in all areas of the shire.	Environmental information across a range of issues has been updated. Located at 'Environmental messages' on Council's website.
Establish a correspondence policy in relation to electronic delivery.	Improve staff efficiency and cost savings.	Number of subscribers, number of electronic copies sent.	Socially and environmentally responsible business.	Community Connect and staff newsletter are examples, but limitation for outdoor staff and those with no computer access. Policy is that where possible electronic delivery is the preference.
Establish a herbicide usage and spray policy.	Reduce use of herbicide and areas of overspray. Improved customer perceptions about council's environmental practices.	Policy developed. Policy implemented.	Maintain our diverse and attractive landscapes.	Policy now operational.
Establish capability to sell native plants from Council's nursery.	Potential for raising revenue for NRM work. Increase in native endemic vegetation in private gardens, improved habitat potential.	Sales of native plants, level of cost recovery.	Continuous improvement in the condition of our environment in all areas of the shire.	Nursery selling plants is now operational. Sales and level of cost recovery will be reviewed after a period of operation.
Establish requirement for energy efficient street lighting in newly developed areas.	New streetlighting infrastructure matches energy efficiency of existing infrastructure that has been recently retrofitted with energy efficient fittings.	DCP development.	Socially and environmentally responsible business.	An addition to the Ballina Shire Combined Development Control Plan is now complete.

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Action	Benefits	Measurement	CSP Outcome	Progress Report
Finalise the Richmond River Estuary Management Plan.	Provide for grant opportunities to improve the health of the Richmond River.	Plan gazetted.	Excellent water quality in the Richmond River.	Coastal Zone Management Plan for the Richmond River Estuary gazetted in February 2012.
Implement a fleet management system.	Improved fuel consumption rate and reduced operating costs.	Fuel consumption and operating costs.	Efficient and effective transport.	Fleet management system is operational and as data is collected, this will allow monitoring of fleet. Future plant purchase decisions will utilise this information to ensure best value.
Implement a Street Tree Planting program with targets for native species, both endemic and indigenous.	Increased numbers of native trees, enhance biodiversity, improved customer perceptions.	Program developed and implemented.	Maintain our diverse and attractive landscapes.	'Urban vegetation and tree management on public lands' policy in place. Implementation underway.
Implement after hours auto shutdown of overhead monitors at the Airport Terminal Check-In counters.	Reduced electricity use. Extend usable life of monitors.	Automatic shutdown implemented.	Socially and environmentally responsible business.	Automatic shutdown implemented.
Implement Biodiesel Fuel program.	Produce less carbon emissions and smoke particulates. Displaces some usage of fossil fuels.	Use of B20 in Council plant.	Socially and environmentally responsible business.	All Council's heavy plant is currently utilising B20 from new bowsers at Council's works depot.
Improve efficiency of air-conditioning in Customer Service Centre.	Reduction in energy usage. Better control over individual areas, can zone air-conditioning to suit needs.	Electricity account auditing.	Effective and responsible power generation and use.	An audit and costings for this project have been undertaken. Grant funding was applied for but Council was unfortunately unsuccessful. Cost-benefit analysis has shown that improvement in lighting will benefit airconditioning by removing lighting as a heat source, and that ongoing maintenance is the most effective aid to ensuring optimal efficiency in air-conditioning system.
Install public recycling bins in town and village centres.	Increase recycling rates and reduce drink containers etc going to landfill.	% of waste diverted from landfill.	Infrastructure and facilities that meet individual and community needs.	Public recycling bins have been installed in all village centres. They are located adjacent to bins. Some problems with contamination due to a lack of understanding by users of what is recyclable and what is not.
Install water efficient shower heads.	Reduced water use (both hot and cold). Reduced electricity use associated with heating and pumping of water.	Number and flow rate of water efficient shower heads in Council buildings.	Effective water collection use and reuse.	All showers and taps in Council operated buildings are being currently fitted with flow restrictors. Water efficient hardware is replacing old hardware when and as required. Flow restrictors and water efficient shower heads have been installed at all Council operated caravan parks. Water efficient retrofits continue to be undertaken in all Council operated caravan parks.
Install workstation power isolation in Council Administration Building as required.	Staff can reduce standby power usage when workstation is not in use.	Electricity account auditing. No. of switches in place.	Effective and responsible power generation and use.	Workstations in Corporate Services with multiple appliances that use standby power have been fitted with one main switch for each station.

Action	Benefits	Measurement	CSP Outcome	Progress Report
Investigate potential sites for the installation of alternative power generation e.g. wind & solar.	Public education and environmental leadership.	Public response and energy savings in terms of financial and environmental.	Effective and responsible power generation and use.	Solar energy now utilised for Ballina Library, Lennox Head Community Centre, Alstonville Leisure and Entertainment Centre, Ballina's Waste Management Centre and Kentwell Community Centre.
Maintain internal environment team to integrate action for environmental sustainability between Council sectors.	An internal working group will provide a coordinated, integrated and innovative implementation of the environmental sustainability actions across the organisation.	Regular meetings of internal staff Environment Team.	Socially and environmentally responsible business.	Internal working groups formed on an as needs basis to advance projects.
Provide environmentally acceptable, off- road vehicles beach access while retaining beach amenity and safety for others.	Decrease in damage to beach environment by off-road vehicles and a harmonious sharing of the beaches and dunes of the Coastal Reserve.	Permit system instigated and functioning.	Infrastructure and facilities that meet individual and community needs.	Beach access points finalised. Permit system in place. Brochure and Council website promote code of conduct. Requires maintenance, especially repairs after storm and high sea events.
Purchase computer hardware with lower wattage power supplies, and embrace alternative technologies.	Reduction of ecological footprint associated with hardware usage.	%age of hardware fleet using sustainable production and materials.	Socially and environmentally responsible business.	New PC's purchased with lowest wattage available for required machine specification. Technology watch on other technologies such as solid state drives etc.
REF for trial of Qx resistant oysters in the Richmond River.	Ensure environmental health protected from potential for pollution. Support loc al oyster industry.	Monitor trial and ensure REF covers all main concerns.	Socially and environmentally responsible business.	Trial complete. Awaiting final report from oyster growers.
Refine water, waste and energy data management and reporting to further enhance the identification of site specific abnormalities in account charges and energy use.	Provides clear and current information on which to base decision-making. Assists with SoE reporting, and accurate cost estimation etc.	Accurate figures provided to SoE. Business case can be more readily made.	Effective and responsible power generation and use.	Energy data for all council sites is now collated and reported in a format that highlights any anomies in use. Exploring options for the collation and reporting of water use data.
Refit public lighting with energy efficient fittings.	Use of high-pressure sodium and T5 fluorescent bulbs will significantly reduce energy consumption associated with public lighting.	%age of the Shire's infrastructure upgraded. Potential for 50% reduction in energy usage with associated cost savings.	Effective and responsible power generation and use	Refit is now complete. Awaiting Essential Energy's 'handover' to Council's retailer to receive the full financial benefit of refit.
Replace Customer Service Centre storage hot water with gas instantaneous or solar heating systems.	Reduced electricity consumption.	Electricity account auditing.	Effective and responsible power generation and use.	Cost found to be prohibitive for the amount of hot water used. Off peak found to be most efficient option for provision of hot water.
Update and adoption of Urban Stormwater Management Plan.	Identify works required to treat stormwater. Improve water quality in creeks and River.	Plan adopted.	Socially and environmentally responsive business.	Plan adopted as at August 2012. Implementation schedule and budget adopted also.
Worm farms and compost bins provided to the public to assist in diverting organics from landfill.	Assists with reducing organics going to landfill, provides social and community benefits.	% of waste diverted from landfill.	Efficient production systems that minimise waste.	This program is ongoing. Reports on numbers provided will be updated in future years.

Attachment 3: Ideas for Environmental Action

This attachment details actions that have yet to be progressed as well as ideas that have been put forward by staff, Councillors and the public that may be considered in the future.

Action	Benefits	Measurement	Council Area	CSP Outcome
Build display homes to educate the community about what is possible in terms of ESD.	Greater awareness of green technologies and material may increase the use of these in new homes.	Building constructed or alternative method to meet desired outcome found.	Strategic	Socially and environmentally responsible business.
Communicate local climate change information through social networking technology.	An informed community is better able to make informed decisions around climate change related issues.	Opportunities to use social networking for distributing information explored.	Strategic	Individual and collective action to mitigate the risks posed by a changing climate.
Design, develop and implement a storm water retention system to supply toilets and amenities in stage 2 of the passenger terminal re-development at the airport.	Reduce mains water usage. Reduced electricity use associated with storage, treatment and pumping of water.	Energy and cost savings.	Airport	Effective water collection use and reuse.
Develop a Building Management System in stage 2 of the passenger terminal re-development at the airport.	Reduced energy consumption. Ensuring non- essential lighting, air-conditioning and other appliances are automatically switched off overnight.	Energy and cost savings.	Airport	Effective and responsible power generation and use.
Develop an Environmental Safety Statement for Council Operations.	Will provide a formal outline of our current practices and form a guideline for future practices. Useful for staff induction purposes as very simple.	Statement developed.	Strategic	A justifiable trust in our organisations business and government.
Develop design for phytoremediation style for passive gas management system to be included in capping of landfill.	Reduction of methane and CO₂ generated by capped landfill.	Monitoring of CO ₂ and CH ₄ emissions.	Waste	Individual and collective action to mitigate the effects of a changing climate.
Encourage corridor plantings, especially for Big Scrub vegetation community, to enhance biodiversity outcomes on both public and private lands.	Enhance the one-third of remaining Big Scrub that is found in Ballina Shire, and increase its biodiversity potential and resilience for the future.	Hectares replanted and corridors established.	OSR	Continuous improvement in the condition of our environment in all areas of the shire.
Establish a ClimateCam for energy (in partnership with ClimateCam for Water).	Community awareness regarding energy usage, collective pressure to reduce energy usage.	kWh and kL used per capita, kWh used as Shirewide.	Built Assets	Effective and responsible power generation and use.
Establish a ClimateCam for Water (see above).	Provide 'real-time' public awareness of water usage in their locality.	kilolitres per person/household.	W&S	Effective water collection use and reuse.

Action	Benefits	Measurement	Council Area	CSP Outcome
Establish a webpage on design and renovation for new and additions to homes (links to Brisbane City Council's lists as per Marrickville Council).	Provide information on what is possible in terms of sustainability when building, and assist with long term adaptation to climate change for new homes.	Links established, with accompanying information.	Strategic	Buildings infrastructure and public spaces that complement our natural environment.
Form alliance with other coastal shires in NSW to collaborate on funding from State Government.	External funding will assist in implementing adaptation actions.	Number of applications submitted. Number of applications successful.	Corporate	Socially and environmentally responsible business.
Implement a 'steering committee' approach for rezonings, with representation from Strategic, Regulatory and Civil to capture all environmental and practical considerations for rezonings.	Will streamline subsequent DA process and provide certainty to developers. Will also provide greater ability to protect environmental attributes. Strategic Services to maintain carriage of rezoning process.	System implemented.	Strategic	Recognition and valuing of our natural cultural and built heritage.
Implement actions from the Maguires Creek Catchment Vegetation Management Plan (2004).	Improvement in native vegetation, habitat and visual amenity. Reduction in weed source. Track maintenance and infrastructure improvements.	Hectares rehabilitated. Improvement in condition of native vegetation. Plants planted. Survival and growth rate of plantings. Infrastructure upgraded/maintained.	OSR	Continuous improvement in the condition of our environment in all areas of the shire.
Implement actions from the Marom Creek Weir (Lismore LGA) Vegetation Management Plan (2005).	Improvement in native vegetation, habitat and visual amenity. Reduction in weed source. Improved water quality.	Hectares rehabilitated. Improvement in condition of native vegetation. Plants planted. Survival and growth rate of plantings. Water quality.	W&S	Continuous improvement in the condition of our environment in all areas of the Shire.
Install dual flush toilet cisterns in female and disabled public toilets.	Reduced water usage / Increased public perception of Council's environmental aims.	Water consumption audit.	OSR	Effective water collection use and reuse.
Install energy efficient lighting and motionactivated switches in server room.	Lights are only on when they are required instead of running 10-12 hours per day.	Installation of lights and switches completed.	Built Assets	Effective and responsible power generation and use.
Install motion/infrared detectors in public toilet facilities to control lighting which currently left on during accessible hours.	Reduced electricity usage / Increased public perception of Council's environmental aims.	Electricity account audit.	OSR	Effective and responsible power generation and use.
Install water tanks to harvest stormwater and plumb into toilets for flushing.	Reduce potable water use. Show environmental leadership.	Appropriately sized tanks installed in no. of Council buildings. Potable water usage reduced.	Built Assets	Effective water collection use and reuse.
Install waterless urinals in public toilet facilities.	Reduced water usage / Increased public perception of Council's environmental aims.	Water consumption audit.	Built Assets	Effective water collection use and reuse.
Install waterless urinals in the Customer Service Centre male toilet facilities x 2.	Reduction in mains water consumption.	Water consumption audit.	Built Assets	Effective water collection use and reuse.

Action	Benefits	Measurement	Council Area	_CSP Outcome
Introduce a schedule of environmental performance for works over \$50 000 for completion by those submitting tenders.	Provides first stage of an audit process for materials, works and ethical standards of suppliers. Would need to be included in assessment process and decision made with regard to any weighting given to this. Review by procurement panel required.	Schedule developed and included in works requests.	Engineering Works	A justifiable trust in our organisations business and government.
Investigate business case for community education centre (to cover more than waste issues). Potential to trial using 'pop-up' show concept in Wigmore Arcade.	Can increase diversion rates on landfills by up to 3% of waste by volume. Provide community education/information on all of Council's activities.	Visitors to Centre, diversion rates at landfill.	Waste	Infrastructure and facilities that meet individual and community needs.
Investigate feasibility of charging an additional (voluntary) fee on normal charges for environmental initiatives.	Community and visitors can directly influence sustainability initiatives.	\$ received.	Strategic	Socially and environmentally responsible business.
Investigate funding partnerships with private sector to progress environmental initiatives.	Will add in funding programs that have currently limited funding sources.	Number of private/public partnerships formed and implemented.	Corporate	Socially and environmentally responsible business.
Investigate new ways to divert 1000t of food waste and 1800t of dry recyclables by 2014 to meet WaSIP targets.	Avoid penalty rates for waste to landfill, attract extra WaSIP payments for meeting targets.	Tonnages diverted from landfill.	Waste	Efficient production systems that minimise and reuse waste.
Investigate options for making a Council building carbon neutral.	This would provide a working demonstration of the commitment to achieve this aspiration.	Electricity account audit.	Built Assets	Effective and responsible power generation and use.
Investigate provision of organics collection to business.	Reduction in organics in landfill.	Tonnages diverted from landfill.	Waste	Efficient production systems that minimise and reuse waste.
Investigate recycling by commercial suppliers - why is it more expensive to pick up than rubbish. Potential to implement better pricing policy or other method of encouraging recycling.	Better recycling rates as a Shire.	Unsure, as often commercial waste is taken out of Shire.	Waste	Efficient production systems that minimise and reuse waste.
Maintenance of weed-free reserves after target programs conclude - Ballina Coastal Reserve for example, maintaining it free of bitou bush.	Reduced need for large \$ in the future to remove weeds again, biodiversity outcomes, landscape amenity.	Funding found and approved.	OSR	Continuous improvement in the condition of our environment in all areas of the shire.
Prepare a Community Environmental Education Strategy.	Ensure a coordinated approach to engaging the community in environmental and sustainability learning.	Strategy established and endorsed by Council.	Strategic	Continuous improvement in the condition of our environment in all areas of the Shire.
Prepare Vegetation Management Plan for Richmond Hill / Shaws Bay.	Enhanced native vegetation in Richmond Hill, Shaws Bay area.	Vegetation management plan completed and under implementation.	OSR	Continuous improvement in the condition of our environment in all areas of the shire.
Provide/support climate change education and debate in schools.	An informed community is better able to make informed decisions around climate change related issues.	Officer appointed and climate change related programs implemented.	Strategic	Individual and collective action to mitigate the risks posed by a changing climate.

Action	Benefits	Measurement	Council Area	CSP Outcome
Recommend to State Government/ community that primary and secondary schools teach science /environment theory in relation to local environment.	Provide this recommendation direct to NSW Department of Education and Training. Council has previously provided environmental education workshops for primary and secondary schools around energy efficiency and water quality.	Education Department informed of this recommendation from the Ballina Climate Change Forum.	Strategic	Individual and collective action to mitigate the risks posed by a changing climate.
Review website to ensure linkages with relevant local sustainability organisations and showcase local industry (ie sustainable fishing, production etc).	Meet community expectations about access to sustainability information, support local industries.	Website reviewed annually for updating of links etc.	Strategic	A justifiable trust in our organisations business and government.
Support 'climate change' education in schools (particularly high schools).	An informed community is better able to make informed decisions around climate change related issues.	Officer appointed and climate change related programs implemented.	Strategic	Individual and collective action to mitigate the risks posed by a changing climate.
Undertake stormwater risk assessment in relation to climate change (particularly for floodplain areas).	Improved public health and water quality. Feed into long-term decision making about future of low lying urban areas.	Risk assessment completed.	Engineering Works	Excellent water quality in the Richmond River.
Upgrade of recyclables area to contain recyclables.	Reduce overspill, maintain integrity of 'product'. Increase resource recovery rate.	Tonnages of recycleables being recovered. Viability of demolition waste recovery.	Waste	Efficient production systems that minimise and reuse waste
Use cleaning products and services that have less environmental impacts (biodegradable, microfibre, non toxic etc).	Cleaning products and services may impact on the environment at all life cycle stages – from manufacture, to distribution, use and disposal.	Clauses included into tender documents for cleaning contracts. Number of cleaning products considered more environmentally friendly.	Built Assets	Socially and environmentally responsible business.