

Ballina Shire Council

Environmental Action Plan



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Welcome to the Environmental Action Plan

Welcome to Ballina Shire Council's Environmental Action Plan. The Environmental Action Plan (EAP) documents Council actions that aim to improve our local environment through Council's own operations and activities.

The aim of the EAP is to provide guidance to the elected Council and the community on the types of actions that are taking place within the organisation. Whilst Council has always been active in improving environmental outcomes across its areas of responsibility, this is the first time these actions have been comprehensively documented.

The EAP is a working document that is reviewed on an ongoing basis. This process provides an opportunity for Council staff, Councillors and community to regularly contribute to the plan by providing good ideas aimed at increasing the environmental sustainability of our shire.



What is the Environmental Action Plan?

The EAP informs Council's Delivery Program and Operational Plans that are required by the Department of Local Government as part of the Integrated Planning and Reporting Framework (Figure 1). Each of these programs and plans serve to inform the community about how Council is moving toward its commitments in the Ballina Shire Council Community Strategic Plan (CSP).

The EAP outlines Council's own commitments in meeting the environmental components of the CSP and identifies the principal activities that the organisation is undertaking to meet those objectives. It documents planned improvements in Council's practices that will improve the environmental sustainability of the organisation. Although these actions are focused on improving environmental outcomes, many actions also have economic or social benefits.

This plan aims to improve the planning and priority setting for the Council as a whole organisation with respect to its various environmental initiatives. This action plan will assist in the review of resources available to develop and implement environmental programs, ensure we are able to measure our performance, and identify areas which would benefit from a more proactive development of programs and initiatives.

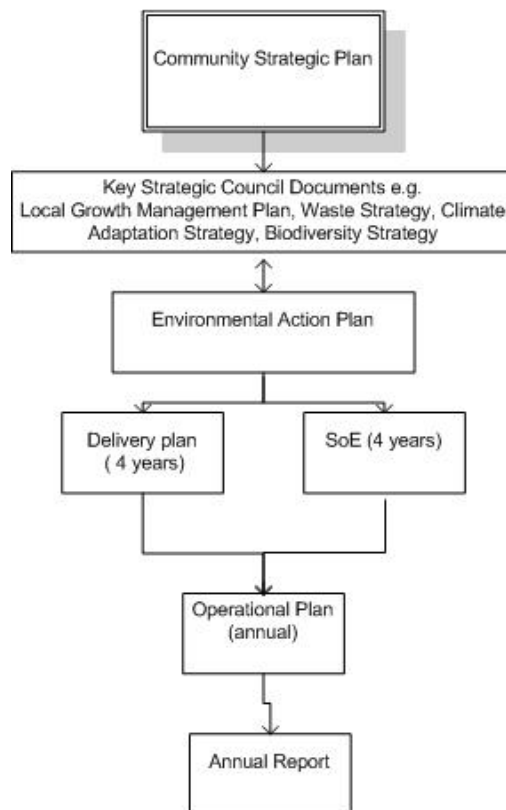


Figure1.



Developing the Environmental Action Plan

This Environmental Action Plan identifies actions that seek to achieve better environmental outcomes in many of Council's activities and operations. The development of the plan has required input from Councillors and from staff across many of Council's principal activity areas including:

Civil Services

- Built Assets and Operational Support
- Depot & Fleet
- Engineering Works
- Open Space and Reserves (OSR)

Commercial Services

- Airport

Corporate Services

- Administration
- Human Resources

Information Technology (IT)

- Financial Management
- Communication and Tourism

Regulatory Services

- Environmental and Public Health
- Development Services

Strategic and Community Planning

- Economic Development

Sewer, Waste and Water Services

This EAP collates the array of environmental initiatives that are undertaken by staff, many of which have not been previously reported or recorded. This plan also collates ideas for future action to ensure that these are formally identified and can be reviewed once resources become available.

Each action in the plan is listed alongside the benefits of the action and how progress towards the action will be measured. The action plan is largely operational in nature and a working spreadsheet has been designed to ensure that actions can be viewed and examined against a number of different criteria such as the CSP objective it relates to, possible funding sources or progress status. Each of the actions has also been assigned a management portfolio within Council that has the responsibility of regularly reporting the progress of these actions through internal reporting mechanisms.

The regular review of this plan provides an internal process that seeks to encapsulate all of these activities and ideas in a centralised and ongoing way.



Community Strategic Plan Objectives

A key focus of the EAP is to ensure that its actions relate directly to the objectives of the Community Strategic Plan (CSP). The CSP provides all of the residents of our shire with a strategic direction for a sustainable Ballina Shire up to 2025 and beyond. The EAP works towards achieving Council's commitments to the environmental components of the CSP. These objectives have been outlined below.

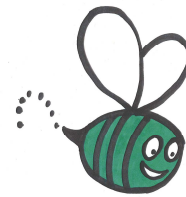
1. A feeling of safety, regardless of where in the shire
2. Buildings, infrastructure and public spaces that complement our natural environment
3. Clean beaches and foreshores
4. Effective engagement with our neighbouring areas and within the region
5. Continuous improvement in the condition of our natural environment
6. Effective and responsible power generation and use
7. Effective water collection, use and re-use
8. Efficient and effective integrated transport
9. Efficient production systems that minimise and re-use waste
10. Employment opportunities for all
11. Excellent water quality in the Richmond River, its tributaries and coastal lakes
12. Preserve the potential for agricultural land and important extractive resources
13. Maintain our diverse and attractive landscapes
14. Integrated land uses
15. High level of social capital
16. Holistic understanding of approaches to health
17. Individual and collective action to mitigate risks posed by a changing climate
18. Infrastructure and facilities that meet individual and community needs
19. Maintain and improve our land-based productivity
20. Recognition and valuing of our natural, cultural and built heritage
21. Respect for the needs of different land users and land uses
22. Robust structure in the local economy
23. Socially and environmentally responsible business
24. Viable local business
25. We have a justifiable trust in our organisations, businesses and government
26. Widespread participation in lifelong learning



A Working Document

Further work is being completed around Council's corporate systems to ensure the EAP remains contemporary and that suggestions from across the organisation and the community are able to be regularly included in the EAP. As a working document, the EAP also provides a database for the good ideas that are provided by Council staff and the community. It is intended that the EAP process will become embedded into the organisation and that individual program managers will access and use the plan as a compiled reference source as they monitor grant submissions or budget process opportunities as they arise. Internal procedures will also ensure the plan is reviewed frequently and progress reported to the elected Council and the community.

Ballina Environmental Action (BEA)



The Green Bea will be keeping the Ballina Shire community up to date on Council's environmental initiatives. Look out for Bea buzzing about in various Council media, such as the Community Connect, local newspapers and the staff newsletter.

How can I Contribute?

The EAP is an evolving document and serves also as a central database of ideas for further actions. To date the actions documented in this plan have come from ideas provided by staff, management and the elected Council. The community is also encouraged to provide ideas for improving our shire's environmental sustainability. Although it is understood that not every idea will be resourced, community ideas and input will help Council in considering which areas to focus on. This ensures that all good ideas are documented and can be developed into actions if the opportunities and resources become available. Community members wanting to contribute their ideas can do so by emailing greenbea@ballina.nsw.gov.au with the subject heading *Environmental Action Plan*.

Environmental Achievements



This section of the EAP outlines the environmental actions that Council has recently implemented or which are now standard practice within the organisation.

Action	Benefits and Outcomes	Council Area	CSP Objective
Planted Tea-Tree in western paddock of the Airport.	Revegetation and bird hazard reduction.	Airport	Integrated land uses
Developed a system for monitoring air-conditioning units in Council's built assets to ensure units are operating at maximum efficiency and have in place controlled time of use.	Reduced electricity consumption and extended life of air conditioning units.	Built Assets & Support Operations	Effective and responsible power generation and use
Introduction of an electronic records management system.	Saving on paper and improved efficiency for staff.	Corporate	Socially and environmentally responsible business
Recycled paper and envelopes for rates notices.	Saving of natural resources.	Corporate	Socially and environmentally responsible business
Reduced use of paper printed for audit purposes.	Saving on paper, reduction to costs.	Corporate	Socially and environmentally responsible business
Recycled reusable items during annual records cull.	Re use of paper and plastics.	Corporate	Socially and environmentally responsible business
Reduced paper consumption by making staff newsletter electronic.	Saving on paper, reduction to costs.	Corporate	Socially and environmentally responsible business
Introduced viewing of rate notices and rates book electronically.	Saving on paper, reduction to costs, improved efficiency for staff.	Corporate	Socially and environmentally responsible business
Introduction of on-line development application system.	Saving on paper, reduction to costs, improved efficiency for staff.	Corporate	Socially and environmentally responsible business
Implemented use of recycled paper, envelopes and business cards and soy based inks for printing.	Saving on natural resources, reducing use of fossil fuels, and also emissions by using soy based inks. Improved air quality.	Corporate	Socially and environmentally responsible business
Establishment of a junk mail management protocol.	Paper saving, time saving.	Corporate	Socially and environmentally responsible business

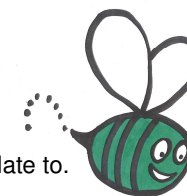
Action	Benefits and Outcomes	Council Area	CSP Objective
Phased out coloured copy paper wherever possible.	Financial savings, paper saving.	Corporate	Socially and environmentally responsible business
Investigated electronic delivery of rates notices.	Saving on paper, postage/printing/paper costs reduced.	Corporate	Socially and environmentally responsible business
Promote EFT payments for creditors.	Saving on paper, reduction to costs.	Corporate	Socially and environmentally responsible business
Draft sea level rise of 50cm and 90cm (as provided by the NSW Government in their draft policy statement) included in flood modelling.	Inclusion of latest climate change predictions, in line with NSW Government recommendations.	Engineering Works	Individual and collective action to mitigate the risks posed by a changing climate
Recycled pavement.	Resource efficiency. Less 'new' material used.	Engineering Works	Efficient production systems that minimise and reuse waste
Continued reuse of cleared vegetation.	Mulch and reuse of resources.	Engineering Works	Efficient production systems that minimise and reuse waste
Raised temperature of IT server room to higher end of optimal operating temperature range.	Higher ambient temperature means air conditioning is not working as hard therefore consuming less power.	IT	Effective and responsible power generation and use
Rationalized the number of servers by moving to a virtual server environment where appropriate.	Reduced spend on server hardware and server room power consumption, both in terms of server power and room air conditioning costs. Improved business continuity outcome. Resource efficiency.	IT	Effective and responsible power generation and use
Introduced a Power Management Protocol e.g., for PCs, Lights and other electrical appliances.	Reduced energy consumption and raised awareness amongst staff. Ensuring computers are switched off overnight will result in approximately 1/3 of the energy use than that of a computer left on.	IT	Effective and responsible power generation and use
Completed the Sustainable Urban Business Project.	The project assessed businesses in the area with the view of improving their environmental sustainability. The focus was to assess environmental matters such as energy usage, waste management, water and stormwater management, air emissions and use of raw materials.	Public Environmental Health	Socially and environmentally responsible business
Ongoing update Contaminated Land Register & Mapping Program.	Up to date information relating to land contamination for Section 149 Zoning certificates. Easily accessible information for Council Officers assessing development applications. Reduce the risk of unsuitable land use being approved on contaminated land.	Public Environmental Health	Continuous improvement in the condition of our environment in all areas of the shire
Community education material developed for public and environmental health issues.	Educated the Ballina Shire community on managing construction, building & demolition waste, correct handling/disposal of dog droppings, managing waste water from roof cleaning, erosion & sediment control, the dangers of accepting fill and the correct handling of waste.	Public Environmental Health	Continuous improvement in the condition of our environment in all areas of the shire

Action	Benefits and Outcomes	Council Area	CSP Objective
Implemented the 'Our Lakes' community education project.	Educated the public in relation to threats to the water quality in our coastal lakes i.e. litter, nutrients, pollution, weeds and dog droppings.	Public Environmental Health	Continuous improvement in the condition of our environment in all areas of the shire
Implemented the 'Bin Your Butt' community education project.	Raised community awareness in relation to cigarette butt littering. Provided community butt bins at key identified sites in public spaces i.e. Wigmore arcade.	Public Environmental Health	Continuous improvement in the condition of our environment in all areas of the shire
Developed 'Avoiding the Dangers of Accepting Fill on Your Land' brochure and included in rate notices to Ballina Shire rural rate payers 2007.	Educated rural land owners about the dangers of accepting uncertified fill on their land. Potentially reduce the number of contaminated sites within Ballina Shire.	Public Environmental Health	Continuous improvement in the condition of our environment in all areas of the shire
Implemented Erosion and Sediment Control Enforcement Program.	Reduced the amount of sediment and other material entering the stormwater system thus protecting the water quality of the shire's waterways.	Public Environmental Health	Continuous improvement in the condition of our environment in all areas of the shire
Implemented the Erosion and Sediment Control Education Program.	Educated construction industry working in the Ballina Shire about the need and benefits of erosion and sediment control measures. Refreshed Regulatory staff's knowledge on Council's Erosion and Sediment Control Enforcement Protocol.	Public Environmental Health	Continuous improvement in the condition of our environment in all areas of the shire
Development of a brochure and web page on care of water tanks.	Increased community awareness of the importance of maintaining water tanks to help ensure good water quality and reduce the possibility of mosquito borne infestation.	Public Environmental Health	Effective water collection use and reuse
Provided community education material on water, storm water, energy, lightning, waste and paper facts in a 6 weeks education campaign in local press including on line competition.	Increased awareness of more environmentally sustainable practices for the broader community.	Public Environmental Health	Continuous improvement in the condition of our environment in all areas of the shire
Undertook CEO Forum with a Sustainability Focus.	Engaged local business community and develop positive approach to environmentally sustainable business options. Highlighted link between local environment, local government and activities undertaken by these groups that may impact on the environment.	Public Environmental Health	Viable local business
Undertook energy efficient lighting assessment of Council's Customer Service Centre.	Provides options for saving energy and reducing costs.	Public Environmental Health	Effective and responsible power generation and use
Undertook environmental and sustainability assessments program for small to medium enterprises in the BSC area.	Adoption of more sustainable practices in business/industry.	Public Environmental Health	Continuous improvement in the condition of our environment in all areas of the shire
Compiled and distributed sustainability education kits including 100% recycled calico bags, useable mugs and resource fact sheets.	Diverse range of educational material produced for use by different sections Council. Education kits delivered to businesses engaged in project.	Public Environmental Health	Continuous improvement in the condition of our environment in all areas of the shire

Action	Benefits and Outcomes	Council Area	CSP Objective
Undertook pre and post survey of small to medium businesses in the shire in relation to sustainable behaviours.	Pre - survey benchmarked current knowledge, skills, attitudes and behaviours of business owners and managers regarding environmentally sustainable management options for their business operations. Post survey assessed business awareness of the Sustainable Urban Business Project.	Public Environmental Health	Socially and environmentally responsible business
Coordinated Champion Businesses of the Month, promotion in the local media.	Education campaign aimed at increasing awareness of environmentally sustainable practices of businesses and the broader community.	Public Environmental Health	Continuous improvement in the condition of our environment in all areas of the shire
Carried out environmental rehabilitation works including a community/business tree planting day at Kingsford Smith Reserve – Ballina.	Rehabilitation of sensitive land and also engagement of local businesses in the tree planting day highlighting the link between business activities and the local environment.	Public Environmental Health	Maintain our diverse and attractive landscapes
Undertook environmental and sustainability assessments for Council owned buildings - Visitor Information Centre, Library, Customer Service Centre and Depot.	Assisted Council in progressively integrating more sustainable practices into all Council operations.	Public Environmental Health	Buildings infrastructure and public spaces that complement our natural environment
Facilitated Resource Efficiency Workshops.	Increased understanding of resource efficiency among business owners and operators.	Public Environmental Health	Socially and environmentally responsible business
Established a DA information brochure on energy efficiency design principles for newly approved development applications for dwellings and flats within the shire.	Education of householder in design choice of energy efficiency features installed in their dwelling.	Regulatory Services	Buildings infrastructure and public spaces that complement our natural environment
Constructed a catchment activity model of Richmond River.	Encourages understanding about the water cycle and the need to care for our catchment.	Strategic and Community Planning	Excellent water quality in the Richmond River
Coordinated the Summer Bus initiative.	Provided young people with a means of transport. An 'introduction to public transport' for the community.	Strategic and Community Planning	Efficient and effective transport
Developed a Sustainable Purchasing Policy.	Triple bottom line accounting. Can offer local companies more opportunity. Tenders provide consideration of social and environmental responsibility, not based solely on economic grounds.	Strategic and Community Planning	Socially and environmentally responsible business
Educated community on bus services and other more sustainable modes of travel in Ballina Shire and the region through the "Cool Commuters" project.	Increased the awareness and perhaps uptake of more sustainable transport modes in the shire resulting in a reduction in fuel usage and greenhouse gas emissions.	Strategic and Community Planning	Efficient and effective transport

Action	Benefits and Outcomes	Council Area	CSP Objective
Protection of prime agricultural land, through planning processes.	Protection of prime agricultural land will ensure that land is available for food production.	Strategic and Community Planning	Maintain and improve our land based productivity
Participated in Bottled Water Alliance.	Reduction over time in landfill waste. Savings made by Council and community as a result of not purchasing bottled water.	Water & Sewer	Continuous improvement in the condition of our environment in all areas of the shire
Implemented the Backlog Sewer Program.	Connects groups of unsewered properties which are located near existing urban sewer areas to Council's sewer system. In doing so it addresses existing public health and environmental issues.	Water & Sewer	Clean beaches and foreshores
Implemented drop-off and recycling of compressed fluorescent lights and fluorescent lights at Council's Waste Management Facility.	Improved environmental management and opportunities for recycling and reuse.	Water & Sewer	Efficient production systems that minimise and reuse waste

Environmental Actions in Progress



This next section of the document provides the actions that are being currently progressed and are arranged below under the operational area of Council that they relate to.

Built Assets and Support Operations

Action	Benefits	Measurement	CSP Objective	Progress Report
Establish requirement for energy efficient street lighting in newly developed areas.	Financial and energy savings.	The development of a DCP for street lighting standards.	Effective and responsible power generation and use	Staff have commenced a project to prepare an addition to the Ballina Shire Combined Development Control Plan dealing with street lighting standards. It is proposed that the DCP provisions will establish specific light type acceptable to Council.
Install dual flush toilet cisterns in the Customer Service Centre.	Reduced water usage.	Water consumption audit.	Effective water collection use and reuse	2 of 10 completed. Replacing as worn out or broken.
Install energy efficient lighting and motion-activated 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.	Effective and responsible power generation and use	The installation of motion sensors has begun in the Customer Service Centre's toilet areas.
Install photovoltaic cells for a Council building (eg library) as a demonstration project.	Council seen as a leader. Chance to review technology ourselves. Develop business case for other buildings.	Monitor grid electricity used to gauge cost-benefit.	Effective and responsible power generation and use	10kW solar PV system was installed on Library and Ballina Community Service Centre - Data is being captured to monitor the cost/benefit.
Install sensor controlled lighting in the toilets of the Customer Service Centre and other appropriate Council owned buildings.	Reduced electricity usage / Increased public perception of Council's environmental aims.	Electricity account audit.	Effective and responsible power generation and use	Downstairs toilets installed with sensor lighting. Others to follow.

Action	Benefits	Measurement	CSP Objective	Progress Report
Install solar powered lights in public areas (including tourist parks).	Save energy. Lower installation costs. Demonstration projects - show leadership in the community.	New developments and redevelopments 100% installation of solar powered lights.	Effective and responsible power generation and use	Caravan Parks no longer managed by BSC. Potential solar lighting projects being investigated for other assets.
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. Water consumption.	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 buildings and facilities. Water efficient retrofits continue to be undertaken in all Council operated facilities.
Investigate alternative efficient pool heating systems for use at the Alstonville Pool.	Reduced gas/energy consumption.	Energy audit.	Socially and environmentally responsible business	Heating systems are being investigated.
Review the function of the carpool network annually and opportunities for involvement in the regional car pooling network.	Save money for Council staff. Save GHG emissions.	No. of staff carpooling.	Efficient and effective transport	Council is a partner of the Northern Rivers Carpool.
Refit public lighting with energy efficient fittings.	High-pressure sodium and T5 fluorescent bulbs will significantly reduce energy consumption of public lighting associated with public lighting. It is estimated that a 50% reduction in energy consumption is achievable by switching from the current 80W Merc.	% of the shire's infrastructure that has been upgraded.	Effective and responsible power generation and use	The street lighting assessment model has now been completed for Ballina Shire. This model incorporates an inventory of the street lighting assets within the shire and enables the comparison of various lighting technologies in terms of energy efficiency.
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	The Ballina Library and Ballina Community Services Centre have had 10kW Solar PV Systems installed. A 10kW system is currently being installed at the Alstonville Leisure and Entertainment Centre. A 3kW system is to be installed at the Commercial Services building and a 10kW system on the transfer station at the waste centre.

Action	Benefits	Measurement	CSP Objective	Progress Report
Make Council premises/ infrastructure as energy efficient as possible as a model for residents.	Energy efficiency will reduce greenhouse gas emissions and reduce costs for electricity.	Number of Council owned or operated buildings that have energy efficient features.	Effective and responsible power generation and use	Retrofitting of Council's existing premises with energy efficient lighting, photovoltaic panels, water saving appliances and bathroom furniture is in hand. Further works would likely wait until new buildings are built or significant development is required.
Install workstation power isolation as required in Council's Customer Services Centre.	Easily locatable switches at each workstation will encourage staff to switch off stand-by power when not in use.	Number of switches in place.	Socially and environmentally responsible business	Workstations in Corporate Services that have multiple appliances that use standby power have been fitted with one main switch for each workstation.
Refine water, waste and energy data management and reporting.	Improves 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 for business cases etc.	Reporting system developed.	Effective and responsible power generation and use	Electricity accounts are being monitored for abnormalities through Planet Footprint.

Commercial Services

Action	Benefits	Measurement	CSP Objective	Progress Report
Establish sustainability criteria for inclusion in all tender processes requiring a minimum NABERS standard of 4 stars. Issues such as life-cycle costing, healthy buildings, energy and water efficiency, green buildings.	4 stars will make us on a par with other councils and business. Reduced environmental impacts of products and services purchased by Council.	Criteria developed. Clauses included. Budget and resources supplied to ensure that these aspects are built in to cost.	Infrastructure and facilities that meet individual and community needs	In progress
Installation of PV panels for solar power for cabins, amenities and lighting at Flat Rock Holiday Park.	Improved standard of accommodation facilities. Decentralized power generation. Save capital cost of putting electricity to park.	Installation complete. Number of panels installed. Capacity generated.	Buildings infrastructure and public spaces that complement our natural environment	In progress

Corporate Services – Administration, Human Resources, Information Technology, and Finance

Action	Benefits	Measurement	CSP Objective	Progress Report
Establish a correspondence policy in relation to electronic delivery.	Reduce paper use. Improve staff efficiency and cost savings.	Policy developed.	Socially and environmentally responsible business	Community Connect and staff newsletter are examples, but limitation for outdoor staff and those with no computer access.
To promote/ support festivals and events that are managed to limit adverse environmental impacts.	Limiting resources consumed at festivals and events in the shire will reduce resource consumption.	Number of events that demonstrate activities designed to reduce resource consumption.	Socially and environmentally responsible business	Currently part of the Festivals and Events Support Policy.
Educate staff about Council's sustainable procurement policy.	Help ensure there is continued uptake of more sustainable products and services throughout Council sectors.	Number of staff workshops, events, newsletters. Annual sustainable procurement survey results	Socially and environmentally responsible business	Council's sustainable procurement procedure provides a purchasing framework that will advance the sustainable use of resources by considering products and services that contain recycled content are recyclable, minimize waste, or conserve energy. Ongoing.
Reduce the number of hard copy business papers produced.	Saving on paper, reduction to costs.	Number of business papers reduced from 83 to 56.	Socially and environmentally responsible business	Discussions have been held with people receiving hardcopy business papers such that they view the document on line. This has resulted in a 32% reduction however we are hopeful of improving on this position.
Council to promote the environmental programs that it is currently running.	Builds community awareness about Council's green initiatives.	Regular inclusion of information regarding green initiatives in council media and website	Socially and environmentally responsible business	Currently have Sustainable Ballina Shire section on Council's website that includes information about Council programs. Recently introduced the "Green Bea" as a logo that will flag Council's green initiatives in local media.
Lobby State and Federal Government to assist with funding for adaptation to climate change in shire.	External funding will assist in implementing adaptation actions.	Number of applications submitted. Number of applications successful.	Socially and environmentally responsible business	High level discussions need to be convened.
Investigate funding available for communities at risk .	External funding will assist in implementing adaptation actions.	Number of applications submitted. Number of applications successful.	Socially and environmentally responsible business	Use Climate Action Plan to frame up areas for funding.

Action	Benefits	Measurement	CSP Objective	Progress Report
Develop "Green Matters @ Work" Program for creating a culture of sustainability in the workplace.	Improved energy, waste and water efficiency awareness should result in reduced consumption.	Inclusion of a 'Green Matters @ Work' component into new staff induction package and in the staff newsletter.	Continuous improvement in the condition of our environment in all areas of the shire	Sustainable travel options to and at work have been included into new staff induction material. Performance Review form currently being amended to include / promote sustainability initiatives and actions.
Introduce electronic payroll advice system.	Saves paper and time.	Paper saving per staff member that accepts.	Socially and environmentally responsible business	Outdoor staff still receive paper pay slips. Identified barriers in staff computer skills however skills training plan currently being developed.
Incorporate sustainability requirements and or targets into performance plans and position descriptions.	Engages and encourages individual employee contributions to sustainability, and provides for recognition of individual efforts.	Annual employee performance review process.	Socially and environmentally responsible business	Annual performance appraisal forms are being updated for upcoming appraisal to include sustainability initiatives and actions. Position Descriptions are proposed to be updated within key performance and outcomes section being page 2 of position description.
Develop an Emergency Response Plan for the depot.	Reduce the risk of pollution. Improve OH&S.	Maintain incident log.	Socially and environmentally responsible business	Draft plan has been prepared in conjunction with Risk & HR Section and Engineering Support Operations.
Undertake the use of remanufactured printer cartridges in printers.	Reduced resource footprint associated with the production of cartridges.	Percent of printers using remanufactured cartridges.	Efficient production systems that minimize and reuse waste	Remanufactured cartridges used in individual printers as warranties expire. Remanufactured cartridges not to be used in network copiers.
Assess hardware suppliers for their green credentials and commitment to materials recovery of redundant hardware.	Improved whole-of-lifecycle management with Council making informed purchasing decisions as to where product came from and where it goes to after Council use.	Inclusion of assessment criteria in Quotation, ROI, EOI and Tender specifications.	Efficient production systems that minimize and reuse waste	IT equipment purchased on State Govt contract, which includes green credentials as part of the contract assessment process.
Purchase computer hardware with lower wattage power supplies, and embrace alternative technologies such as high-speed solid state flash drives and cases made from organic materials opposed to petro-chemical based products.	Reduction of the eco footprint associated with computer hardware used by Council.	Percentage of hardware fleet using sustainable production techniques and materials.	Socially and environmentally responsible business	New PCs purchased with lowest wattage power supplies available for required machine specification. Technology watch on use of solid state drives etc.

Depot and Fleet

Action	Benefits	Measurement	CSP Objective	Progress Report
Conduct survey of suppliers to ensure their operations and products are consistent with Council's own sustainable purchasing policy.	Improve access to sustainable manufacturers and suppliers, greater access to local suppliers and locally produced materials.	Report completed.	Socially and environmentally responsible business	Review of purchasing of toilet paper and batteries carried out, continue to monitor.
Implement Biodiesel Fuel Program.	Produce less carbon emissions and smoke particulates. Avoids the use of fossil fuels.	Biodiesel provided as replacement fuel.	Socially and environmentally responsible business	Implemented for Council fleet beginning of 2010. New bowsers have been installed and we are provided biodiesel on the State Government contracts from "The Biodiesel Station". Reduction in 227.20 tonnes of ghg emissions since March 2010.
Phase out two stroke engines in Council small plant fleet where possible, replace with four stroke engines. Use eco-friendly two stroke engines where necessary.	Improved fuel efficiency, less smoke & other pollutants released into the atmosphere. Less noise.	% of 2 and 4 stroke engines in small plant. Total fuel use.	Effective and responsible power generation and use	Council has replaced a small number of mowers with four stroke as they suited the application. Situation continues to be monitored, however power to weight ratio is significant re brush cutters etc.
Implement a fleet management system.	Improved fuel consumption rate and reduced operating costs.	Fuel use. Calculated emissions. Emissions per kilometre. 3 1/2 star rating for all vehicles in fleet.	Efficient and effective transport	Quotations being assessed- expect implementation early 2011.
Specify environmental considerations in tenders for new vehicles and plant models (e.g. biodiesel, fuel consumption, ease of use, suit ability for job etc.)	Ensures best vehicle for the job, not too big not too small increases fuel efficiency, reduction in running costs, option of multiple uses for plant vehicles and provides opportunity for plant operators to have input into the purchase of new plant.	Compliance with specifications.	Efficient production systems that minimize and reuse waste	Recent consultation with operators resulted in purchase of small plant vehicles allowing greater manoeuvrability or rural roads. Uses less fuel, easier to handle, better traffic flow when in operation.

Engineering Works

Action	Benefits	Measurement	CSP Objective	Progress Report
Update and implement urban stormwater management plan.	Improve stormwater quality.	Items of action plan completed.	Excellent water quality in the Richmond River	Brief in preparation for update of plan.
Dust sealing of unsealed roads.	Prevent erosion run off into waterways.	% of roads that have been sealed.	Buildings, infrastructure and public spaces that complement our natural environment	Council has undertaken sealing of some unsealed roads. Future sealing depends on budget.
Council to investigate and consider available options for the management of sea level rise risks and severe weather events in relation to low lying settlements in the shire.	Investigating options for dealing with climate change risks increases the ability to respond effectively, minimising impacts to both built and natural environments.	Investigation complete and results included into relevant plans and documents.	Individual and collective action to mitigate the risks posed by a changing climate	In the short to medium term, this is being considered as part of the Floodplain Management Plan and Coastal Hazard Management Plan.
Council to provide timely and accurate climate change risk information that does not alarm the community.	Ensuring accurate risk information is available to the community will assist them to plan effectively.	Information is available.	A feeling of safety regardless of where in the shire	Floodplain and Coastal Hazard Management planning will undertake this role.
Implement engineering works related actions from the Lake Ainsworth Management Plan and Lake Ainsworth Vegetation Plan.	Improved environmental outcomes through better management of the estuary.	Actions completed.	Continuous improvement in the condition of our environment in all areas of the shire	Many actions from these plans have already been implemented.
Implement engineering works related actions from the Shaws Bay and East Ballina Estuary Management Plan.	Improved environmental outcomes through better management of the estuary.	Actions completed.	Continuous improvement in the condition of our environment in all areas of the shire	Progress on many actions in the plan- see individual actions in plan for details.

Environmental and Public Health

Action	Benefits	Measurement	CSP Objective	Progress Report
Carry out the recreational water quality monitoring and reporting program – BeachWatch.	Monitor beaches and waterways in the local area to ensure the water is safe for swimming and for compliance with the National Health and Medical Research Council (NHMRC) water quality guidelines.	Number of samples collected and analysed for compliance with relevant guidelines. Number of media releases prepared and submitted.	Excellent water quality in the Richmond River	A Beachwatch Sampling Manual has been produced for internal Council use. The new sanitary inspection procedure has been undertaken and the beach suitability grade and risk assessment matrix have been completed. The 2010/2011 Beachwatch sampling commenced.
Coordinate Clean-up Australia Day for the community.	Engage the local community and create positive outcomes for the environment. Remove rubbish from bushland areas and reserves not regularly serviced by Council. Help to identify problematic illegal dumping sites.	Number of registered participants and sites each year. Amount of rubbish collected each year.	Continuous improvement in the condition of our environment in all areas of the shire	Annual event - first weekend in March.
Implement Lake Ainsworth Management Plan.	Ensure the environmental outcomes detailed in the management plans are achieved.	Completion of actions identified in MP.	Continuous improvement in the condition of our environment in all areas of the shire	Committee formed to implement management plan.
Implement On-Site Sewage Management Program.	Manage and regulate the impact of on-site sewage management systems in Ballina Shire. Ensures the protection of the surrounding environment including groundwater, surface water, land and vegetation through the selection of a suitable system for a specific site.	Number of existing OSSMS inspected.	Continuous improvement in the condition of our environment in all areas of the shire	The OSSM inspection program is now in its 9th year. Approximately 200 OSSMS have been inspected to date. OSSM is still an ongoing issue with 50-60% failure rate consistent with other years and other LG Areas.

Action	Benefits	Measurement	CSP Objective	Progress Report
Implement Shaws Bay Management Plan.	Ensure the environmental outcomes detailed in the management plans are achieved.	Completion of actions identified in MP.	Continuous improvement in the condition of our environment in all areas of the shire	Committee formed to implement management plan.
Increase amount of new buildings that have sustainable technologies and devices such as solar power, solar hot water and rainwater tanks.	Increasing sustainability of new buildings improves efficiency and reduces greenhouse gas emissions.	Number of Council controlled assets that have these features. Difficult to measure other buildings in the shire.	Individual and collective action to mitigate the risks posed by a changing climate	BASIX points move toward a lowest common denominator for these technologies. Incentives and Renewable Energy Certificates (REC's) also contribute to take up rates. Green Building Checklist currently provides design opportunities for improving the sustainability of privately owned buildings.

Outdoor Spaces and Reserves

Action	Benefits	Measurement	CSP Objective	Progress Report
Protect and stabilise coastal dunes at Lake Ainsworth.	Coastal protection and reduced dune erosion.	Sand movement, dune condition.	Continuous improvement in the condition of our environment in all areas of the shire	Dune stabilisation fencing installed, hardened beach access tracks installed, native plantings established. Recent storm damage to paths and fencing. Work ongoing
Plant vegetation corridor between Shaws Bay and rainforest escarpment.	Improved habitat.	Area / no of plants planted, survival and growth rates.	Continuous improvement in the condition of our environment in all areas of the shire	Initial plantings established. Natural recruitment (regeneration) occurring. Assisted regeneration (weeding) required. Work ongoing.
Implement the Ballina Coastal Reserve Plan of Management.	Effective management of the Ballina Coastal Reserve.	Number of actions completed from plan.	Continuous improvement in the condition of our environment in all areas of the shire	Many actions being implemented to various degrees. Work ongoing.

Action	Benefits	Measurement	CSP Objective	Progress Report
Implement the Lennox Headland Master Plan.	Public amenity upgrades and vegetation management on Lennox Headland.	Installation of furniture, length of paths and decking, Number of plants and areas of landscape improvements.	Buildings infrastructure and public spaces that complement our natural environment	Substantial plantings and weed management through grants. Work ongoing. Limited infrastructure works due to lack of funding.
Implement the Ballina Coastal Reserve Precinct Plans.	Development of the Ballina Coastal Reserve as envisaged by the community and users.	Implementation of actions contained in the plans, number of actions completed.	Continuous improvement in the condition of our environment in all areas of the shire	Many actions funded through external grants and Council contributions. Work ongoing.
Install recycled plastic beach access tracks in high use eroding areas in the Ballina Coastal Reserve.	Improved public amenity and safety.	Number of plastic tracks installed.	Infrastructure and facilities that meet individual and community needs	Regular installation of new recycled beach access tracks as funds permit, many through external funding. Work ongoing.
Implement actions from the Vegetation Management Plans for various sites around the shire.	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.	Continuous improvement in the condition of our environment in all areas of the shire	Ongoing works dependent upon funding, resource ability and priority needs. Good landcare support for many sites.
Implement actions from the Bitou Bush Threat Abatement Plan (TAP).	Abatement of a threatening process, improved coastal habitat and public amenity.	Reduced hectares of Bitou Bush and hectares of improved condition of native vegetation and habitat.	Continuous improvement in the condition of our environment in all areas of the shire	8 sites under active management, 5 sites in third year, 3 sites first year. Initial work by BSC Regeneration Team. 2009 - 2010 contract signed with private contractor for the eight sites.
Replace use of CCA treated bollards in public locations with recycled plastic.	Sustainable building products assist environment.	Metres of bollards replaced.	Buildings infrastructure and public spaces that complement our natural environment	Price of plastic bollards getting cheaper. Starting to use these for some sites.
Undertake Chickiba Bird Roost Project.	Improved habitat for migratory water birds.	Number and species of birds roosting and using island and lake.	Continuous improvement in the condition of our environment in all areas of the shire	Largely complete, follow-up mangrove seedling control may be required until seed viability is extinguished. DA requirement for road construction.
Prepare Chickiba SEPP 14 EIS.	Greater understanding of ecology and hydrology of Chickiba wetlands.	EIS study approved.	Continuous improvement in the condition of our environment in all areas of the shire	On track for completion and submission. Will require further studies with additional expenses.

Action	Benefits	Measurement	CSP Objective	Progress Report
Implement Kingsford Smith Reserve - (Conservation area) Management Plan.	Improvement in public amenity and native habitat in a urban reserve.	Area of native vegetation rehabilitated, improvement in education value and public amenity.	Buildings infrastructure and public spaces that complement our natural environment	Grant underway.
Design and implement a 'Code of Conduct' for beach vehicle access.	Safer multi use of beach. Reduce environment damage.	Degree to which Code of Conduct is implemented.	Infrastructure and facilities that meet individual and community needs	Code of Conduct and signage in place. Recent damage to signage due to high seas and storms. Resources required for maintaining compliance. Work ongoing.
Council to support community gardens, school gardens, local farmers market and backyard vegetable gardens.	Supporting activities that encourage more local food production will reduce the transport miles associated with transporting food and hence reduce greenhouse gas emissions.	Number of sites nominated for this sort of activity in the shire.	Individual and collective action to mitigate the risks posed by a changing climate	Council has recently endorsed a community gardens policy that encourages the use of public land for food production and is currently supporting the development of the first formal community garden.
Council to plant more native trees, but not in places where they create a bushfire hazard near houses.	Planting endemic trees in suitable locations provides habitat, limits soil loss and reduces carbon in the atmosphere.	Number of revegetation sites in the site. Number of trees planted per year.	Continuous improvement in the condition of our environment in all areas of the shire	Council's nursery, plantings and bush regeneration support activities are currently implementing this recommendation.
Provide off-road vehicles beaches access while retaining environmental values, 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 planning phase. Brochure and Council website promote code of conduct. Requires maintenance, especially repairs after storm and high sea events. Work ongoing.
Conduct a community education program on the impact of garden escapee weeds to the surrounding native habitat.	Reduced impact on native habitat from garden escapee weeds. Increased community awareness of the benefits of environmentally friendly gardening.	Education program completed.	Continuous improvement in the condition of our environment in all areas of the shire	Beneficial environmental outcomes. Green Garden Guide worked well.

Strategic, Community and Economic Services

Action	Benefits	Measurement	CSP Objective	Progress Report
Council to support the establishment of a local centre for distribution of local and regional produce (lower emissions and sustainable local economy and local-social cohesion).	Supporting the production, distribution and consumption of locally grown produce will reduce transport distances associated with the transportation of food.	Establishment of local centre for distribution set up.	Individual and collective action to mitigate the risks posed by a changing climate	Council's involvement in the Food Links Project is currently supporting initiatives that promote the production, distribution and consumption of locally grown produce
Collate a Regional State of the Environment Report (SoE).	Provides regional snapshot on environmental issues particularly where they are not bound by shire boundaries.	Regional indicators reported.	Continuous improvement in the condition of our environment in all areas of the shire	Regional SoE group has been formed to develop a framework for a Regional SoE Report.
Develop the Richmond River Estuary Management Plan.	Blueprint for actions that will have an effect on estuary health. Opportunity to apply for funding to implement projects.	Actions prioritized and funded.	Excellent water quality in the Richmond River	A draft plan is almost ready for exhibition.
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 organization.	Regular meetings of internal Environment Team.	Socially and environmentally responsible business	Council's internal Environment Team is made up of staff from all sectors of Council and has been running since 2006. Currently convenes to ensure the collation of the EAP and prioritize actions for recommendation to MANEX.
Prepare vegetation management DCP.	Establish clear policy direction for management of vegetation in the shire under the planning framework.	Implementation of vegetation management DCP	Integrated land uses	Draft vegetation management DCP awaiting finalization pending New LEP gazettal.
Undertake vegetation mapping for the shire.	Provide an improved understanding of habitat values in the shire. Provide direction for development of Council policy and planning instruments.	Vegetation mapping complete. High conservation areas identified.	Continuous improvement in the condition of our environment in all areas of the shire	Mapping is being prepared as resources allow by Council's Environmental Scientist. Mapping is supporting preparation of Ballina LEP renewal and will inform preparation of vegetation management DCP.

Action	Benefits	Measurement	CSP Objective	Progress Report
Develop a Climate Change Adaptation and Mitigation Action Plan.	An adaptation and mitigation action plan will ensure Council has a strategic approach to combating the impacts of climate change.	Plan developed. Climate change mitigation estimated using measures reporting tool to track progress towards Council's projected greenhouse gas targets.	Individual and collective action to mitigate the risks posed by a changing climate	Council has resolved to establish a Climate Action Plan. DECCW has provided 50% funding. Council risk assessment is complete. Community recommendations have been provided through the Climate Change Forum.
Promote existing carpool website for NR Carpool.	Encourage greater uptake of carpooling in the shire.	Number of registrations on the website.	Efficient and effective transport	Ongoing.
Council to investigate incentives for people who install solar panels and other energy efficient measures on existing housing.	Increased uptake of more sustainable technologies will reduce energy and resource use.	Number of homes that take up solar technologies under the scheme.	Effective and responsible power generation and use	Council has undertaken community awareness activities that promote the State and Federal rebates available for improving the energy and water efficiency of their homes. This included partnering with local businesses to provide additional discounts to customers. Opportunities to provide other incentives are continuing to be investigated.
Liaise with industry and stakeholders to stop the burning of cane on site.	Improved air quality and reduction on greenhouse gas emissions.	Stakeholder communication	Socially and environmentally responsible business	The Richmond River Cane Growers Association is working toward this issue, in conjunction with the Broadwater Mill.
Research Queensland pathway to legislation on not burning cane.	Improved air quality and reduction on greenhouse gas emissions.	Stakeholder communication	Socially and environmentally responsible business	It is understood that burning of cane prior to milling is still carried out in the Burdekin area according to industry practices.
Establish internet based supply chain network for industry clusters.	Financial savings, boosting local economy.	Network established.	Efficient production systems that minimize and reuse waste	In progress.

Water and Sewer

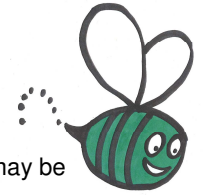
Action	Benefits	Measurement	CSP Objective	Progress Report
Implement water dual reticulation system.	Reduce energy and environmental water use by re-using as much water as possible to reduce current potable water use.	100% reuse.	Effective water collection use and reuse	Dual reticulation is included in all new developments that have access to the water. This is ongoing with the recycled water to become available following the upgrades to Ballina WWTP and Lennox Head WWTP.
Review existing Demand Management Measures in partnership with Rous Water.	Ensure measures are cost-effective. Save more water if targeted appropriately.	Reduction in water use and money spent.	Effective water collection use and reuse	This is a Rous Water function and is dealt with above.
Implement and complete the Water Loss Management Program.	Significant reductions in water demand through reduced system leakage and water consumption. Economic benefits through savings in water production, operation and management costs, water & wastewater treatment and pumping costs. Fewer water supply interruptions.	Through monitoring and metering.	Effective water collection use and reuse	Construction of flow meter pits. Purchase of flow meters. Purchase of pipe work. Area 3 (Lennox Head) implemented Christmas 2009. Final area to be implemented with an underbore to Fishery Creek which is programmed to occur in February 2011.
Implement and complete the Ballina Salinity Infiltration Reduction Program.	The primary objective of the proposed re-use scheme is to satisfy community desire for high levels of effluent re-use. The salinity reduction is likely to be critical to achieving high levels of re-use, particularly for scenarios involving potable waters.	Ongoing monitoring of the system.	Effective water collection use and reuse	Contract awarded (August 09). DPWS are managing the contract. Contractor difficulties at present and new tenders will be sought in 2011.
Alstonville water re-use expansion.	Replace potable water and groundwater use with reclaimed water. Diverting nutrients from Maguires Creek.	% reuse of dry weather flows (target is 80% of dry weather flows).	Effective water collection use and reuse	Currently in progress, and expanding as required (as new applicants come on line). Discussions with CMA with regard to discharge being an environmental flow, therefore reuse under consideration.

Action	Benefits	Measurement	CSP Objective	Progress Report
Ballina and Lennox Head WWTP upgrade - need to cater for future development.	Ballina will be able to cater for 30 000 ep. Lennox Head will be able to cater for 26 000 ep. Higher quality water more suitable for re-use, particularly in Ballina Heights and Lennox Head, and for sporting irrigation.	% of dry weather flow re-use. Bulk water supply.	Infrastructure and facilities that meet individual and community needs	Lennox Head WWTP Upgrade underway. Contract for the construction of the Ballina WWTP upgrade and Lennox Head WWTP upgrades to be awarded in early 2011, and the pipelines and reservoirs detailed design contract is to be awarded in February 2011.
Audit of pump station assets /condition report.	Energy savings and pump efficiency.	Identify cost savings and targeted repairs.	Infrastructure and facilities that meet individual and community needs	Audits ongoing as at Dec 2010.
Upgrade of pump station assets.	Energy savings and pump efficiency.	Energy savings.	Infrastructure and facilities that meet individual and community needs	Program started as at July 2009, programmed replacement and repairs across total assets to be complete by 2012 (August 09). 65 out of 200 complete.
Reuse of 80% of dry weather flows by 2026.	Replace potable water use. Reduced energy requirements for production of 'new' water.	Dry weather re-use.	Effective water collection use and reuse	All new developments to have dual reticulation. Have implemented extensive program of urban open space watering. At conceptual stages of vegetation regeneration property acquisition (with RTA).
Demand management strategies.	Reduce potable water usage in households, business and industry.	Kilolitres per person/household.	Effective water collection use and reuse	Demand management adopted as a tool by Rous Water and BSC.
Pollution Reduction Plan for sewer overflows. (Upgrading of pump stations to ensure operational efficiencies).	Improved water quality in river (no overflows to river).	Water quality monitoring meets ANZECC guidelines.	Excellent water quality in the Richmond River	Program has been developed and is 'loaded' into the Management Plan (August 09). Included as part of capital works and begun as part of 09/10 budget to now be rolled out progressively.
Urban Water Management Strategy - a whole of catchment approach to water management (i.e. Ballina Shire catchment).	Improved catchment management.	Kilolitres per person/household.	Socially and environmentally responsible business	Education officer interview held Dec 2010, once position is awarded the role will be charged with managing this.

Waste

Action	Benefits	Measurement	CSP Objective	Progress Report
Develop a shire-wide waste management strategy.	Ensures a holistic approach to waste management, having regard to Council's broader sustainability aim and strategies, and incorporating environmental, economic and social factors.	Adoption by Council.	Efficient production systems that minimise and reuse waste	Consultant brief prepared (August 09). Aurecon have been appointed, Councillor workshops are being held and consultancy is in progress.
Investigate biochar - burning organic material to charcoal.	Carbon sequestration. Reduction in landfill space required. Reduction in methane and other greenhouse gases. Secondary source of energy production. Can be used to enhance soil fertility/structure.	% of waste diverted from landfill.	Individual and collective action to mitigate the risks posed by a changing climate	Working with DPI on feasibility studies (August 09). Reviewing business case (February 10).
Construct leachate pre-treatment facility at Council's waste management facility.	Improved water quality and reduced risk of pollution.	Existing monitoring program.	Continuous improvement in the condition of our environment in all areas of the shire	Commissioning completed, waiting on handover documentation from consultant (August 09). Plant up and running, W&S have taken over. Performance review happening. When OK this action will be complete.
Waste Community Education Plan.	Diversion of waste from landfill. Positive profile for Ballina Shire Council. Further develop community acceptance of waste diversion practices.	% of waste diverted from landfill.	Efficient production systems that minimize and reuse waste	The new waste strategy was developed and adopted by Council in October 2010. Waste diversion strategies will be implemented as identified with the first being the provision of a kerbside organics and green waste collection in July 2011.

Ideas for Environmental Action



This next section of the document 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 Objective
Upgrade lighting fixtures and install power efficient lamps in the BBGA passenger terminal building and under driveway awning at the airport.	Reduced electricity use.	Energy and cost savings.	Airport	Effective and responsible power generation and use
Provide recycling bins in the passenger terminal building at the airport.	Reduce waste to landfill.	Number of functional recycling bins.	Airport	Efficient production systems that minimize and reuse waste
Install waterless urinals in public toilet facilities.	Reduced water usage.	Water consumption audit.	Built Assets & Support Operations	Effective water collection use and reuse
Install waterless urinals in the Customer Service Centre male toilet facilities.	Reduction in water consumption.	Water consumption audit.	Built Assets & Support Operations	Effective water collection use and reuse
Investigate the potential to capture and re-use rainwater collected and discharged via overflow from the Alstonville Swimming Pool.	Reduction in water consumption and effective use of natural resources.	Water consumption audit.	Built Assets & Support Operations	Effective water collection use and reuse
Replace Customer Service Centre office lighting with energy efficient lighting.	Reduced electricity consumption.	Electricity account audit.	Built Assets & Support Operations	Effective and responsible power generation and use
Replace the Customer Service Centre storage hot water units with gas instantaneous or solar heating systems.	Reduced electricity consumption.	Electricity account audit.	Built Assets & Support Operations	Effective and responsible power generation and use

Action	Benefits	Measurement	Council Area	CSP Objective
Install rainwater tank at the works depot - (for workshop & plant washing).	Reduction in mains water consumption.	Water consumption audit.	Built Assets & Support Operations	Effective water collection use and reuse
Control external security lighting at the works depot to remain off when nobody on-site and light up when entry is made to the depot at night either authorized by swipe access or the interruption of security beams.	Reduced electricity consumption.	Electricity account audit.	Built Assets & Support Operations	Effective and responsible power generation and use
Progressive movement toward a minimum NABERS rating for all property leased out by Council.	Community leadership in water and energy savings. Reduction in community usage of water and energy.	% of buildings with NABERS rating of 4 stars or more.	Commercial	Infrastructure and facilities that meet individual and community needs
Review Council's internal DA distribution process to reduce paper.	Save on paper. Financial savings.	Paper saving of a new system.	Corporate	Socially and environmentally responsible business
Introduce security passwords on photocopiers for individuals.	Save on paper. Financial savings.	Monitor paper usage and copy counts and costs on photocopiers.	Corporate	Socially and environmentally responsible business
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.	Methodology set up.	Corporate	Socially and environmentally responsible business
Lobby State and Federal Government for adaptation funding based on Ballina Shire being a high risk/vulnerability to climate change.	External funding will assist in implementing adaptation actions.	Participation in activities and submissions to State and Federal Govt.	Corporate	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
Develop an environmental management plan for the depot.	Reduce inappropriate storage of chemicals, tyres, batteries and other potentially contaminating materials. Reduced risk of pollution. Improve storm water quality leaving the site.	Plan to include a timeframe and prioritization of tasks, in order that ongoing implementation occurs.	Depot & Fleet	Socially and environmentally responsible business

Action	Benefits	Measurement	Council Area	CSP Objective
Implement GPS System for Council works fleet.	Reduce waste and cost, saves on fuel consumption and vehicle wear & tear.	System installed.	Depot & Fleet	Efficient and effective transport
Undertake an environmental audit and hazard risk assessment of operations and facilities at the depot.	Reduce the risk of pollution. Improve OH&S.	Report produced.	Depot & Fleet	Socially and environmentally responsible business
Audit adequacy of chemical storage controls at the depot.	Reduce the risk of pollution. Improve OH&S.	Report produced.	Depot & Fleet	Socially and environmentally responsible business
Construct new covered stores in order to accommodate small plant and stockpiles of materials currently exposed to the weather and deterioration.	Reduce weathering of existing vulnerable materials, such as PVC sewer piping, which are currently stored in the open, thereby improving their life expectancy and reducing waste.	Report produced.	Depot & Fleet	Socially and environmentally responsible business
Implement a fleet management system.	Improved fuel consumption rate and reduced operating costs.	Fuel use. Emissions per kilometre 3 1/2 star rating for all vehicles in fleet.	Depot & Fleet	Efficient and effective transport
Centralise Council purchasing via the stores department rather than through individual departments.	Reduce likelihood of duplication of purchasing effort, better management of sustainable purchasing policy, reduced transportation through greater economy of scale.	Report produced.	Depot & Fleet	Socially and environmentally responsible business
Stormwater risk assessment for 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
Provide a terminal at customer service counter for customers to view appropriate Council documents.	Saves paper, improves service.	Terminal provided.	IT	Socially and environmentally responsible business
Install dual flush toilet cisterns in female and disabled public toilets	Reduced water usage. Increased public awareness of Council's environmental actions.	Water consumption audit.	OSR	Effective water collection use and reuse

Action	Benefits	Measurement	Council Area	CSP Objective
Implement actions from the Chickiba Lakes ASS and Wetland Vegetation Management Plan (2006).	Improvement in native vegetation, habitat and visual amenity. Reduction in weed source. Improved water quality.	Number actions implemented Area of vegetation restored.	OSR	Continuous improvement in the condition of our environment in all areas of the shire
Implement actions from the Maguire's Creek Catchment Vegetation Management Plan (2004).	Improvement in native vegetation, habitat and visual amenity. Reduction in weed source. Track maintenance and infrastructure improvement.	Number actions implemented Area of vegetation restored.	OSR	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.	OSR	Continuous improvement in the condition of our environment in all areas of the shire
Implement Alstonville Creek Rehabilitation Project Concept Plan.	Improved visual, recreational amenity, biodiversity and flooding outcomes.	Stages of concept plan implemented.	OSR	Buildings infrastructure and public spaces that complement our natural environment
Establish capability to sell native plants via Council nursery.	Potential for raising revenue for NRM work. Increase in native vegetation in private gardens, improved native habitat.	Sales of native plants, level of cost recovery, additional income.	OSR	Continuous improvement in the condition of our environment in all areas of the shire
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
Adjust the running time for Lake Ainsworth Aeration System.	Reduce energy consumption while still achieving sufficient mixing to breakdown thermal stratification making the lake a less suitable habitat for the growth of cyanobacteria.	Level of stratification occurring in lake. No of days closed due to blue green algae. Power usage/cost.	Public Environmental Health	Effective and responsible power generation and use
Undertake catchment education activities throughout the shire to community and school groups to build awareness of catchment issues.	Increased community awareness of the catchment issues may lead to reducing the human induced impacts on the river.	Number of activities undertaken each year.	Public Environmental Health	Excellent water quality in the Richmond River
Create a "Plant a native program" card for seedling give-aways.	Revegetation with native species. Community education.	Customer, businesses feedback.	Regulatory Services	Buildings infrastructure and public spaces that complement our natural environment

Action	Benefits	Measurement	Council Area	CSP Objective
Engage a Sustainability Education Officer.	Specialist community engagement skills held in house. Opportunities for collaboration with other councils (and therefore cost savings).	Equivalent EFT.	Strategic & Community Services	Continuous improvement in the condition of our environment in all areas of the shire
Investigate feasibility of charging an additional (voluntary) fee on normal charges for environmental initiatives.	Community and visitors can directly influence sustainability initiatives.	\$ received.	Strategic & Community Services	Socially and environmentally responsible business
Prepare a Sustainability Education Strategy for the Ballina Shire Community.	Ensure a coordinated approach to engaging the community in environmental and sustainability learning.	Strategy established and endorsed by Council.	Strategic & Community Services	Continuous improvement in the condition of our environment in all areas of the shire
Provide ongoing education and training for staff on sustainability. Also provide recognition for staff who endeavour to undertake workplace activities in a more sustainable manner.	This will ensure that staff are kept up-to-date with developments in environmental sustainability and that best practice guidelines are applied to relevant local government services and responsibilities. Also awards those staff that are implementing more sustainable practices in their own work program.	Training or education events per year. Recognition process set up.	Strategic & Community Services	Continuous improvement in the condition of our environment in all areas of the shire
Council to investigate bicycle loan/share system.	Encouraging more sustainable modes on transport in the shire can increase uptake of these modes and reduce greenhouse gas emissions.	System explored.	Strategic & Community Services	Efficient and effective transport
As part of a biodiversity strategy, Council and State government to identify, conserve and enhance flora and fauna corridors to enable fauna and flora migration if the climate demands it.	Corridors will help connect existing remnant vegetation to ensure the migration of species and viability of populations.	Strategy developed and corridors identified.	Strategic & Community Services	Continuous improvement in the condition of our environment in all areas of the shire
Council to seek advice from Aboriginal Elders and involve Aboriginal people in responses to climate change.	Ensures better representation of views from the Aboriginal community.	Advice received and included in responding the climate change.	Strategic & Community Services	A justifiable trust in our organizations business and government
Council to build display buildings 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 buildings.	Building constructed.	Strategic & Community Services	Socially and environmentally responsible business

Action	Benefits	Measurement	Council Area	CSP Objective
Council to provide advice to community on innovative low cost technologies.	Community awareness about green technologies and products may increase uptake and reduce environmental impact of households.	Links on websites to sites that promote these products.	Strategic & Community Services	Buildings infrastructure and public spaces that complement our natural environment
Develop plain english community information sheets on climate change.	An informed community is better able to make informed decisions around climate change affected issues.	Information sheets provided to the community.	Strategic & Community Services	Individual and collective action to mitigate the risks posed by a changing climate
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 & Community Services	Individual and collective action to mitigate the risks posed by a changing climate
Council to 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 & Community Services	Individual and collective action to mitigate the risks posed by a changing climate
Provide more support towards 'climate change' education in schools (particularly high schools).	An informed community is better able to make informed decisions around climate change related issues.	Activities that support climate change school related programs documented.	Strategic & Community Services	Individual and collective action to mitigate the risks posed by a changing climate
Recommend to State Government/ community that primary and secondary schools teach science /environment theory in relation to local environment.	An informed community is better able to make informed decisions around climate change affected issues.	Education Department informed of this recommendation from the Ballina Shire Climate Change Forum.	Strategic & Community Services	Individual and collective action to mitigate the risks posed by a changing climate
Implement ClimateCam Program for better water management.	Provide 'real-time' public awareness of water usage in their locality.	Kilolitres per person/household.	Water & Sewer	Effective water collection use and reuse
Implement actions from the Marom Creek Weir (Lismore LGA) Vegetation Management Plan.	Improvement in native vegetation, habitat and visual amenity. Reduction in weed source. Improved water quality.	Hectares rehabilitated. Number of plants planted. Survival and growth rate of plantings. Water quality improvement.	Water & Sewer	Continuous improvement in the condition of our environment in all areas of the shire
Implement Stormwater Quality Management Plan at Council's Waste Management Facility.	Improved water quality and reduced risk of pollution.	Existing water quality monitoring program.	Waste	Continuous improvement in the condition of our environment in all areas of the shire

Action	Benefits	Measurement	Council Area	CSP Objective
Review Landfill Environmental Management Plan for Council's Waste Management Facility.	Improved environmental management and asset protection.	Existing water quality monitoring program and annual licence audit process.	Waste	Continuous improvement in the condition of our environment in all areas of the shire
Install public recycling bays in town and village centres.	Increase percentage of recycled materials recovered from landfill. Provide leadership to the community and good PR for Council.	Waste received that is diverted from landfill.	Waste	Infrastructure and facilities that meet individual and community needs