

Cairns Regional Council
State of the Environment Report
2013/14



Cairns Regional
COUNCIL

This report has been produced by Cairns Regional Council.

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Cover photograph: Palm Cove Cairns



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Cerbera manghas photographer Bob Jago



Cattana Wetlands

The Cairns Regional Council local government area encompasses 1687 km² of land on a narrow coastal strip that extends from the Mirriwinni, in the South to Ellis Beach, in the North. Cairns City is the principal centre of the region and is centrally located along the coastal strip with sub-regions to the north and south consisting predominantly of good quality agricultural land and areas of high ecological significance.

The estimated residential population of the Cairns region as at 30 June 2013 was 157,080. The region has experienced an average annual growth rate of 2.7% over the last 10 years. It is predicted that two thirds of Tropical North Queensland's population growth (approximately 70,000 people) will be accommodated within the Cairns region, with up to 50,000 ultimately accommodated within the Mount Peter area.

Council believes in the importance of transparent reporting and accountability of its performance to the community. Council provides the State of the Environment (SoE) report on an annual basis to identify and communicate sustainability indicators.

The State of the Environment Report (SoE) uses data collected for various indicators, including indicators relating to broader sustainability aspects such as community well-being and governance, and monitors Council's performance against them.

On the 9 March 2013 a de-amalgamation poll was held which resulted in the community voting to de-amalgamate the former Douglas Shire from the Cairns Regional Council. The Douglas Shire Council was re-established on 1 January 2014. This de-amalgamation means that not all data sets are complete for this year and there will not be a comparative analysis with last financial year. This year's data will provide the benchmark for future reporting for the new Cairns Regional Council and next year's report will provide a comparative analysis of the data.



View over Cairns CBD

Waste and Recycling

- 47,515 tonnes of domestic kerbside waste collected.
- 8,227 tonnes of soil conditioner exported from Bedminster.
- 22,551 tonnes of green waste processed.
- 7,234 tonnes of recyclables sent for recycling.
- 3,574 tonnes of metal were recycled.
- 71,260 litres of oil sent for recycling.

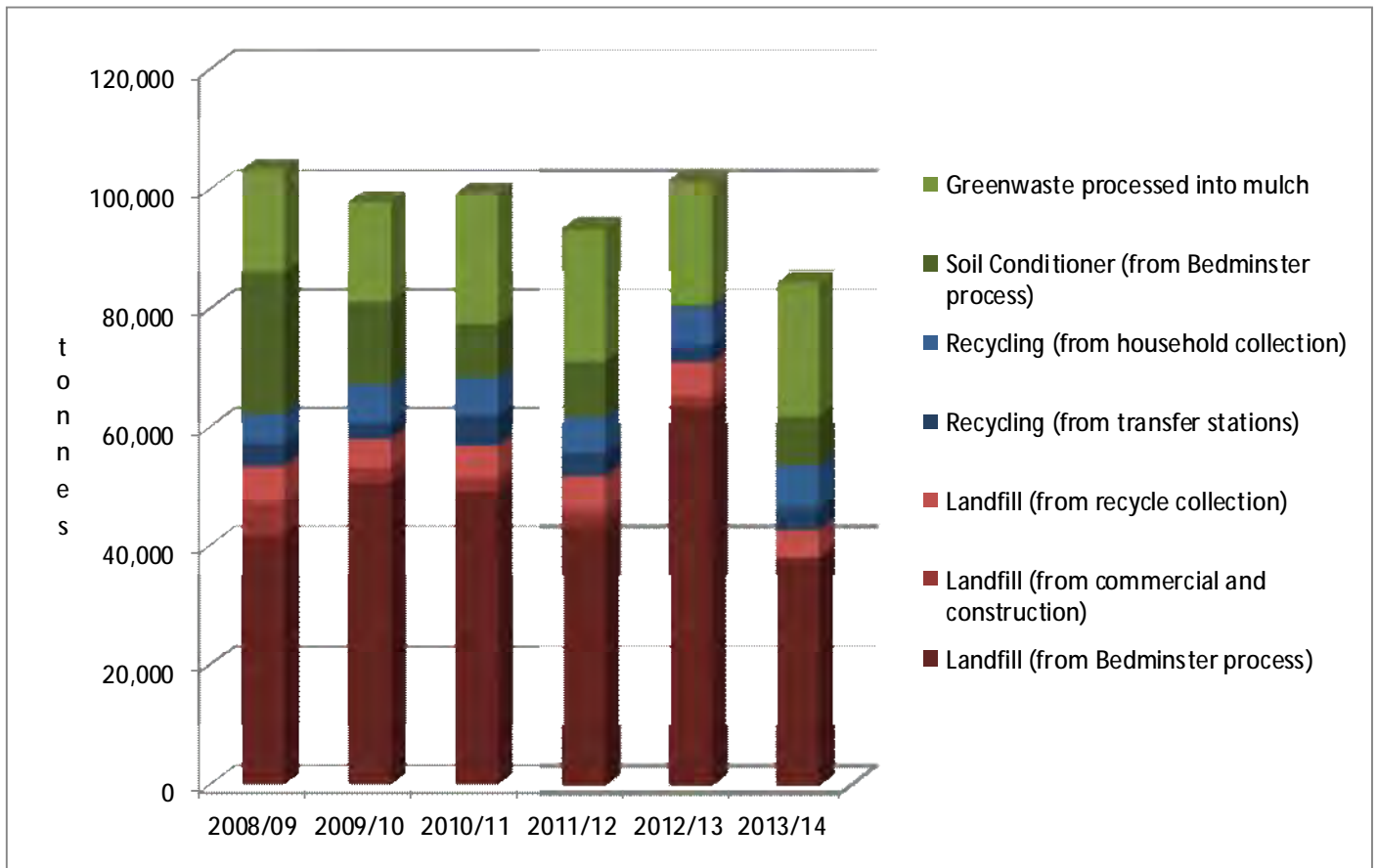


Advanced Resource Recovery Facility (Bedminster),
Transfer Station and Buy Back Shop

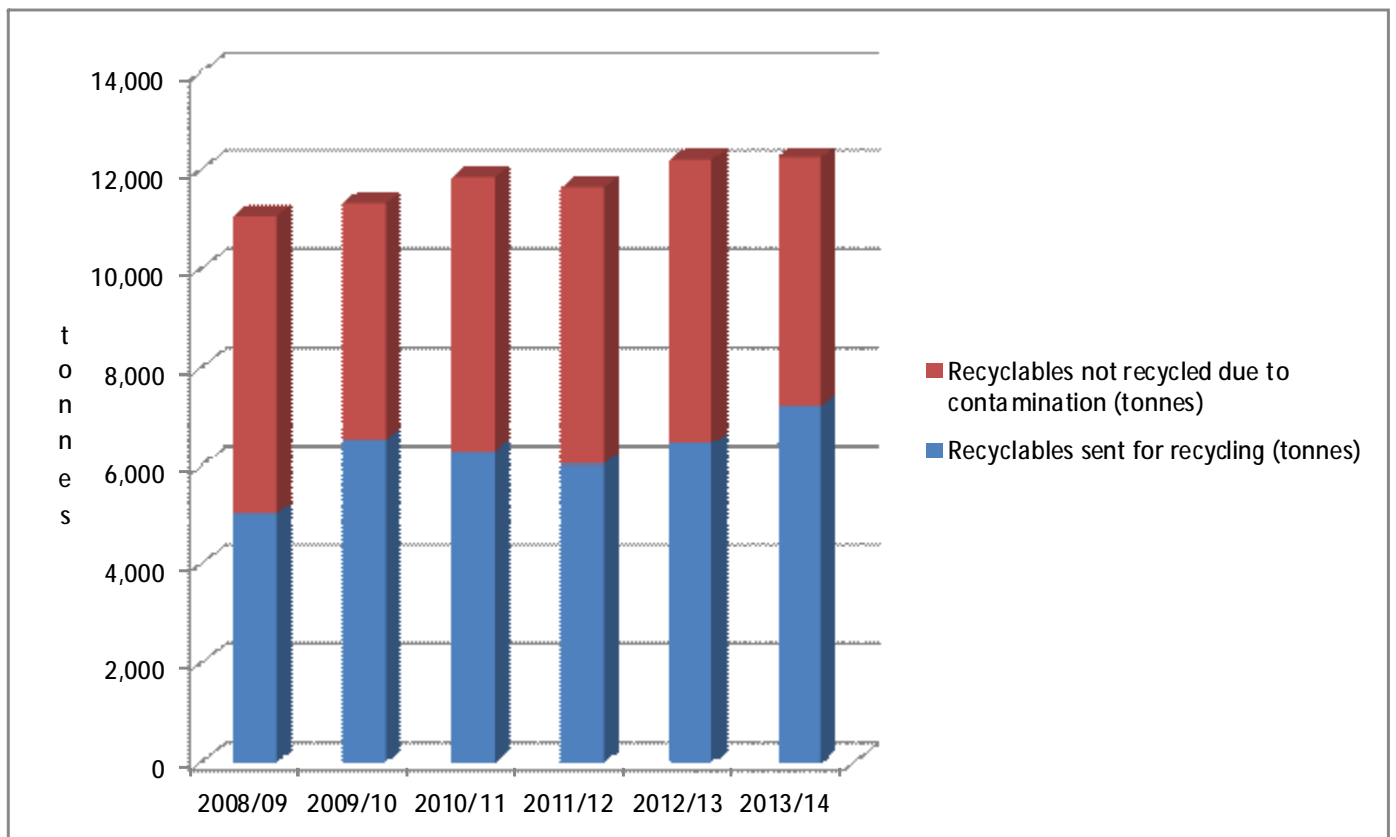


Council Waste and Recycling Trucks

Council Waste Streams



Household Recycling

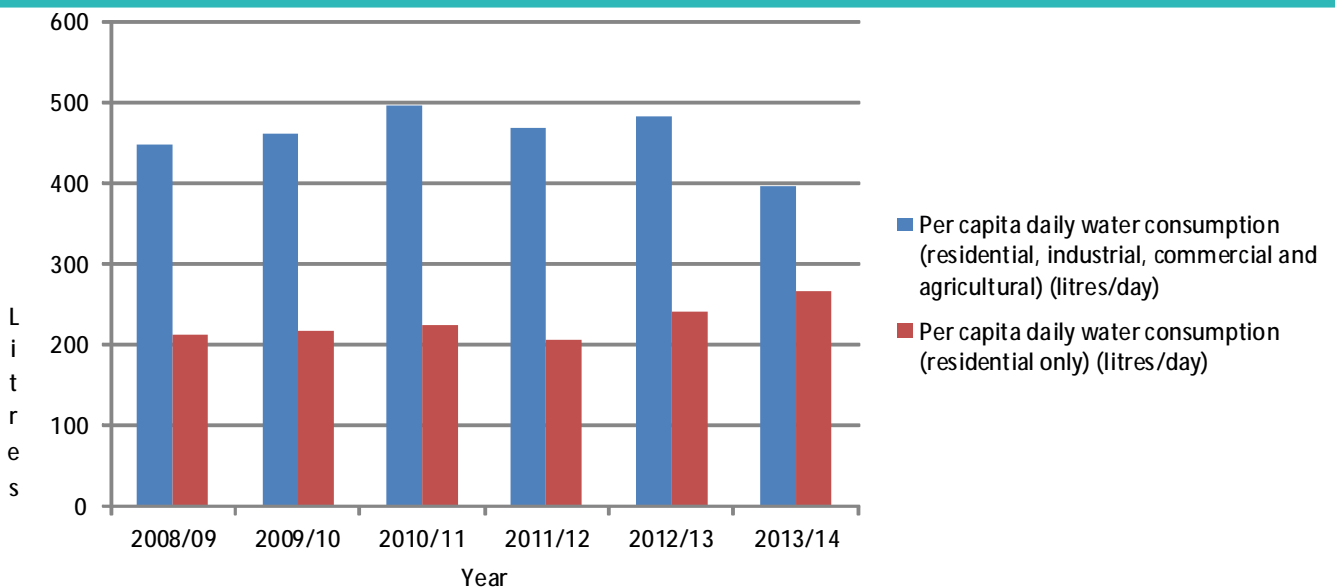


Water

- Per capita daily water consumption was 265 litres per day (residential only).
- Per capita daily water consumption was 396 litres per day (residential, industrial, commercial and agricultural).
- Total wastewater treated was 20,653 mega litres.
- Recycled water used was 2,300 mega litres.



Per Capita Daily Water Consumption

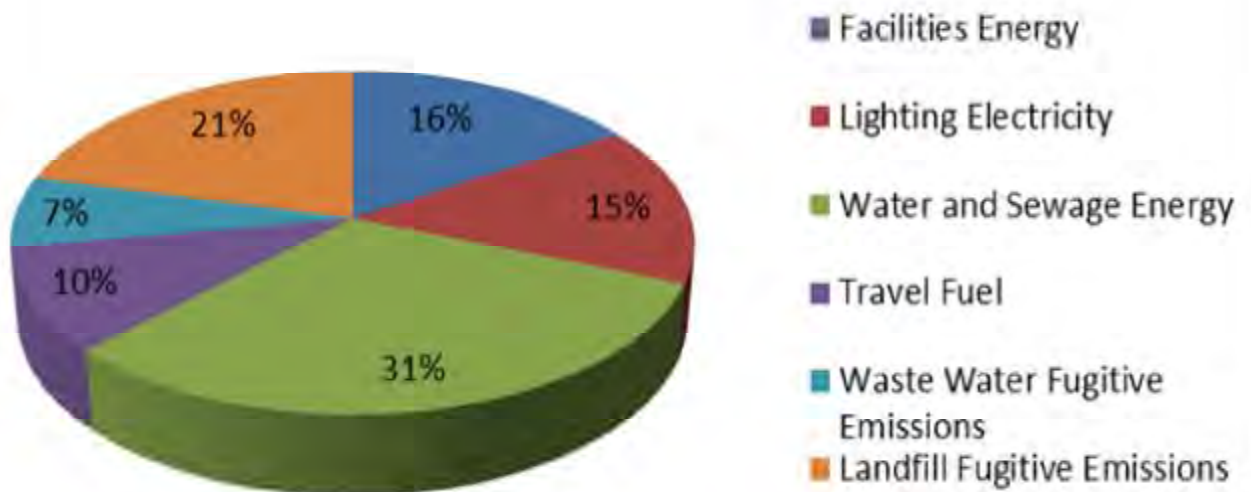


Energy and Emissions

- Council activities emitted an overall total of 46,644 tonnes CO₂e.
- Council used 33,425,684 kilowatt hours of electricity (equivalent to 3,663 average Australian homes).
- Council's electricity use emitted a total of 28,746 tonnes CO₂e.
- Council vehicles emitted a total of 4,569 tonnes CO₂e.
- Landfill gas emissions were 9,807 tonnes CO₂e.



Greenhouse Emissions by Activity (%)



Conserving biodiversity

- 3,131 trees were planted by Council.
- 10,459 trees donated to the community,
- Council has 27,601 trees under management.
- 135 feral pigs destroyed in the Cairns Region.
- Council potted 14,076 seedlings.



Mangroves

Governance & Economic Management

- 496 Planning Applications received.
- 2,335 Building Approvals issued.
- Council staff turnover rate 5.8%.
- Council has 1,234 staff.



Edge Hill Arial View



School Visits

Community Wellbeing

- 67 square kilometres of Council area is accessible as parks and land for community use.
- There are 490 kilometres of shared cycle/pedestrian pathway and 10km of dedicated cycleway in the Council area.
- Total Cyclist Count for Super Tuesday was 1,170.

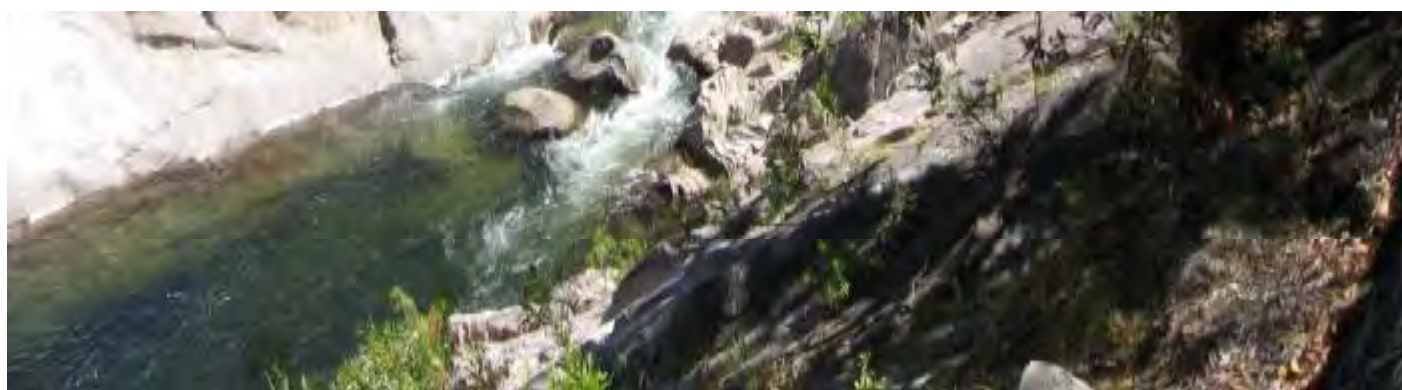


Data - Improving Resource Efficiency

Indicator	2009/10	2010/11	2011/12	2012/13	2013/14 Cairns Data
Cairns and Douglas Data					
WASTE —Some previous financial years figures have been amended as a result of an extensive data cleansing exercise on all waste datasets which should result in more accurate reporting.					
Domestic Kerbside Waste collected (tonnes)	49,412	50,103	50,458	50,969	47,515
General domestic waste taken to Transfer Stations (tonnes)	9,646	10,380	9,608	10,623	9,580
Total domestic and kerbside waste	66,328	62,147	62,634	64,298	62,264
Construction waste to landfill (tonnes)	272	302	542	740	793
Commercial waste to Transfer Stations (tonnes)	3,847	4,307	3,828	1,760	n/a
Commercial waste to landfill (tonnes)	2,363	2,041	2,197	1,048	n/a
Total waste to Bedminster (tonnes)	45,855	63,852	62,634	4,325	57,535
Total residential waste directly to landfill (tonnes)**	20,473	18,295	0	59,973	4,729
Soil Conditioner exported from Bedminster (tonnes)	13,946	9,226	9,315	467	8,227
Non-compostable waste exported from Bedminster to landfill (tonnes)	30,333	31,033	43,563	3,591	33,432
Green waste processed (tonnes)	16,698	21,786	22,110	20,587	22,551
RECYCLING					
Total recyclables collected (tonnes)	11,321	11,681	11,644	12,209	12,256
Total recyclables sent for recycling (tonnes)	6,544	6,307	6,045	6,453	7,234
Proportion of collected recyclables sent for recycling	58%	54%	52%	53%	57%
Domestic kerbside recycling collected (tonnes)	11,089	11,357	11,320	11,852	12,047
Commercial waste recycled (tonnes)	34	113	99	81	203
Metal recycled (tonnes)	2,396	4,893	3,766	2,763	3,574
Tyres recycled (tonnes)	12,119	9,338	5,527	4,560	3,389
Oil sent for recycling (litres)	73,920	78,730	61,000	65,330	71,260
Batteries sent for recycling (tonnes)	89	72	82	72	113

Data - Improving Resource Efficiency

Indicator	2009/10	2010/11	2011/12	2012/13	2013/14 Cairns Data
WATER & WASTEWATER					
Per capita daily water consumption (residential, industrial, commercial and agricultural) (litres/day) [#]	461	497	469	483	396
Per capita daily water consumption (residential only) (litres/day) [#]	217	223	206	241	265
Total wastewater treated (megalitres)	Not available	24,849	21,413	20,445	20,653
Total wastewater discharged (not reused) (megalitres)	Not available	23,667	21,162	18,214	19,450
Recycled Water Used (megalitres)	1,042	1,042	1,320	1,698	2,300
WATER QUALITY					
Compliance with EPA sewerage Licensing requirements (%)	98%	99%	99%	99%	98.5%
Gross Pollutant Traps (GPTs) Cairns region waterways	Not available	Not available	178	187	181
Number of Floating Litter Traps (FLTs)	Not available	Not available	2	2	2
Volume of rubbish m ³ in Floating Litter Traps (FLTs)	Not available	Not available	3.5	5	23
Volume of sediment m ³ and rubbish in Gross Pollutant Traps (GPTs)	Not available	Not available	180	170	193



Behana Creek, Cairns Regional Council

Data - Improving Resource Efficiency

Indicator	2009/10	2010/11	2011/12	2012/13	2013/14 Cairns Data
ENERGY & EMISSIONS —Some previous financial years figures have been amended as a result of a review and upgrade of the Energy Emissions System to more accurately report data.					
Fuel use by Council vehicles – diesel (litres)	1,216,921	1,336,811	1,366,865	1,465,030	1,547,204
Fuel use by Council vehicles – Unleaded (litres)	331,065	344,980	318,065	242,149	184,215
Greenhouse gas emissions from fuel use (tonnes CO ² e*)	4,070	4,422	4,413	4,643	4,569
Electricity use by street lighting (kWh)	7,323,386	7,242,776	7,985,465	8,482,604	8,206,333
Electricity use by water and sewerage networks (kWh)	21,085,947	24,252,727	22,318,110	21,044,484	16,996,339
Electricity use by Councils facilities (kWh)	10,205,113	9,655,931	9,759,963	9,774,832	8,223,012
Electricity use by Council offices (kWh)	Not collected	2,193,026	2,104,739	2,216,183	1,709,856
Electricity use by Council pools (kWh)	Not collected	1,534,916	1,679,630	1,698,273	1,341,666
Electricity use by Council libraries (kWh)	Not collected	1,051,542	1,005,507	940,150	748,667
Electricity use by Council depots (kWh)	Not collected	1,037,113	918,778	926,328	814,275
Electricity use by community centres (kWh)	Not collected	289,716	441,489	473,132	426,762
Total electricity use by Council (kWh)	38,614,446	41,817,461	40,063,538	39,301,920	33,425,684
Total energy cost to Council (\$)	Not collected	10,431,225	11,019,550	11,126,817	10,470,172
Greenhouse gas emissions from electricity use (tonnes CO ² e)*	35,310	40,256	36,152	34,248	28,746
Fugitive greenhouse gas emissions from waste water treatment (tonnes CO ₂ e)	Not collected	2,994	3,324	3,305	3,117
Fugitive greenhouse gas emissions from landfill (tonnes CO ₂ e)	Not collected	41,731	27,745	10,679	9,807
Total greenhouse gas emissions from Council activities (tonnes CO ₂ e)	Not collected	89,403	71,633	52,874	46,644

< includes– offices, libraries, depots, unspecified, museum/arts, parks, water depots, community centres, amenities, waste facilities

Data - Conserving Biodiversity

Indicator	2009/10	2010/11	2011/12	2012/13	2013/14 Cairns Data
ENVIRONMENTAL RESTORATION					
Number of trees planted by Council	44,243	43,680	25,263	24,470	3,131
Number of trees donated to the community	13,687	11,108	11,473	11,857	10,459
Number of trees under management	123, 316	167, 559	192,822	72,970	27,601
Days spent on watering/maintenance/site preparation	310	1,442	575	456	178
Number of seedlings potted	78,246	63489	42,266	28,418	14,076
Number of hours spent on seed collection	225	226	210	175	96
Percent of annual Council budget spent on natural areas management	0.89%	0.96%	0.80%	0.48%	0.5%
Number of hours spent on revegetating riparian areas	Not collected	Not collected	5,716	3,815	1,490
PEST MANAGEMENT					
Number feral pigs destroyed	671	849	652	633	135
High Priority Weeds (days)	164	1,128	578	606	240
MOSQUITO CONTROL					
Number of Mosquito Complaints Received	227	588	210	345	511
Amount of pesticide sprayed for mosquito control (Reslin and Pyrecide) (litres)	431	531	452	1,046	1,552



Licuala ramsayi, Cairns Regional Council

Data - Community, Governance and Economy

Indicator	2009/10	2010/11	2011/12	2012/13	2013/14 Cairns Data
Cairns and Douglas Data					
OPEN SPACE					
Council land area accessible as parks and lands for community (square kilometres)	Not available	96.1	96.3	96.4	67
COMMUNITY PROGRAMS					
Kilometres of shared cycle/ pedestrian pathways within Council region	423	475 ^{##}	476	481.4	490
Kilometres of dedicated bikeways within Council region	0	6	6	6	10
Total cyclist count for Super Tuesday bike count	Not available	1,139	1,267	1,435	1,170
ECONOMIC SUSTAINABILITY					
Building Applications approved	3,557	2,653	2,572	2,463	2,335
Planning Applications received	521	376	384	363	496
STAFF WELLBEING					
Staff turnover rate (%)	12.22	10.34	15.52	11.5%	5.8%
Average days of sick leave taken per Council staff member	7	7.7	7	11	11

* Using NGER methodology for GHG emissions calculations (*National Greenhouse and Energy Reporting (NGER) Act 2007*).

Data is for the Cairns City region (excluding Division 10, previously Douglas Shire)

** Due to Bedminster being out of operation.

This data has been altered from the previous year due to introduction of a more accurate data set.

++ Due to a restructure of the Creative Cairns branch, some re-calculations have been made to allow a comparison with the previous years data.



Sustainability Performance Summary

Improving Resource Efficiency - Waste Composting Facility

Council provides a kerbside waste collection to 76,000 households across the Cairns Region. All kerbside and domestic waste is taken to the Portsmith composting facility called the Advanced Resource Recovery Facility (Bedminster). This facility is operated by SITA Australia. Waste is processed through Bedminster in one of three on site digesters and then placed onto the aeration floor in wind rows to mature into soil conditioner suitable for broad-acre farm use. Residual waste (i.e. non organic waste) that cannot be composted is transported to landfill.

In 2013/14 there was 57,535 tonnes of waste processed through Bedminster and of that, 8,227 tonnes was used as compost on local farms. The figures for the waste to Bedminster and the amount of compost produced are high due to the composting facility being operational for the majority of the reporting period from August 2013 to June 2014.

Materials Recovery Facility (MRF)

As part of Council's kerbside recycling service 12,256 tonnes of recycling was collected in 2013/14 of which 7,234 tonnes were sent for recycling equating to 57% of the total recyclables collected. There was a 12% increase in recyclables sent recycling demonstrating the effectiveness of the Council recycling education campaign.

Water and Wastewater

Daily per capita residential water consumption was 265L/day which was up 10% from the previous year. This may be due to a good to average wet season where water restrictions were not required, and there was less focus on the communication of water conservation measures.

Recycled water use increased by 35% due to improved utilisation of the existing system to supply additional sports fields and improved substitution of potable water in the wastewater treatment processes.

Total wastewater treated was 20,653ML and total wastewater discharged was 19,553ML. 2300ML of Recycled Water was produced and used either on site to aid in the wastewater treatment process or off site for the irrigation of golf courses and sports fields.

Destratification System Replacement project

Copperlode Falls Dam has historically experienced thermal and chemical stratification on a seasonal basis causing limited circulation and poor water quality. Stratification refers to the formation of layers in a water body with particular temperature and water quality characteristics. Stratification events were the reason for the installation of an aeration de-stratification system in 1978.

The Copperlode Falls Dam Destratification System Replacement project has been developed to allow replacement of the existing equipment with a more reliable system to protect against the potential release of poor quality raw water to the downstream treatment process and the local environment. Also the replacement of the current air injection system with the latest destratification technology will have a significant reduction in ongoing operating costs.

Stormwater Management

Council has 183 gross pollutant traps (GPT's) and 2 floating pollutant traps (FPT's). The GPT's and FPT collect rubbish and sediment to protect and restore waterways in the region. In the 2013/14 reporting period 216m³ of rubbish and sediment was collected.

Sustainability Performance Summary

Improving Resource Efficiency - Energy and Emissions

In 2013/14 the total emissions from Cairns Regional Council activities (excluding Douglas Shire) was 46,644 tonnes of CO₂e. There was an 11% reduction compared to the previous year due to changes in Cairns Regional Council emissions.

What activities are the greatest emissions contributors?

Energy consumption for water and sewage processing has the highest emissions (31%) out of all of the activity groups followed by landfill emissions (21%), facilities (16%), lighting (15%), travel (10%) and wastewater (fugitive emissions) (7%).

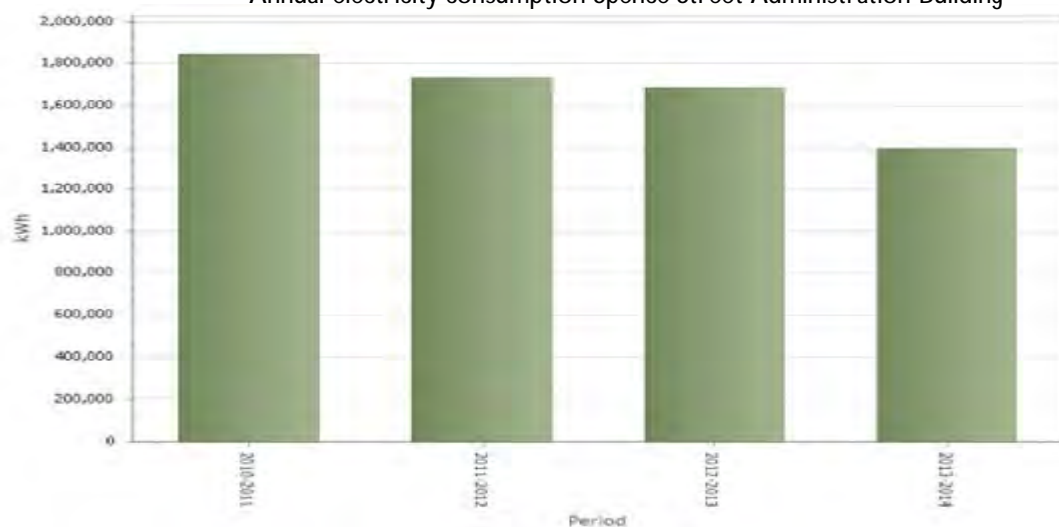
What is the cost of Council's energy use?

Council's total energy cost for 2013/14 was \$10,470,172. This figure includes electricity, fleet fuel, generator fuel and gas. Electricity consumption accounts for the bulk of this cost. In terms of annual operational energy costs per activity, water and sewage treatment contributes the greatest amount to this total energy cost at around \$3.3 million per year, followed by lighting, travel and facilities.

Spence St Administration Building

Council's offices on Spence Street are the fourth biggest electricity consuming site in Council and have been a target for recent energy efficiency upgrades. In June 2013 a lighting upgrade of the building was completed resulting in a 17% reduction in energy use, saving over \$50,000 a year. This upgrade also resulted in improved light quality and reduced maintenance. Previous year's upgrades have achieved a 7% reduction giving a total 24% reduction since 2010/2011. The downward trend can be clearly seen below in the graph.

Annual electricity consumption Spence Street Administration Building



Energy and emissions management practices deliver savings

Council's management practices include an annual review of the electricity use and tariff used by all of Council's 500+ accounts. This ensures Council is always on the correct electricity tariffs. With rising electricity prices and constantly changing tariffs this is an important process to reduce Council's bill. Last year Council saved over \$150,000 and in the next year it is estimated the savings will further increase from electricity tariff reviews.

The Portsmouth landfill, which is now closed, actively captures and destroys landfill gas. The gas is predominantly comprised of methane which is flared, ensuring the gas is not released to the environment. This activity has achieved Australian Carbon Credit Units returning a revenue to Council of \$286,000.

Sustainability Performance Summary

Conserving Biodiversity

The number of trees planted and propagated each year fluctuates according to phases of revegetation planting and maintenance. During some years, Council staff concentrate on weed management and tree maintenance rather than propagating and planting new trees.

The number of trees donated to the community was 10,459 and the number of trees planted by Council was 3,131. The number of seedlings potted was 14,076 and hours spent on seed collection was 96.

The number of trees under Council management is 2,760, many trees have grown to a certain stage where they do not require ongoing maintenance. There was 1,490 hours spent on revegetating riparian areas and 178 days spent on watering and maintenance. The number of feral pigs destroyed was 135 and there was 240 days spent on 'High Priority weeds days'.

Mosquito Control

The number of mosquito complaints in the 2013/14 year was 511 which was significantly higher than last year. To manage mosquitoes in the region Council provides community information sessions on mosquitos control and dengue mosquitos and sprays pesticide. In the 2013/14 reporting period 1,552L of pesticide was sprayed to control the mosquitos.



Cattana Wetlands

Sustainability Performance Summary

Enhancing community health and wellbeing

The amount of land area available to the community as parks and lands is 67 square kilometres. This is less than previous years due to the de-amalgamation with the Douglas Shire.

The amount of shared cycle/pedestrian pathways increased to 490 km. The Super Tuesday Bike Count, which started in Cairns in 2010, recorded a total of 1,170 cyclists. This was reduced from previous years due to wet conditions and subsequent reduced check points. Council has an Active Transport Officer who commenced in 2012 and works towards encouraging walking and cycling as a healthy transport option in the region. Free community bike rides are co-ordinated each month and have become very popular. Council is also actively working with schools to encourage the bike bus and bike infrastructure.

Delivering sound governance and economic management

The number of planning applications received was 496 and the number of building applications was 2335. These figures have not shown growth for the past few years as a result of the economic downturn which has affected the building industry in the region. In the 2013/14 reporting period figures for the number of planning applications have show stronger growth and building applications remain consistent.

The percentage turnover for Council staff was 5.8% The average days of sick leave taken per Council employee was unchanged at 11 in 2013/14.

Trinity State School Bike Bus



Our Lady of Help Christian Schools Bike Bus

New Education Centre at the MRF

As part of Council's Waste Management Strategy 2010-2015, it was identified that the existing education room at the Materials Recovery Facility (MRF) was not adequate and in need of an upgrade. Works on the new 'Re-Discovery Centre' began in the 2013/14 financial year, with development and implementation of interactive resources continuing as part of the 3 year waste and recycling communication and education campaign.

The Re-Discovery Centre will provide visual displays of the recycling processes as well as interactive games which will assist in educating students and our residents in ways they can better manage their waste, through waste avoidance and re-use as well as reinforcing our key education messages. Students and the community will also have the opportunity to view the recycling operations of the plant, outlining the sorting processes and the recyclable products.

The Re-Discovery Centre can accommodate classes up to 30 students, from prep all the way up to year 12, from schools across the Cairns region as well as tertiary students and residents from the Cairns community. Council's Strategic Programs Officer will be facilitating engaging sessions in this great new interactive space.





TNQ20 Awards

Council launched the inaugural TNQ20 Business Excellence Awards and the TNQ20 Tropical Innovation Awards. Awards range across a number of categories and showcase the exceptional business and innovators in our region.

The TNQ20 Awards aim to:

- promote a climate of pride in the business community;
- encourage innovation, professionalism and creativity;
- recognise and reward outstanding levels of business excellence and innovation;
- provide a benchmark of best practice;
- be a platform for business promotion and networking; and
- provide recognition for innovation from the tropics for the tropics.



Tropical Innovation of the Year—Clonal Solutions



Business of the Year—Mungalli Creek Dairy

CAIRNS REGION PLANNING SCHEME

One region, many communities

DRAFT

Draft Cairns Region Planning Scheme

Council is planning for the future with a new draft Cairns Region Planning Scheme being prepared this year. The Scheme will respond to growth and development across the Cairns Region over the next 20 years. The draft Cairns Region Planning Scheme will shape how the region grows and ensure the right development occurs in the right place.

It is important that good planning processes are put in place to achieve a balance between continued growth and maintaining the qualities and characteristics that make the Cairns region special. The draft Cairns Region Planning Scheme has been developed over the last three years. A number of studies were undertaken to inform the preparation of the draft. Additionally, community and stakeholder input has guided Council in creating a balanced plan for the region's future.

The draft scheme eases regulation, streamlines the process and provides a framework with a focus on outcomes, not process. The mapping contained within the draft is the most up to date and the best available. The draft scheme seeks to protect people, property and the environment and to allow natural processes to continue to occur. Natural values that underpin State and Federal legislation have been integrated to provide a holistic approach to protecting and maintaining areas of environmental significance.



Related stories - Conserving biodiversity



Conserving Biodiversity

Volunteers are a valued and integral part of the Cairns Regional Council Cairns Botanic Gardens and play an integral role in promoting and raising awareness of this unique environment through a number of programs and activities.

Due to interest in horticultural activities the Down 'n' Dirties program was formed in 2007. This enthusiastic group of volunteers meet each Wednesday from 9am until 12 noon and are involved with general gardening duties such as weeding, detailing, mulching and planting supporting the horticultural staff.

Another group of volunteers that work in the field are the Jabirus who meet each Tuesday at Cattana Wetlands from 9am – 12noon to assist with general maintenance and promotional activities.

This year volunteers assisted with the development of a children's nature activities program named 'Little Taccas' after the plant *Tacca integrifolia* and the term Australians called their children. This program was created to encourage children to learn about and experience the natural world whilst also forming friendships, as well as giving them opportunity to develop and grow through the support of caring volunteers and supportive parents in a safe, yet active, natural environment.





Southern Cycleway

The newest instalment of Cairns Regional Council's Cycling and Walking Strategy is the Southern Cycleway consisting of 5km of on and off road cycleway extending from the CBD along Spence Street, and then the old railway corridor from Fearnley Street to Mulgrave Road at Woree.

The route includes two bridges, spanning Moody Creek and Chinamans Creek (shown in the photos). The \$2.8 million project is jointly funded by Cairns Regional Council and the Queensland Government through its Active Towns program. The Southern Cycleway project delivers on Councils ultimate aim to provide a bicycle network from Gordonvale to Palm Cove.



Related stories - *Enhancing community wellbeing*

Peace Week

Cairns Peace Festival was held on the 20-22 September 2013. There were a variety of community-driven events over the weekend, including Mindfulness Meditation, Poetry & Meditation Music at Peace Park, Tropical Wave Festival, Friendship Soccer Games and Palm Cove Body Mind Harmony day. There was approximately 10,000, at the peace celebrations.

Peace Week has been an annual festival to commemorate the International Decade for the Culture of Peace 2000-2010 spearheaded by the United Nations Education and Science Cultural Organisation (UNESCO).

It is a unique festival supported by Local Government, and offers opportunities for people of all cultural and social backgrounds to come together to help create a culture of peace. Council facilitates Peace Week to connect people and create a more cohesive community and build better relationships between community and Council.

Peace Week encouraged people to go beyond their own communities and extend a hand to those whom they may not otherwise have had the opportunity to meet.



Palm Cove Body, Mind and Harmony Day



Tropical Wave Festival



Related stories - Enhancing community wellbeing



Thumbs up for Sustainable Living

In a region where our community is as diverse as the natural environment, Council has created Green Thumb, a sustainable living program that combines an interactive website, commercial radio partnership and local business sponsorship to inform and engage the local community on six urban sustainability topics, specifically:



More themes will be introduced as the program evolves with resources developed to support the local community to live comfortably with less. To find out more visit www.cairns.qld.gov.au/greenthumb

Paper Cuts Go Deep

Energy efficiency, waste management and paper usage have all been improved through the Green Smart program with campaigns such as 'switch off before you knock off' to promote an energy saving culture within the organisation and 'think before you print' to reduce paper usage. Between 2009 and 2014 Council has cut its A4 paper consumption by 52% through a combination of staff education, e devices and double sided printing. Since 2009 Council has also used 100% recycled paper in all of its printers, which requires 50% less energy, 90% less water.

Sustainable Living Expo 2014

Council again delivered a very successful Sustainable Living Expo with over 5,000 people in attendance. There was a great range of local businesses showcasing at the event. There was also a range of non-for-profit groups, government agencies and school groups. This event is a celebration of all things Sustainable and was the launch of the Council 'Cool Homes—Smart Design for the Tropics' Guide.





Cool Homes—Sustainable Built Environment

Council has a commitment to improving the sustainability of its own buildings and addressing its energy and water efficiency, reducing its environmental impacts and also providing healthier indoor environments and improved community spaces. Sustainable buildings reduce impacts on the environment by using less resources, energy and water. They are also more affordable to run.

Council is working to support the community and housing industry to design and build sustainable homes in Cairns through the *Cool Homes - Smart Design for the Tropics* guide.

Living in a home that is designed for the climate is important in the tropics. If homes are not designed for the local environment they can be hot and uncomfortable and expensive to keep cool, particularly over the long hot summer.

Cool Homes - Smart design for the tropics is a user friendly guide that has been prepared to help people work with their architect, designer or builder to incorporate tropical design features into their home from the contemporary block home to the popular "Queenslander"

Accompanying the guide is a Plan Analysis Tool which can be used for site analysis, to analyse a plan or help identify problem areas in an existing home.

The guide outlines low or no cost options that can be easily incorporated into the home as well as providing information and cost-benefits of items that that require additional investment such as solar power, hot water systems and lighting which can save the home owner money over time.

To promote the launch of the guide, two interactive sustainable design workshops were held, one for the community and one for the housing industry. The Cool Homes Guide and Plan Analysis Tool can be downloaded from www.cairns.qld.gov.au/buildings



For further information regarding Council's programs and activities please visit Council's website <http://www.cairns.qld.gov.au>

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Phaleria clerodendron, photographer Bob Jago.