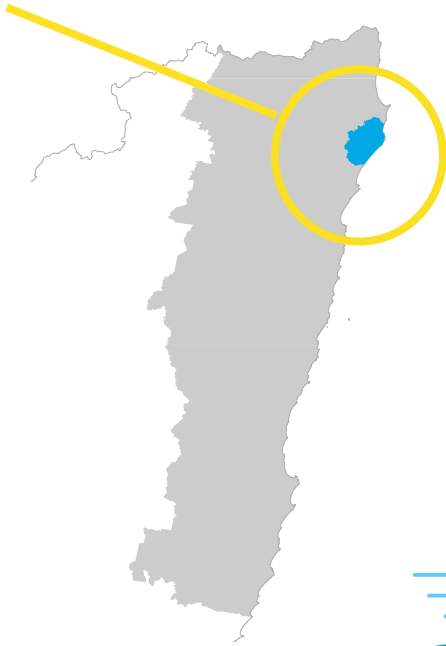


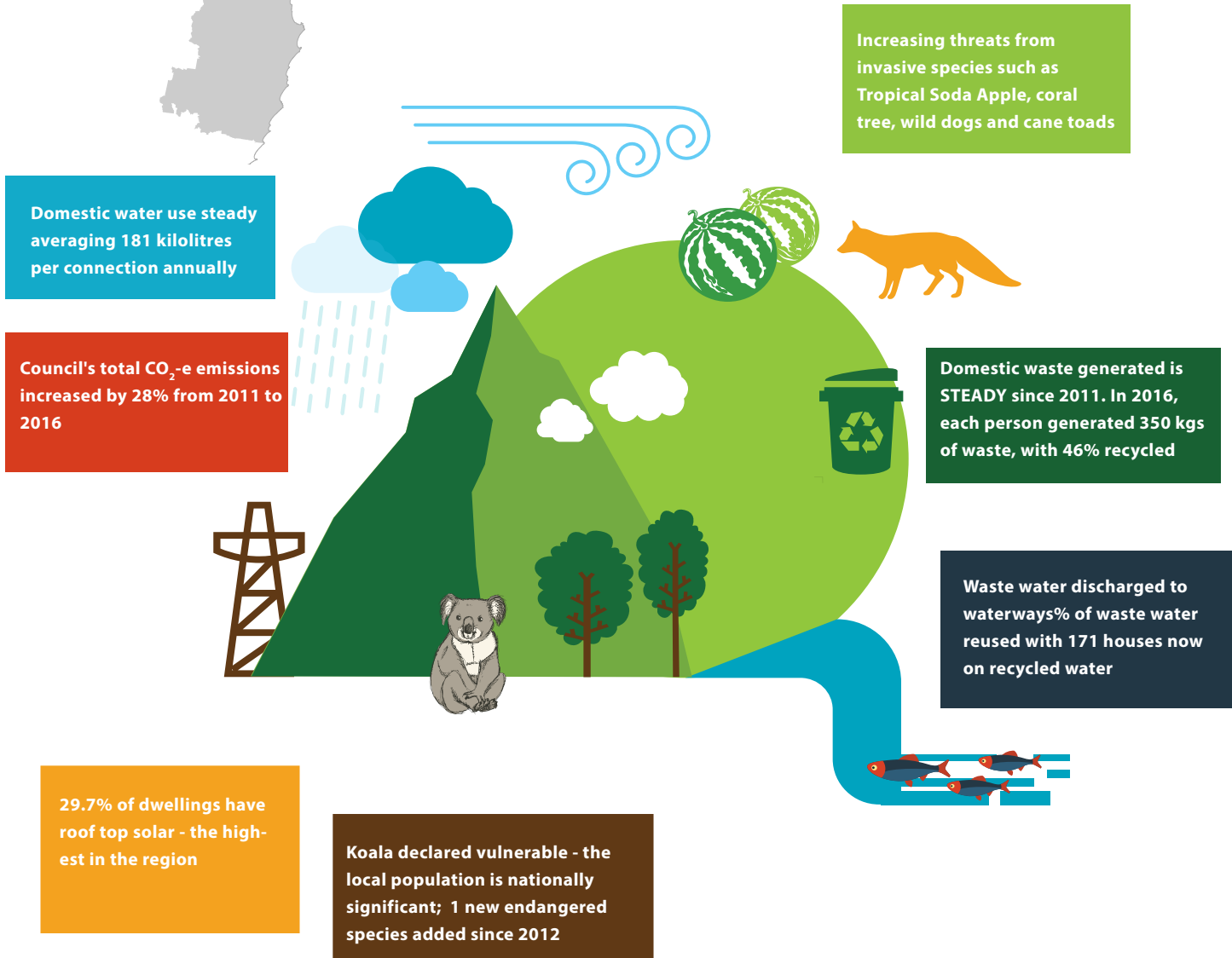
BALLINA LGA



INTRODUCTION

This summary for the Ballina Local Government Area (LGA) forms part of the Regional State of the Environment report for 2016. It was compiled on behalf of the twelve Councils and three County Councils of the North Coast Region of NSW.

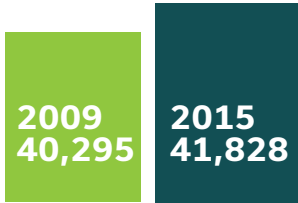
Reporting on major environmental indicators from 2011 to 2016, it identifies trends where relevant. Data was provided by councils, state and federal government, universities, energy suppliers and community groups.



PEOPLE & THE ENVIRONMENT



POPULATION



POPULATION has increased by 3.8%

MEDIAN AGE was 45 years in 2011

CLIMATE CHARACTERISTICS

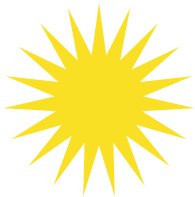


RAINFALL

2013 - HIGH
2014 - VERY LOW
2015 - AVERAGE
2016 - 5 June wettest day on record for NSW

FLOODING

2013 January - MAJOR
2013 February - MODERATE
2015 May - MINOR
2016 June - MINOR



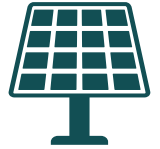
2013 was the **HOTTEST YEAR** on record

COUNCIL EMISSIONS

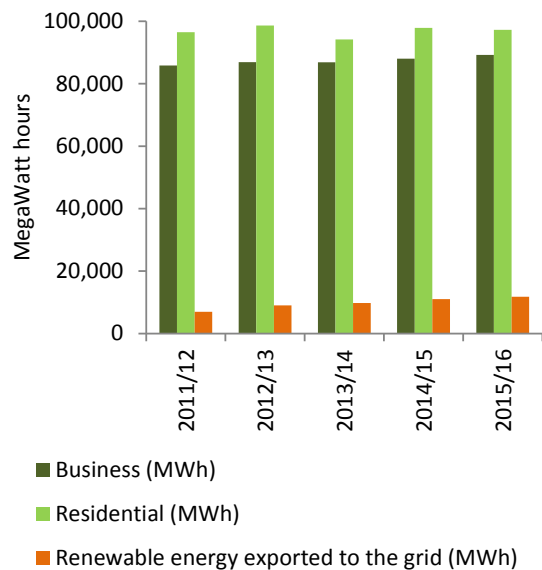
COUNCIL EMISSIONS INCREASING SINCE 2011 by 32% for fuel and 9% for electricity, but streetlighting emissions reduced by 28%
465 TONNES CO₂-e ABATED ANNUALLY

GREENHOUSE GASES & RENEWABLE ENERGY

29.7% of dwellings have roof top solar - the highest in the region



Electricity use (source: Essential Energy)

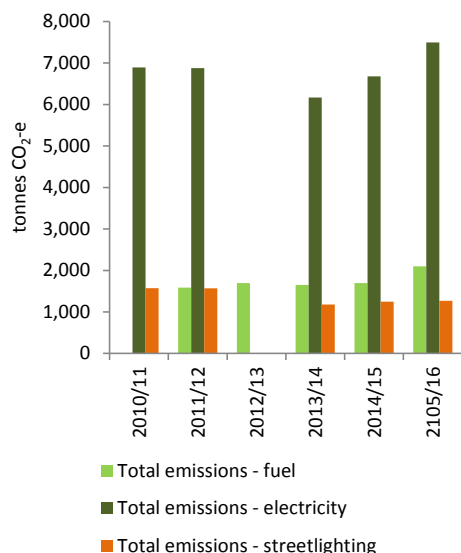


RENEWABLE ENERGY

fed back to the grid has increased by 65% since 2012 with 282 kWh exported per person annually in 2016



2,300 hrs of residential electricity use per person annually
MEGAWATT STABLE from 2012 to 2016



WATER USE

219 KILOLITRES

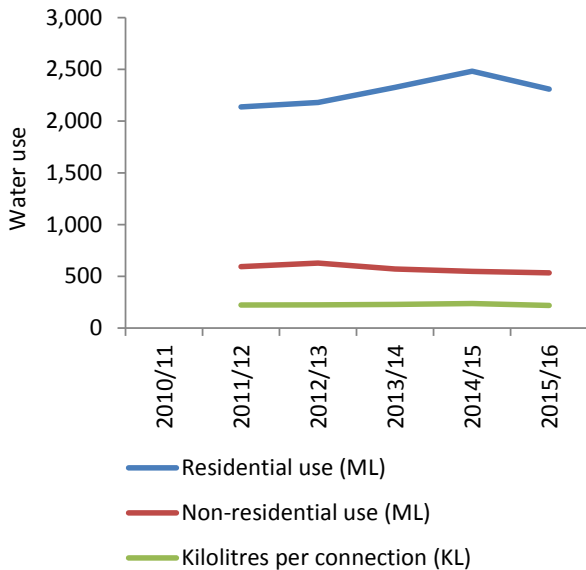
water use per connection annually - steady from 2011-2015



Residential water use

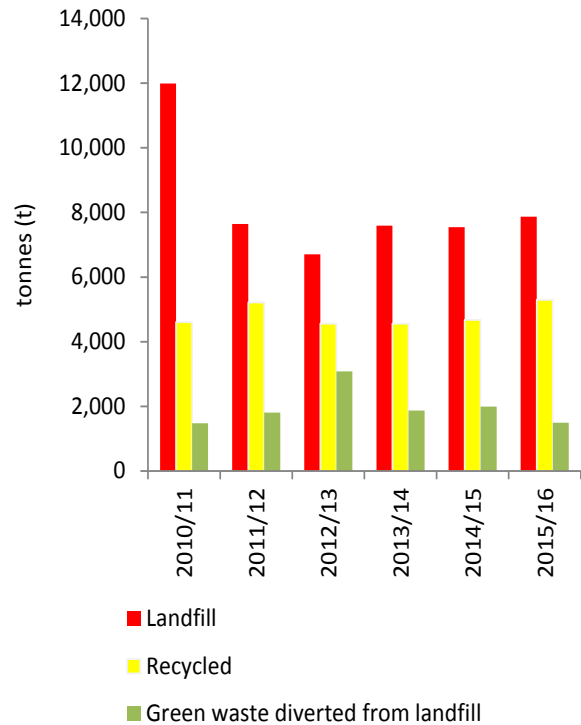
181 KILOLITRES

per connection annually, just above the NSW regional average of 172kL



WASTE

Overall DOMESTIC WASTE generated is steady with a **34% decrease in waste to landfill**, **16% increase in waste recycled**, and a **drop in green waste** sent for composting since 2011



WASTE TO LANDFILL DECREASED BY 34%

350 kgs KILOGRAMS

domestic waste generated by each person in 2016, with **46% recycled**, below the NSW target of 66% diversion from landfill

Green waste **COMPOSTED TO A VERY HIGH QUALITY**



BIODIVERSITY & VEGETATION

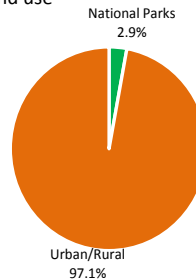
2

RESILIENT LANDSCAPES

Ballina Shire Council manages its remaining **NATIVE VEGETATION** through a variety of **REHABILITATION PROJECTS**

5 CONSERVATION AGREEMENTS PROTECT 44 HECTARES OF LAND

Land use



HABITAT REGENERATION

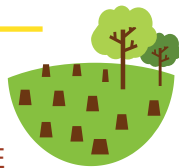
SINCE 2012

+14,000 trees planted

Over **550 hectares** (ha) of land rehabilitated
8 ha koala habitat re-established at Bagotville
36 ha wetland restored at East Ballina

OVER 7,000 HRS VOLUNTEER INPUT from Landcare, community groups and non-government organisations

VEGETATION LOSS



7 APPROVALS FOR PRIVATE NATIVE FORESTRY WERE GRANTED IN THE LGA FROM 2007 TO 2015 COVERING 88 HECTARES

Approvals are mainly in the Bagotville, Meerschaum Vale and Coolgardie areas

INVASIVE SPECIES



Key weed threats are **TROPICAL SODA APPLE, CORAL TREE & HYMANACHNE** with ongoing issues with camphor laurel, lantana & morning glory

FAR NORTH COAST WEEDS (FNCW) conduct weed control within the LGA

APPROX. 20 KILOMETRES of weed control completed annually on rivers, roadsides and railways by **COUNCIL**

Vertebrate pests - **CANE TOADS, DEER, WILD DOGS, FERAL CATS, FOXES, PIGS AND INDIAN MYNAS** are pests of concern in the LGA

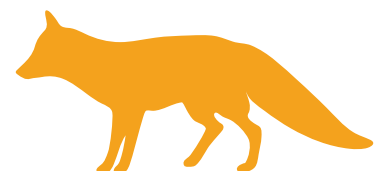
NATIVE FLORA & FAUNA



2 NEW KEY THREATENING PROCESSES SINCE 2012:
Myrtle rust pathogen;
Noisy miners excluding native species from habitat

1 NEW ENDANGERED SPECIES SINCE 2012:
Black-tailed antechinus

1 NATIONALLY SIGNIFICANT POPULATION OF KOALAS



LAND USE & SOILS

3

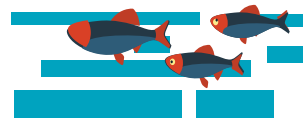
SOIL TYPES found in the Ballina Shire reflect their origins as well as later geomorphological processes. Soils with volcanic origins occur on the Alstonville Plateau and the escarpment, and wetter soils on the floodplain and behind sand-dunes.



Sheet erosion and riverbank erosion are the biggest factors for soil health on the Plateau and on the floodplain. Erosion and drainage of floodplain soils cause significant river health issues (see 'Water – River Health' for more information).

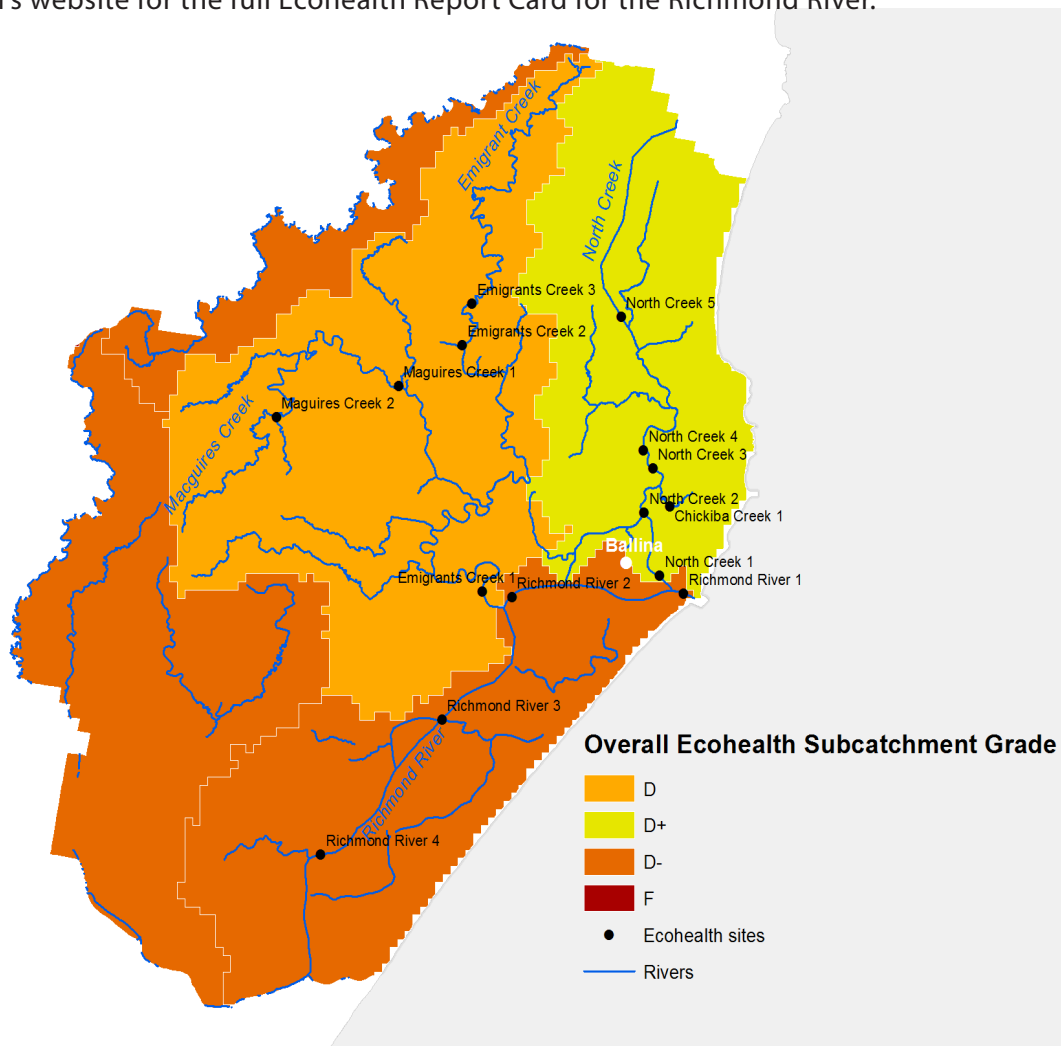
Maintaining organic carbon is an issue for all modern soil management.

4 WATER



RIVER HEALTH

The Ecohealth water quality monitoring program was conducted during 2014 and reported in 2015. River health varies greatly from a B- in the upper catchments to an F (very poor) in the mid catchment. Water quality is poor to very poor in Ballina Shire catchments due to erosion, a lack of riparian vegetation, acid sulfate soils and poorly managed floodplain drainage for agriculture. See Council's website for the full Ecohealth Report Card for the Richmond River.



4

WATER CONT.

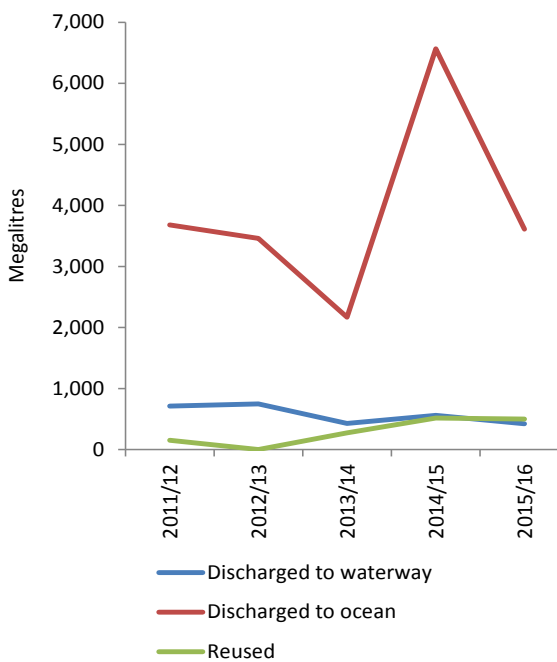
WASTE WATER

Waste water discharge to waterways has dropped by 40% since 2012



In 2016 11% OF WASTE WATER WAS REUSED

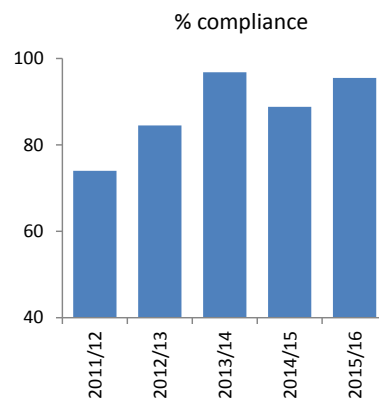
Biosolids are composted



OSSM COMPLIANCE

On-site sewage management systems compliance has been above 84% COMPLIANCE for inspected systems since 2012. In 2016, only 4% of systems inspected were failing

Council now has 2 inspectors inspecting and reviewing OSSM systems



RIVER & COASTAL MANAGEMENT

Ballina Shire has 3 Coastal Zone Management Plans (CZMP) - the Richmond River Estuary CZMP, Shaws Bay CZMP and the CZMP for the Ballina Coastline.

Each manage a different water body and it's associated features and are in various stages of implementation



GROUNDWATER STATUS

6 groundwater sources, all with commenced water sharing plans which manage both surface and ground water sources for allocations and environmental flows

Alstonville Basalt source remains **OVERALLOCATED** in some of its zones so no further allocations are available for sections of the groundwater source

567

identified **GROUNDWATER-DEPENDENT ECOSYSTEMS (GDE)** in the LGA - comprising 44% of all GDEs in the reporting region