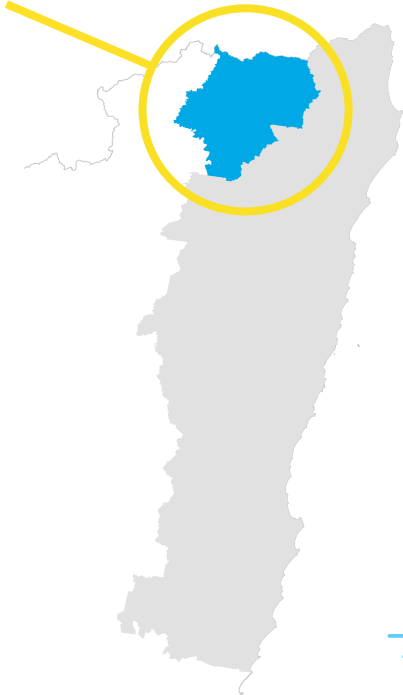




STATE OF THE ENVIRONMENT 2016 FINAL SUMMARY

KYOGLÉ LGA



INTRODUCTION

This summary for the Kyogle 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 Rous County Council 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 Council, state and federal government, universities, energy suppliers and community groups.

Residential water use is steady averaging 144 kilolitres per connection annually the lowest in the region

Council's electricity emissions decreased by 23% since 2012 due to solar installations

23% of dwellings have roof top solar. Domestic electricity use is 3,155 kilowatt hours annually, highest in the region

Four new endangered species since 2012; koala vulnerable

Increasing threats from invasive species such as tropical soda apple, wild dogs, foxes and Indian mynas

Domestic waste has decreased by 33% since 2012. In 2016, each person generated 444 kgs of waste, with 47% recycled

Waste water discharged to waterways varies with more waste water reused in dry years. In 2016, 365 megalitres of waste water was discharged to waterways

River health is fair to poor due to poor riparian condition and bank stability, and high nutrient levels



PEOPLE & THE ENVIRONMENT

1

POPULATION



POPULATION
is steady

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 - MAJOR
2015 January - MINOR
2015 May - MINOR to MODERATE
2016 June - MODERATE
2016 June - MINOR



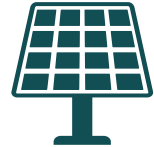
2013 was Australia's
HOTTEST YEAR
on record

EMISSIONS ABATEMENT

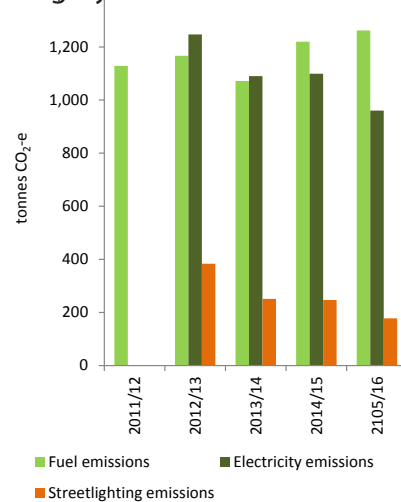
Six new roof-top solar installations in 2015/16 are assisting to reduce emissions, with over 70 tonnes CO₂-e abated annually by Council

GREENHOUSE GASES & RENEWABLE ENERGY

23% of dwellings have roof top solar



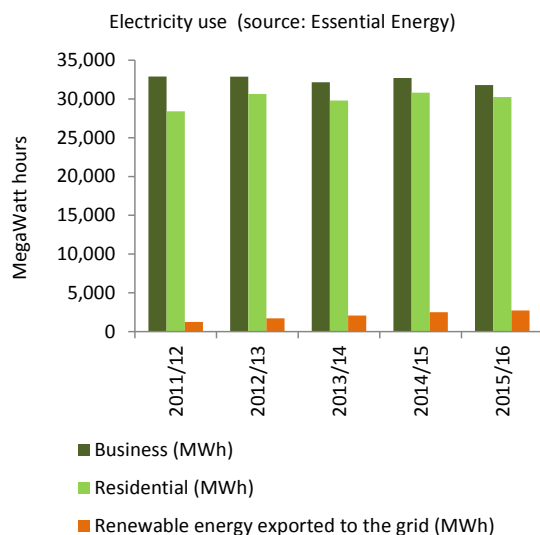
COUNCIL EMISSIONS - DECREASING
by 14% since 2012 overall, but fuel increasing by 8%



RENEWABLE ENERGY

fed back to the grid has increased by 120% since 2012 with **283 kWh exported** per person annually in 2016 - the highest in the region

3,155 hrs of residential electricity use per person annually in 2016 - highest in the region
MEGAWATT



PEOPLE & THE ENVIRONMENT CONT.

1

WATER USE

172 KILOLITRES

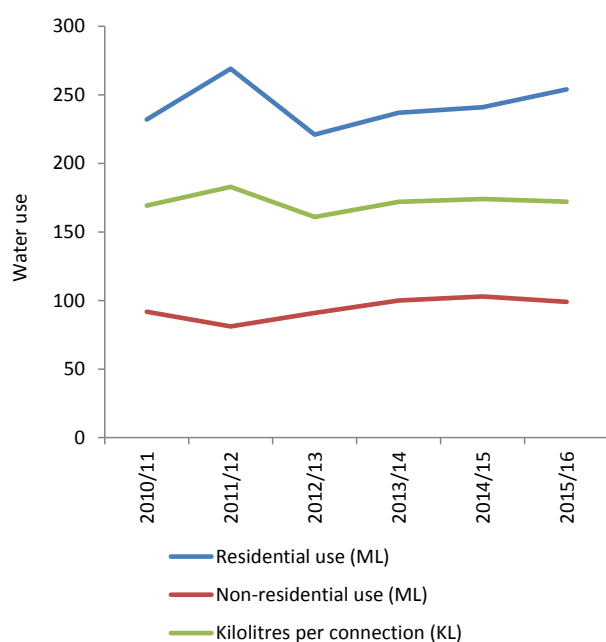
total water use per connection annually - steady from 2011-2015



Residential water use

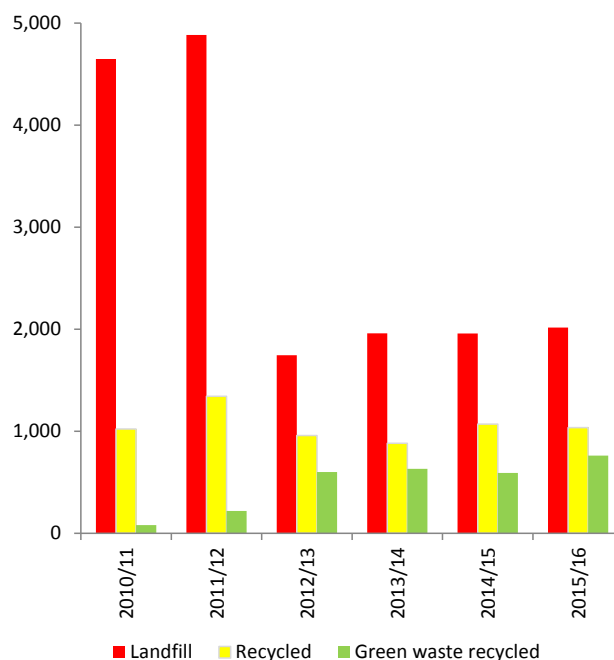
144 KILOLITRES

per connection annually, below the NSW regional average of 172kL - the lowest in the region



WASTE

Overall DOMESTIC WASTE generated
DECREASED BY 33% SINCE 2011



**DOMESTIC WASTE TO LANDFILL
DECREASED** by 56% since 2011

400 kgs KILOGRAMS
waste generated by each
person in 2016, with **47%**
recycled

Greenwaste **RECYCLED**
INCREASED SINCE 2011

Domestic recycling is
47% OF ALL WASTE

up from 20% in 2011, but
below the NSW target of 66%
of waste diverted from landfill



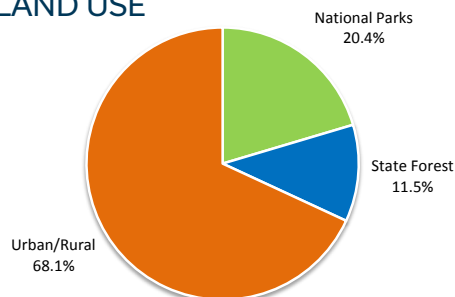
BIODIVERSITY & VEGETATION

2

RESILIENT LANDSCAPES

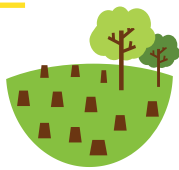
An additional 1,655 hectares of private land is protected under conservation agreements with Office of Environment and Heritage (OEH) and Local Land Services (LLS)

LAND USE



VEGETATION LOSS

139 APPROVALS FOR PRIVATE NATIVE FORESTRY were granted in the LGA since 2007 covering 22,437 HECTARES (9.2%) OF PRIVATE LAND



From 1988 to 2007, 1,585 hectares were harvested under forestry and agricultural operations, highlighting the contribution of private native forestry to vegetation loss outside of State Forest and protected areas if all approvals are enacted

HABITAT REGENERATION

3 hectares of land rehabilitated by Council annually, and

30 hectares managed by Landcare groups

+500 trees planted each year

APPROX. 1,000 HRS VOLUNTEER INPUT ANNUALLY ACROSS 7 LANDCARE SUB-GROUPS

INVASIVE SPECIES

Key weed threats are TROPICAL SODA APPLE AND HYMANACHNE



FAR NORTH COAST WEEDS (FNCW) CONDUCT WEED CONTROL WORK IN THE LGA

OVER 2,500 KILOMETRES of weed control completed annually on rivers, roadsides and railways

HIGH RISK WEED SITES INSPECTED AND TREATED IN 2015 include waterways, wetlands, nurseries and sale yards

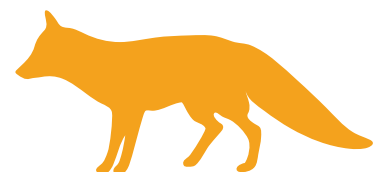
Vertebrate pests - WILD DOGS, FERAL CATS, FOXES AND INDIAN MYNAS are pests of concern in the LGA

NATIVE FLORA & FAUNA

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

1 NEW ENDANGERED POPULATION SINCE 2012: Allocasuarina inophloia (stringy bark oak)

3 NEW ENDANGERED SPECIES Black-tailed antechinus Wollumbin dogwood Torrington mint-bush



LAND USE & SOILS

3

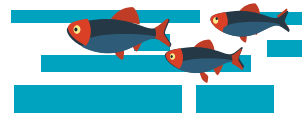
3 SOILS TYPES found in the LGA
MOST IN FAIR TO VERY GOOD CONDITION, but organic carbon, gully, wind and sheet erosion are issues



3 CURRENT MINING LICENCES - GOLD, SILVER AND ANTIMONY

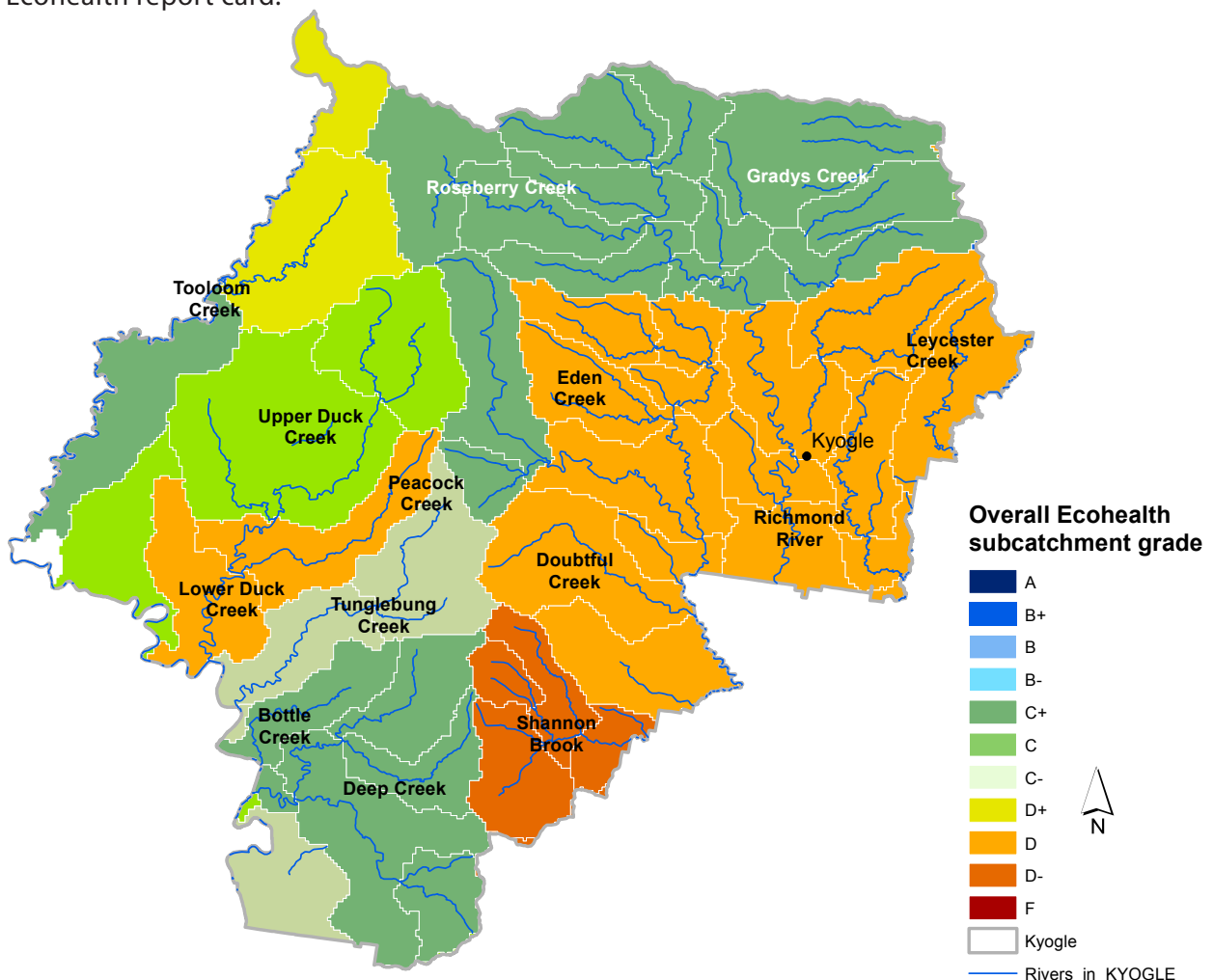
2 CURRENT MINERAL EXPLORATION LICENCES - GOLD

4 WATER



RIVER HEALTH

The Ecohealth water quality monitoring program was conducted in 2013/14 for the Richmond and the Clarence systems. The overall rating for the Clarence system was "C+" (fair), and "D" (poor) for the Richmond. Key issues were poor riparian vegetation, eroding river banks, and elevated nutrients. Fish condition was good for the Clarence tributaries. See Council's website for the full Ecohealth report card.



4

WATER CONT.

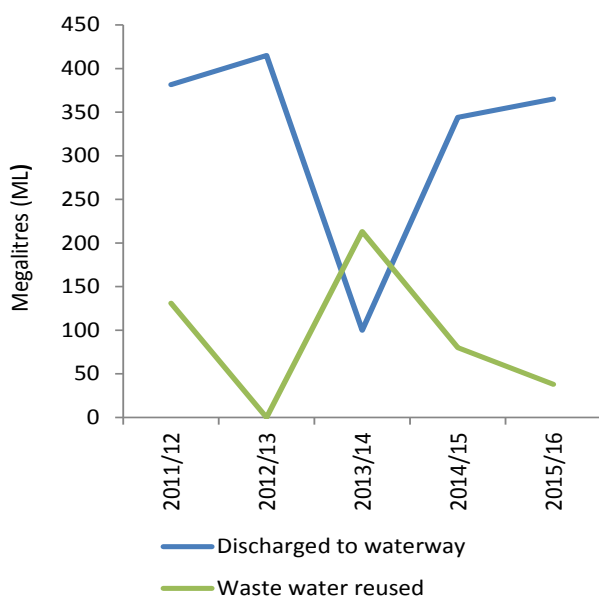
WASTE WATER

Waste water discharged to waterways is variable and related to rainfall



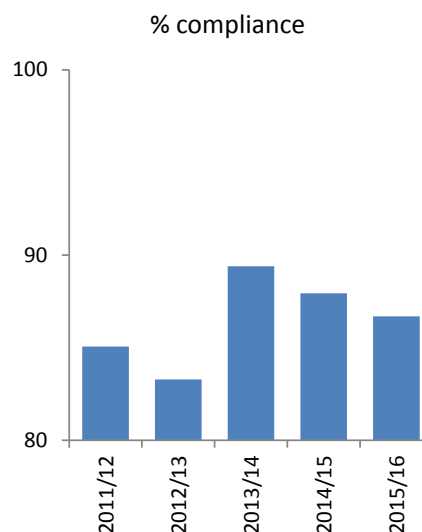
Waste water reuse is highest in drier years

Biosolids are reused as compost



OSSM COMPLIANCE

On-site sewage management systems compliance has been above **83% COMPLIANCE** for inspected systems since 2012



GROUNDWATER STATUS

4 groundwater sources, all with commenced water sharing plans as of 1 July 2016

All groundwater sources are at **LOW RISK** of overallocation

1 identified **GROUNDWATER-DEPENDENT ECOSYSTEM** in the LGA within National Park

RIVER MANAGEMENT

Kyogle Shire Council has a Floodplain Risk Management Plan (2009)

