



Hawkesbury City Council

attachment 3 to item 261

State of the Environment Report 2006/2007

date of meeting: 27 November 2007
location: council chambers
time: 5:00 p.m.



State of the Environment Update Report

2006-2007

CITY-WIDE FOOTPRINT REPORTS

ABORIGINAL HERITAGE

AIR

BIODIVERSITY

LAND

NOISE

NON ABORIGINAL HERITAGE

SOLID WASTE

WATER USE

COUNCIL—SPECIFIC FOOTPRINT REPORTS

ENERGY

GREENHOUSE GAS EMISSIONS

WATER



© 2007 HAWKESBURY CITY COUNCIL



State of the Environment Update Report

2006-2007

ABOUT THIS REPORT

As a requirement of the Local Government Act 1993, Councils must submit an annual State of the Environment (SOE) Report within five months of the completion of the financial year. A comprehensive report is to be prepared every four years (within 12 months of the local government elections) and supplementary update reports are to be produced in the intervening years. The SOE Report is a monitoring and reporting tool that can be used to assist local government to make environmentally related decisions and recommendations. The report also provides yearly data and assessment of the progress of particular actions or outcomes.

This SOE Update Report is the second in a new format being pioneered by Hawkesbury City Council that seeks to present key information in a simple yet informative way. The Report is divided into two primary sections to separate Council's environmental outcomes from those of the wider local government area (LGA). Each section then describes the state of the environment under a number of specific categories, or themes. Each of these themes are presented in simple, one-page **Footprint Reports** that comprise five main components:

- Details of how performance is measured
- A rating for performance of the LGA or Council on that issue
- Quantified representation of the LGA's or Council's performance outcomes.
- A summary of the pressures facing the LGA or Council regarding the issue.
- A summary of Council's response to these pressures.

The report is heavily based on quantifiable performance data, which is drawn from environmental performance data collected and managed by Council. This data is maintained in as current a format as possible, and will be available to the public from mid 2008 when Council launches its **Live Environmental Footprint Portal**. The portal will contain all key outcomes data contained in this SOE Update Report, as well as links to a mass of secondary or supporting data. Much of the data in the Portal will be 'live'; that is, viewers will be able to see up to the minute performance for a range of issues.

This hardcopy version of the SOE Update Report has been produced to satisfy Council's internal reporting requirements as well as requirements for submission of the Plan to the Department of Local Government. An online version of the Report will be developed and launched onto the Hawkesbury City Council website in December 2007, which will allow users to move easily around the report, and (after July 2008) link directly to corresponding live and semi-current performance data contained on the Live Environmental Footprint Portal.

Development of this SOE Update Report was coordinated by Omega Environmental Pty Ltd, who are also coordinating development of the Live Environmental Footprint Portal in partnership with Planet Footprint Pty Ltd.

© 2007 Hawkesbury City Council

366 George Street, WINDSOR NSW 2756

Ph: (02) 4560 4444 Fax: (02) 4560 4400

Website: www.hawkesbury.nsw.gov.au Email: council@hawkesbury.nsw.gov.au

Hours: Monday to Friday 8.30am - 5.00pm



AIR QUALITY

Measures of performance

1. Proportion of days during the year where air pollution was rated as low (according to the Regional Pollution Index - North Western Sydney Region) (percent).

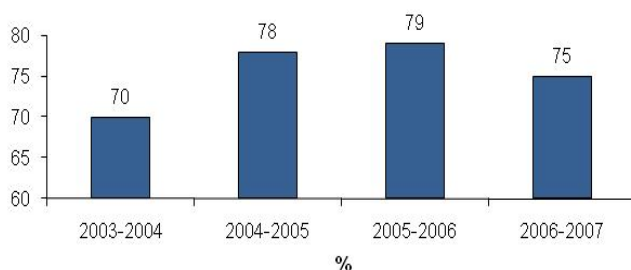
How is the Hawkesbury performing?



The proportion of days where air pollution in the Hawkesbury was rated as low has remained relatively stable.

Outcome 1

**PROPORTION OF DAYS WHERE AIR POLLUTION
IN THE HAWKESBURY WAS RATED AS LOW (%)**



Summary of Pressures

Motor vehicles have been identified as the main source of pollution in Western Sydney that determines air quality on a day to day basis. The major pollutants emitted by motor vehicles are hydrocarbons, nitrogen oxides, carbon monoxides, lead, sulphur oxides, carbon dioxides and other particles. The impact on air quality is increasing due to population growth and a continued reliance on motor vehicles as the primary source of transport in Western Sydney.

Other less significant contributors to air quality are; fires, and emissions from wood and other solid fuel heaters. On a wider scale, energy consumption from residents and businesses in the Hawkesbury contribute to global greenhouse gas emissions through the associated burning of fossil fuels at electricity power stations.

SUMMARY OF HAWKESBURY CITY COUNCIL'S RESPONSE TO AIR QUALITY ISSUES

Council is working to improve air quality in the LGA in two ways:

1. Through enforcement of air quality regulations in relevant environmental legislation, such as the Protection of the Environment (Operations) Act 1997 and the Protection of the Environment (Control of Burning) Regulation 2000.
2. Through implementation of strategic community greenhouse gas abatement actions, following on from Council's involvement in the Cities for Climate Protection Program.



FLORA

FAUNA

Measures of performance

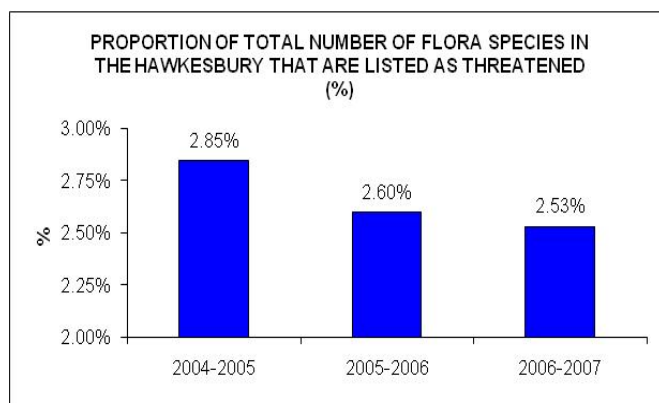
1. Proportion of total number of flora species in the Hawkesbury that are listed as threatened.
2. Proportion of total number of fauna species in the Hawkesbury that are listed as threatened.

How is the Hawkesbury performing?

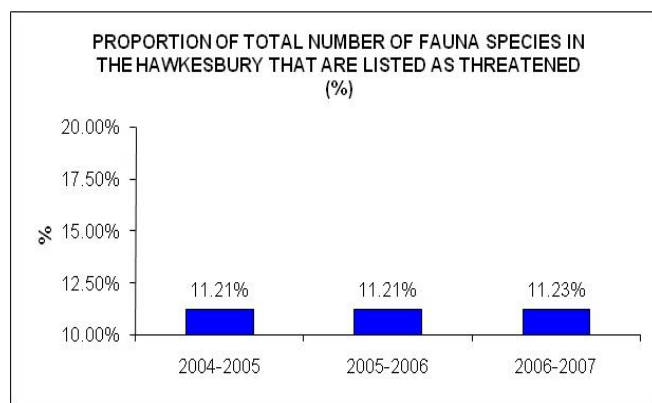


The number of threatened flora and fauna species in the Hawkesbury as a proportion of total species has stabilised or reduced since 2003-2004.

Outcome 1



Outcome 2



Summary of Pressures

Flora and fauna within the Hawkesbury are pressured and threatened from land clearing activities, weed invasion, competition and grazing by feral species, fires, and edge effects such as grazing and frequent mowing.

Summary of Hawkesbury City Council's Response to Biodiversity Issues

Council is working to improve biodiversity in the Hawkesbury through a number of activities and initiatives, including:

1. Continued enforcement of the 1989 Local Environment Plan that seeks to protect areas of threatened vegetation, provide a buffer around areas of ecological significance, protect environmentally sensitive land areas of high scenic value, and restrict development on land that is inappropriate for development by reasons of its physical characteristics or bushfire risk.
2. The identification of areas of threatened species via completion and maintenance of vegetation maps, such as the one completed in 2002 as part of the Cumberland Plan Native Vegetation Mapping Project.
3. Ongoing bush regeneration activities, and the provision of funding to support regeneration projects within the Hawkesbury.



NOISE POLLUTION NOISE COMPLAINTS

Measures of performance

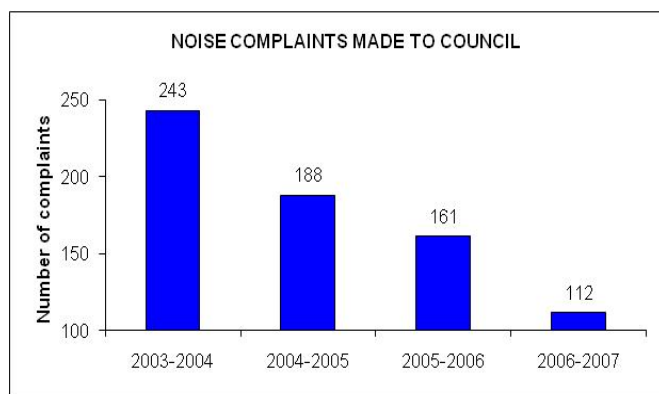
1. Total number of noise complaints made to Council.
2. Number of each type of noise complaint made to Council.

How is the Hawkesbury performing?

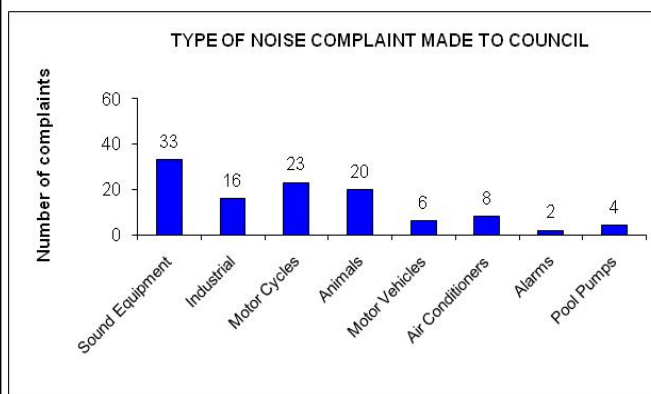


The number of noise complaints made to Council has decreased each year since 2003-2004.

Outcome 1



Outcome 2



Summary of Pressures

Noise pressures in the Hawkesbury predominantly come from road traffic, rail traffic, aircraft traffic, industry, commercial premises, residents, and rural/residential land use conflict. In particular, aircraft traffic noise is an important issue in the Hawkesbury due to the proximity of Richmond RAAF base to the towns of Richmond and Windsor (although not registered in Council's log of complaints as these are generally made directly to the RAAF).

Summary of Hawkesbury City Council's Response to Noise Issues

Council's primary means of dealing with noise issues in the LGA is via enforcement of relevant sections of the Protection of the Environment (Operations) Act 1997, which gives Council increased powers to control offensive noise. In particular, under the Protection of the Environment (Noise Control) Regulation 2000 Council can issue notices relating to the use or timing of use of certain equipment, as well as residential disturbances. This usually occurs after Council has attempted to resolve the issue directly with the noise source and the complainant.

Council also endeavours to proactively manage noise issues by incorporating noise control conditions into approvals for new developments, with conditions of consent placed on industrial and commercial activities to control permissible hours of operation. Council sees the development application stage as the most effective time to bring potential noise pollution to the forefront, thereby allowing noise pollution to be addressed in the early stages and potential problems avoided.

Complaints regarding RAAF activities are dealt with by the RAAF and are often resolved through discussion with the complainant and provision of an explanation as to what is occurring and its duration. The RAAF has also set voluntary curfews to minimise disturbances to residents, with these only exceeded in emergencies. During 2005-2006, the noise 'footprint' (or area of noise impact) was downsized due to an overall reduction in noise levels from RAAF operations, largely the result of improved technology.



PARKLAND CONTAMINATION AND SALINITY

Measures of performance

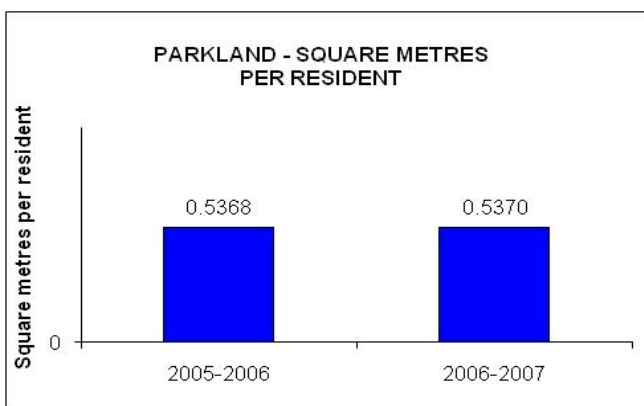
1. Area of parkland per resident.
2. Area of contaminated and salinity affected land.

How is the Hawkesbury performing?

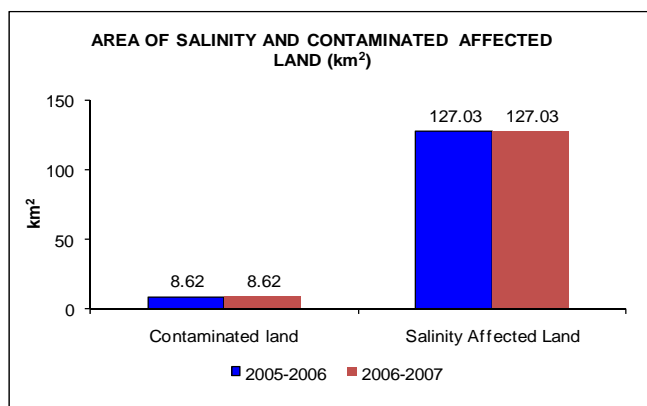


There has been no change in area of parkland per resident, or area of contaminated and salinity affected land, between 2005-2006 and 2006-2007.

Outcome 1



Outcome 2



Summary of Pressures

Population growth in the Hawkesbury has a major impact on land use. If Hawkesbury City is to maintain a growth rate of approximately 1.5 per cent, then increasing pressure will be placed on existing rural and open space and other non-residential areas to be rezoned for residential use.

Council has also been under pressure to adjust zonings under the Local Environment Plan to vary the minimum lot size, as well as from developers to rezone land to allow for residential subdivisions in the existing rural zones.

Pressure is also placed on land use in the Hawkesbury by areas of salinity and contamination, as well as from land degradation including eroded land (from wind, water-sheet/rill or gully), stream bank and riverbank erosion, landslip areas and soil degradation from acid sulphate soils.

Summary of Hawkesbury City Council's Response to Land Issues

Council has developed a number of initiatives in response to pressures facing a variety of different land types in the City. It actively supports environmental groups and organisations that seek to restore and improve areas of degraded or impacted land, and protect other areas from impacts. Council also contributes to development and implementation of the Western Sydney Salinity Code of Practice.

Council's most effective response to land pressures is through its ability to control development within the City, via the Hawkesbury Local Environment Plan (LEP) and Development Control Plans. Recent changes and amendments to these have seen Council limit the spread of multi-unit housing, and introduce new requirements for residential development, subdivision, landscaping and energy efficiency. Council also recently adjusted the LEP to incorporate new objectives into the rural and environmental protection zones, and to amend the new zone names to reflect the new objectives for the preservation of agriculture. Council has also initiated the 'Hawkesbury Agricultural Retention through Diversification and Clustering' project, in response to the identified need for retaining agriculture in the region.



Solid Waste

HAWKESBURY CITY COUNCIL

CITY WASTE COLLECTION AND MANAGEMENT

Measures of performance

1. Total annual waste collected per resident.
2. Proportion of collected waste that is recycled.

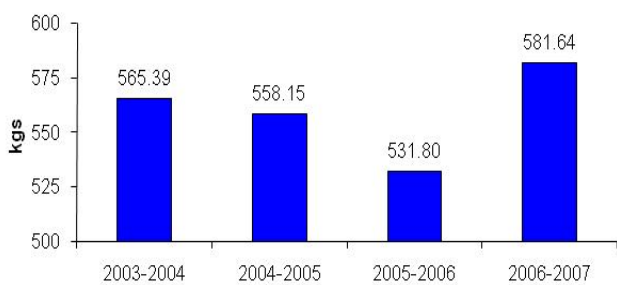
How is the Hawkesbury performing?



Per resident waste collection has increased between 2005-2006 and 2006-2007, while the proportion of waste that is recycled has decreased during this period.

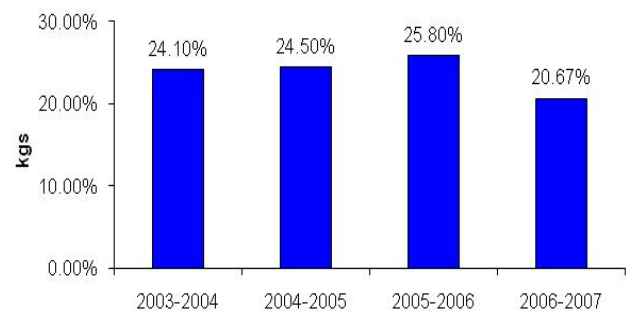
Outcome 1

TOTAL ANNUAL WASTE COLLECTED BY HAWKESBURY CITY COUNCIL PER RESIDENT (kgs)



Outcome 2

PROPORTION OF WASTE THAT IS RECYCLED (%)



Summary of Pressures

One of the most significant issues facing the Hawkesbury with regards to waste is the pressure on landfill. The cell availability at Council landfill sites is diminishing, with landfill lifespan currently estimated at between 15 and 20 years. However this does not take into account any increase in waste volume resulting from population and economic growth.

Summary of Hawkesbury City Council's Response to Solid Waste Issues

Council is working to improve the management of solid waste in the Hawkesbury through a number of activities and initiatives, including:

1. Provision of a fortnightly kerbside recycling service to residents.
2. Programs for acceptance of various materials for recycling and/or responsible disposal at the landfill, including white goods, oil, paper/cardboard, glass, LPG bottles, scrap metal and batteries.
3. Development of management plans for the landfill to monitor groundwater, surface water, landfill gas, leachate, noise, dust and odour.
4. Involvement in the *drumMUSTER* program.
5. Enforcement programs to police illegal dumping and poor waste management practices in the community.



Non-Aboriginal Heritage

HAWKESBURY CITY COUNCIL

HERITAGE BUILDINGS HERITAGE SITES

Measures of performance

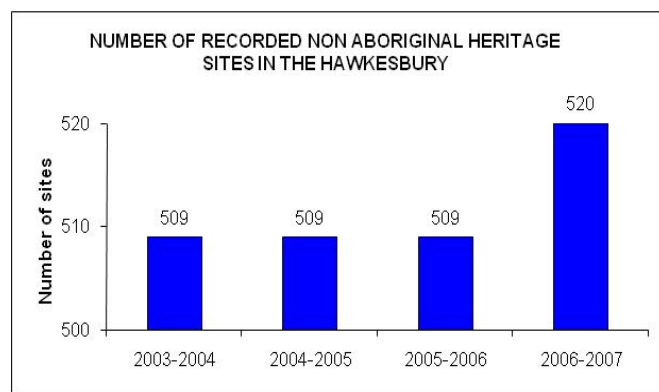
1. Total number of recorded non-aboriginal heritage sites in the Hawkesbury.

How is the Hawkesbury performing?



The number of identified and managed non-Aboriginal heritage sites in the Hawkesbury has increased in 2006-2007.

Outcome 1



Summary of Pressures

Pressures resulting from ignorance of best practice conservation measures, as well as inadequate maintenance and unauthorised unsympathetic works on heritage items are the main issues facing Council.

Summary of Hawkesbury City Council's Response to Non Aboriginal Heritage Issues

Council employs a consultant Heritage Adviser to guide Council with its strategic heritage management programs. The adviser visits fortnightly giving advice to Council, government agencies and owners of heritage items on development matters and policy formulation.

The organisation also supports a Heritage Advisory Committee that meets once a month to examine all aspects of heritage. The committee gives advice to Council and owners of heritage items as well as selecting successful applicants for receiving funding under Council's Local Heritage Assistance Fund and Slab Outbuilding Scheme.

During 2006-2007, Council recommenced construction of the Hawkesbury Regional Museum. Council also completed a review of existing and potential heritage items in the city, and continued to promote heritage issues to the community through the staging of the annual *Heritage Week* event.



COUNCIL ENERGY CONSUMPTION

Measures of performance

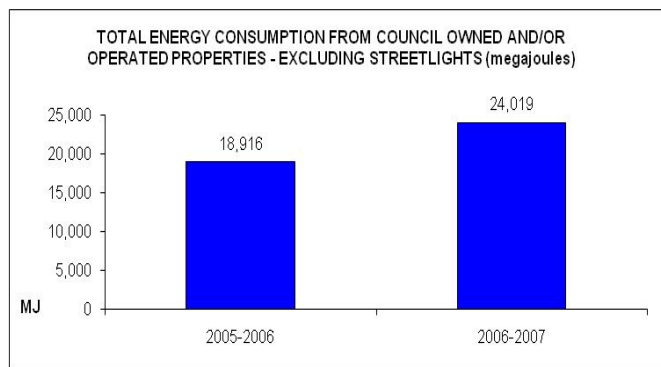
1. Total energy consumption from council operations.
2. Council energy consumption per resident.

How is the Hawkesbury performing?

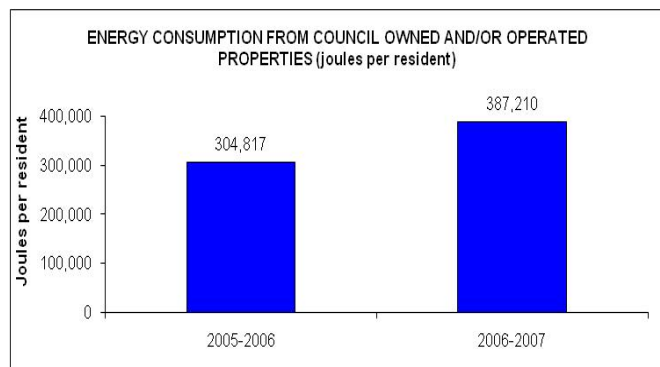


Council's energy consumption increased between 2005-2006 and 2006-2007.

Outcome 1



Outcome 2



Summary of Pressures

Increasing demand for Council services as a result of increasing City population is leading to a rise in energy consumption from Council infrastructure.

SUMMARY OF HAWKESBURY CITY COUNCIL'S RESPONSE TO ITS INTERNAL ENERGY ISSUES

Council has been actively working to reduce energy consumption from its own operations for many years, and has implemented a number of state of the art energy efficient features into its buildings and assets. Much of this has been driven by Council's involvement in and successful completion of the Cities for Climate Protection (CCP) Program. The CCP Program is a global initiative that encourages local government to actively reduce greenhouse gas emissions from their own operations, and to influence a reduction in emissions from the wider community.

In terms of energy abatement actions, key projects completed recently include the installation of building management systems in the primary energy consuming buildings to improve control over heating, cooling and lighting, introduction of power factor correction to key buildings, and the ongoing implementation of a staff energy awareness campaign.

Council has also incorporated energy efficient design into its new buildings, the most notable being the Deerubbin Centre which was opened during 2005-2006 and is comprised of many energy efficient design features. The most effective of these is the building's co-generation plant which enables heating and cooling of the building to be done at almost no cost, with electricity generation from the plant being so great that at times it is fed back into the state's electricity grid.

During 2005-2006 Council commenced development of an Energy Savings Action Plan. Council is required to develop this Plan under legislation administered by the New South Wales Department of Energy, Utilities and Sustainability. The Plan is due for completion in late 2007, and will include provision for commencement of a number of large-scale projects to continue to reduce energy consumption from Council operations, including improvements to the Oasis Aquatic Centre at South Windsor and 'fine tuning' of the Deerubbin Building's co-generation plant.



Water Use

HAWKESBURY CITY COUNCIL

POTABLE WATER CONSUMPTION

Measures of performance

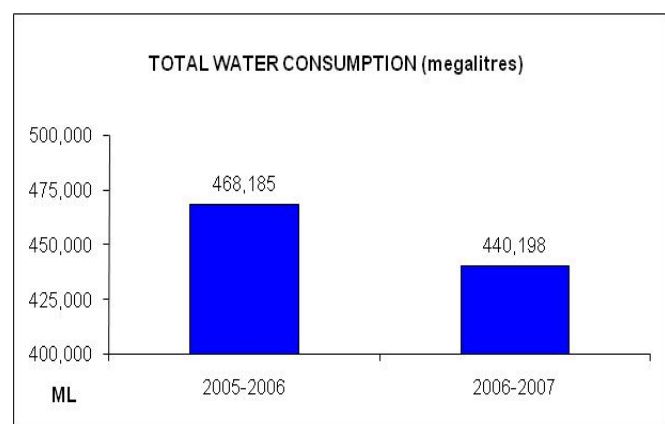
1. Total water consumption
2. Water consumption per resident.

How is the Hawkesbury performing?

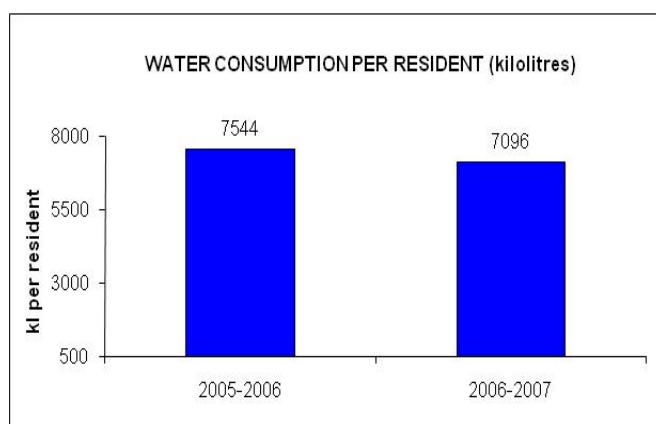


Water consumption across the Hawkesbury decreased between 2005-2006 and 2006-2007.

Outcome 1



Outcome 2



Summary of Pressures

A combination of drought conditions and increasing population is putting pressure on the potable water supply of Sydney and the Hawkesbury.

SUMMARY OF HAWKESBURY CITY COUNCIL'S RESPONSE TO WATER USE ISSUES

The majority of responsibility for reducing water consumption in the Hawkesbury rests with the State Government, and the local water utility (Sydney Water). However, Council actively encourages water use reduction among residents as part of its overall environmental awareness programs, and provides advice and information to residents looking to reduce their water consumption.

Council is also taking a leadership role in reducing water consumption by developing a Water Savings Action Plan to cover its own operations. This Plan will become Council's blueprint for water reduction over the next 3-5 years, and will be used to demonstrate to the community the variety of initiatives that can be implemented to achieve a sustainable reduction in consumption.



POTABLE WATER CONSUMPTION—COUNCIL OPERATIONS

Measures of performance

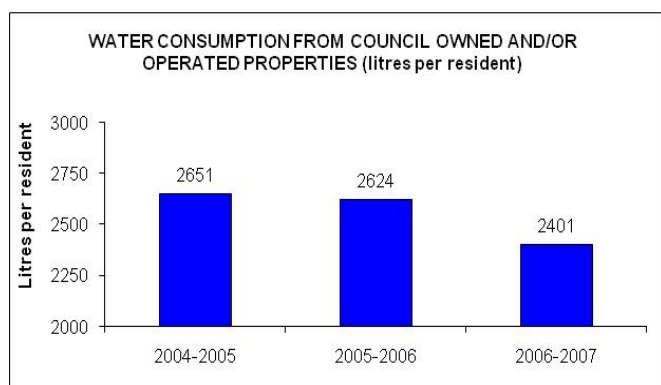
1. Total water consumption
2. Water consumption per resident.

How is the Hawkesbury performing?

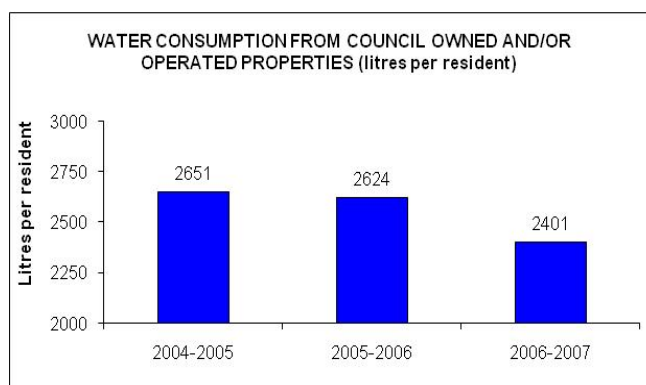


Council water consumption has decreased every year since 2004-2005.

Outcome 1



Outcome 2



Summary of Pressures

A combination of drought conditions and increasing population is putting pressure on the potable water supply of Sydney and the Hawkesbury, and therefore the availability of water for Council operations.

SUMMARY OF HAWKESBURY CITY COUNCIL'S RESPONSE TO ITS INTERNAL WATER USE ISSUES

Council is actively working to reduce its water consumption through continual infrastructure improvements to its facilities to improve water performance. In particular, it is taking a leadership role in reducing water consumption by developing a Water Savings Action Plan to cover its own operations. This Plan is being developed according to legislation and guidelines administered by the New South Wales Department of Energy, Sustainability and Utilities (DEUS). The Plan contains information on Council's historical water performance and details of specific actions Council will implement over the next 3-5 years to reduce water consumption from its own operations. The Plan was completed and submitted to DEUS in May 2006.

Specifically, actions included in the Plan relate to upgrading of water fittings in all buildings (including toilets, taps and showerheads), improvements to Council pools, and use of recycled water at facilities such as the Hawkesbury Companion Animal Shelter at Mulgrove.



Greenhouse Gas Emissions

HAWKESBURY CITY COUNCIL

COUNCIL FOOTPRINT

COUNCIL EMISSIONS FROM ELECTRICITY SOURCES (EXCLUDING STREETLIGHTS)

Measures of performance

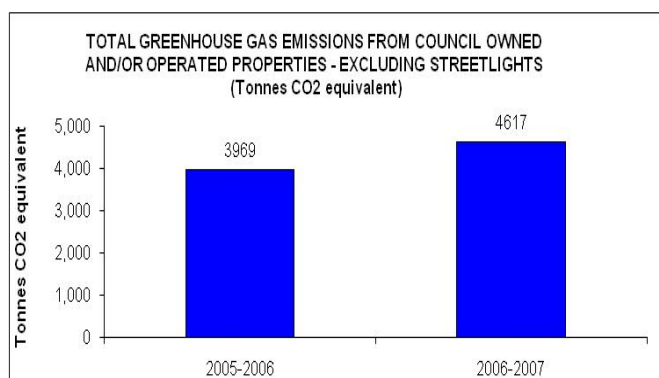
1. Total greenhouse gas emissions from council operations.
2. Council greenhouse gas emissions per resident.

How is the Hawkesbury performing?

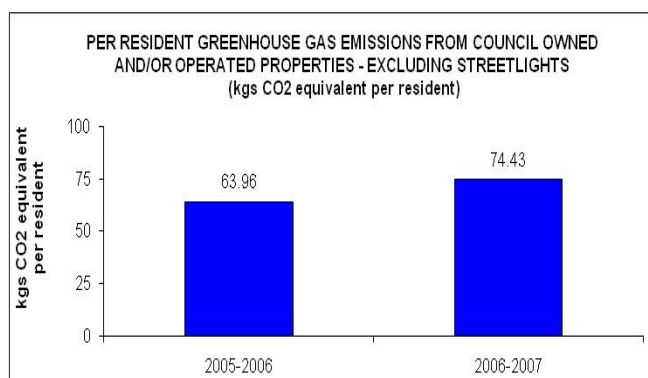


Council's greenhouse gas emissions increased between 2005-2006 and 2006-2007.

Outcome 1



Outcome 2



Summary of Pressures

Increasing demand for Council services as a result of increasing City population is leading to a rise in energy consumption from Council infrastructure, which in turn is leading to a potential increase in Council-related greenhouse gas emissions.

SUMMARY OF HAWKESBURY CITY COUNCIL'S RESPONSE TO ITS INTERNAL GREENHOUSE GAS ISSUES

Council has successfully completed all five milestones of the Cities for Climate Protection (CCP) Program. The CCP Program is a global initiative that encourages local government to actively reduce greenhouse gas emissions from their own operations, and to influence a reduction in emissions from the wider community.

Involvement in the CCP Program has seen Council develop a Green Energy Strategy, which served as Council's blueprint for reducing emissions between 2002-2003 and 2005-2006. During 2005-2006, Council replaced the Green Energy Strategy with an Energy Savings Action Plan which sets out a revised set of actions to continue greenhouse gas abatement.



Aboriginal Heritage

HAWKESBURY CITY COUNCIL

ABORIGINAL SITES ABORIGINAL CULTURE

Measures of performance

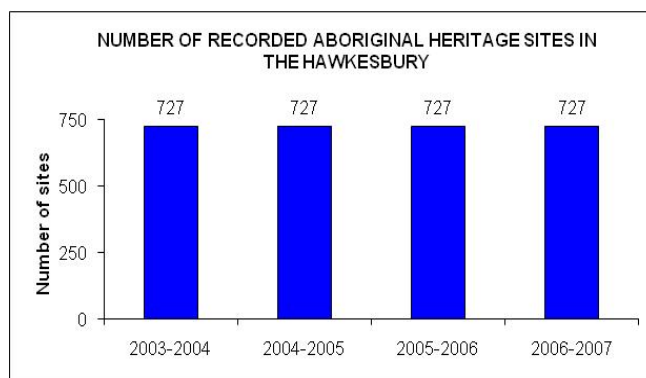
1. Total number of recorded Aboriginal heritage sites in the Hawkesbury.

How is the Hawkesbury performing?

N/A

Aboriginal heritage sites are managed by the New South Wales government, but are reported here as an indicator of the cultural health of the local government area.

Outcome 1



Summary of Pressures

Aboriginal heritage sites occur throughout many zonings in the Hawkesbury LGA and are threatened by most land uses. In the past, development has occurred without the investigation of the archaeological potential of the development site and without consultation with the local aboriginal community.

The lack of information available to Council on aboriginal heritage sites is also a problem. At the moment all information Council holds about aboriginal sites is archaeologically based. Sites of cultural significance that don't contain physical evidence are not identified and not always protected.

Summary of Hawkesbury City Council's Response to Aboriginal Heritage Issues

Council actively supports a number of community groups that promote and manage aboriginal heritage across the Hawkesbury. These include the Aboriginal Police Support Group, and Moran Aboriginal Support Organisation.

