



## **State of the Environment**

**Supplementary Report 2010-11**



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## **State of the Environment Report – Supplementary, 2010 - 2011**

### **Background**

This state of the environment (SoE) supplementary is to be read in conjunction with the Council's Annual Report to comply with the NSW Government's new integrated planning and reporting framework as well as meeting statutory requirements for each Council to report on the state of their local environment.

The purpose of the supplementary SoE is to:

- identify and update any new environmental issues arising since the last supplementary report
- report on trends related to the impacts of these environmental issues; and
- highlight key actions undertaken in response to these environmental issues.

### **Relationship of SoE Supplementary**

Council's SoE reporting is intended to usefully guide and inform on the relevant outcomes and objectives of Council's 20-year, strategic City Plan. The key area of City Plan relevant to SoE reporting remains:

*Outcome 10:* A healthy environment; and to a lesser extent

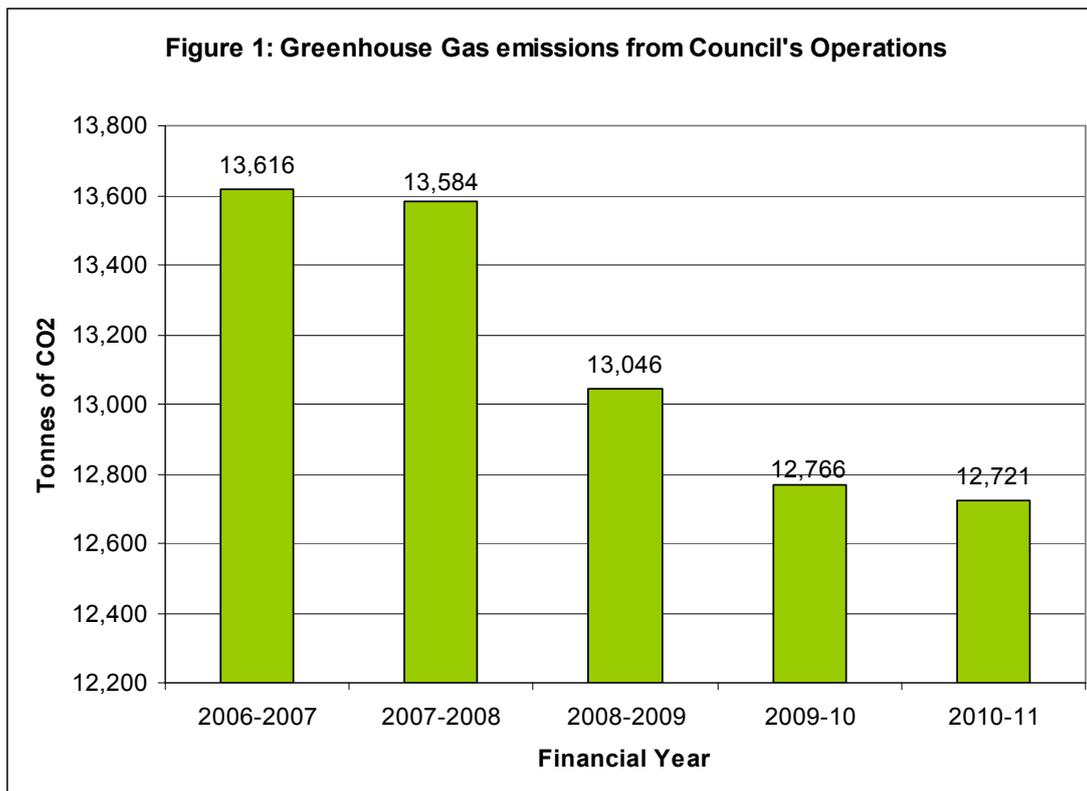
*Outcome 9:* Integrated and accessible transport

It is not intended that the SoE supplementary repeat the level of information and data found in these two recent Randwick Council publications, but merely provide an update as the legislation and reporting framework allows.

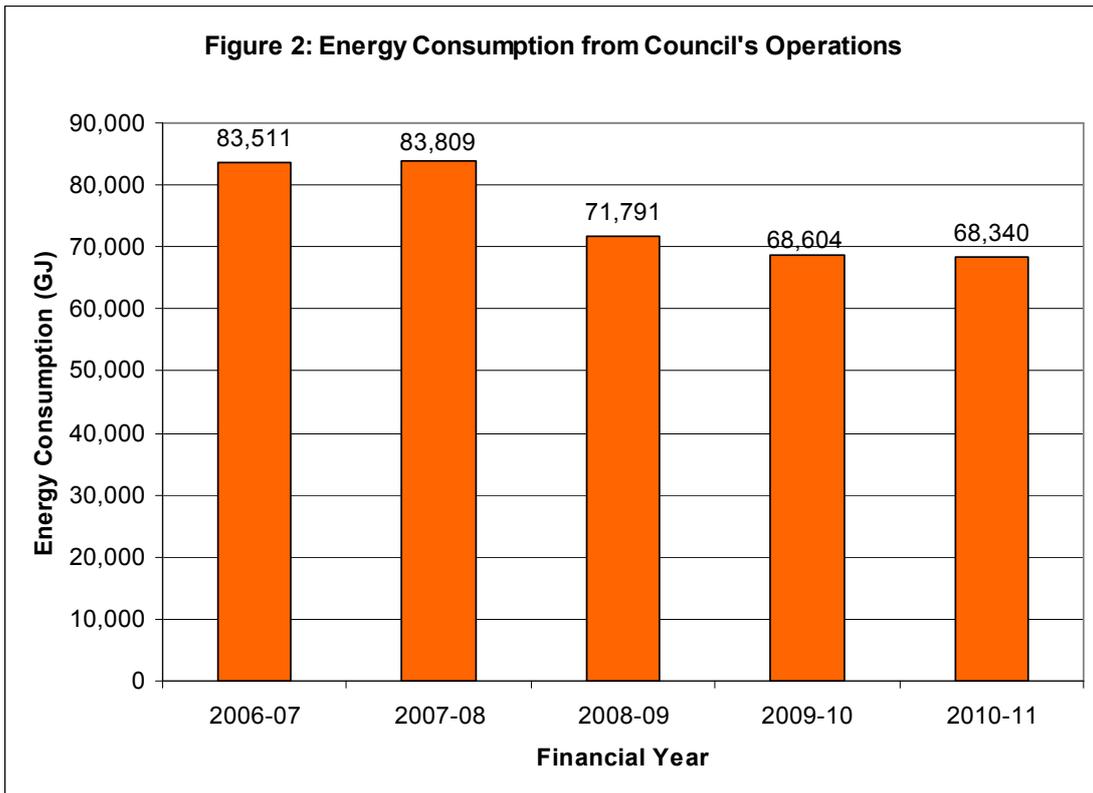
## Energy consumption and Greenhouse gas emissions

### Council's energy consumption and greenhouse gas emissions

Council's greenhouse gas emissions continue to decrease gradually, figure 1 below shows the change in greenhouse gas emissions over the reporting period. The greenhouse gas emissions for the financial year of 2010/11 are 12,721 tonnes of CO<sub>2</sub>-e which is a decrease of around 45 tonnes or 0.3% from the previous year. Over the last 5 years, we have achieved a carbon reduction of around 6.5%.



This trend correlates with our energy consumption where we have a total energy consumption of 68,340 gigajoules which is a decrease of 264 gigajoules or 0.4% (refer to figure 2). Over the last 5 years, we have achieved a reduction of 18% in energy consumption.



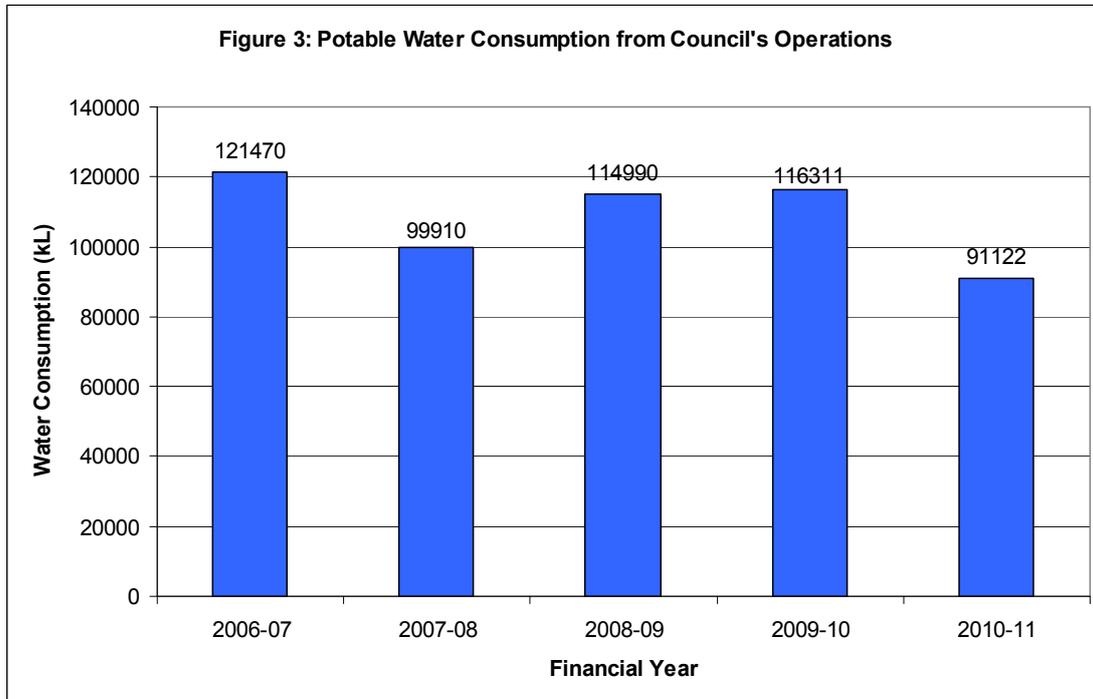
### **Updating Council responses on energy consumption and greenhouse gas emissions**

In June 2010, Council has installed a 10 kW solar panel on the rooftop of our Administration Building. The new solar panels will help generate approximately 14MWh worth of electricity over the year. Council has also recently completed an energy audit of our top ten energy consumption sites as part of the review of our existing Energy Saving Action Plan. Potential energy-saving measures such as lightings switch and BMS upgrades are identified through the audit and will be implemented from the financial year of 2011-12 onwards

# Water

## Council's water consumption

Council's potable water consumption for 2010-11 is 91,122 kilolitres (kL), which is a decrease of 25,189 kL from last year. Over the last 5 years, we have achieved total water saving of 30 million litres of water or 25% reduction (refer to figure 3).



Additional savings have been achieved through investment in installing rainwater tanks, bore water and stormwater harvesting and re-use projects. These projects are listed in the figure below and they are achieving approximately 287 million litres of water savings.

## Annual Water Savings (Approximately) , Unit Litre

Water Saving Project/Activities	Savings in Litre (approx)
<b>Recycled Water and Stormwater Harvesting</b>	
Depot waste water treatment plant	1.5 million
Stormwater Harvesting at Nursery, Kensington	2 Million
Stormwater Harvesting at Coogee Oval and Goldstein Reserve	18 Million
Stormwater Harvesting at Pioneers Park	25 Million
Stormwater Harvesting at Nagle Park	12 Million
Stormwater Harvesting at Clovelly.	10 Million
Backwash Wastewater and Bore Water Recycling and Reuse System at Des Renford Aquatic Centre.	15 Million

Total water Savings per year	83.5 Million
<b>Town Water Replaced with Bore Water</b>	
Arthur Byrne Reserve, Maroubra	9 Million
Burrows Park , Clovelly	3.5 Million
Snape Park, Maroubra	8 million
Kensington Oval, Kensington	13 million
Paine Reserve, Randwick	5 Million
Latham Park, South Coogee	25 Million
Heffron Park, Maroubra	100 million
Coral Sea Park, Maroubra	17 million
John Shore, Maroubra	9 Million
RCC Community Centre, Randwick	3 Million
Roadside Gardening and Waste Recycling Centre	10 Million
Total water Savings per year	203.5 Million

<b>Rainwater Tanks</b>	<b>Tank Capacity</b>
Council Depot	67,900L
Burrows Park	9,000L
Matraville Recycling Centre	10,000L
Malabar Library	10,000L
Des Renford Aquatic Centre	20,000L
Council Admin Building, Randwick	20000L
Total Capacity of Tanks	137,000L

**Figure 4: Water-savings achieved through non-potable water consumption**

### **Updating on Council water re-use and recycling initiatives**

Further investments on stormwater harvesting systems are happening in various parks including Cromwell Park, Malabar; Burrows Park, Clovelly; Grant reserve, Coogee and an upgraded water irrigation system for Coogee Oval and Goldstein Reserve. Council has also recently completed a water audit of our top ten water consumption sites as part of the review of our existing Water Saving Action Plan. Potential water-efficiency measures are identified through the audit and will be implemented from the financial year of 2011-12 onwards.

## Updating on beach water quality issues

The NSW Government's Beachwatch program routinely monitors bacterial levels of 36 ocean beaches and one lagoon in the Sydney ocean beaches region. Recreational water quality is measured using two types of bacteria: enterococci and faecal streptococci, which are indicators of sewage contamination.

Of the 5 main beaches monitored in Randwick, Clovelly beach, Coogee beach, Maroubra beach and Little Bay beach all achieve a beach suitability grade of good which indicates good water quality.

Malabar Beach is the only beach which indicates exceedences of water quality parameter under certain circumstances. Investigations have established this is mainly due to faecal contamination discharged from the stormwater drain on the northern side of the beach. This drain flows following light rainfall and although it is not highly polluted, bacterial levels in the discharge are sufficiently elevated to raise levels in the bay to values unsuitable for swimming at certain times (refer to graph below). Randwick Council is currently working with Sydney Water through funding from the Waste and Sustainability Improvement Program to address the issue and bring the water quality of Malabar beach to the same standard with the other beaches. This work will be completed in 2011-12 with investment of more than \$2 million.

Monitoring period for 2010–11 result is September 2009 to April 2011.

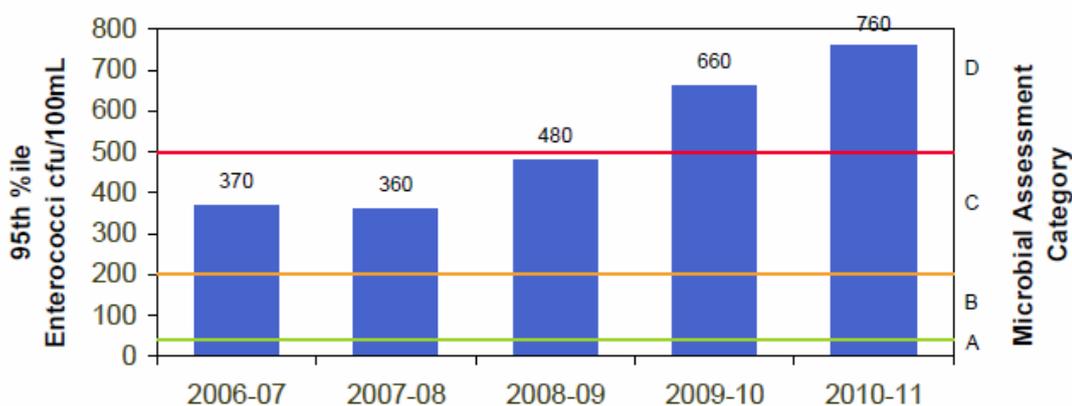


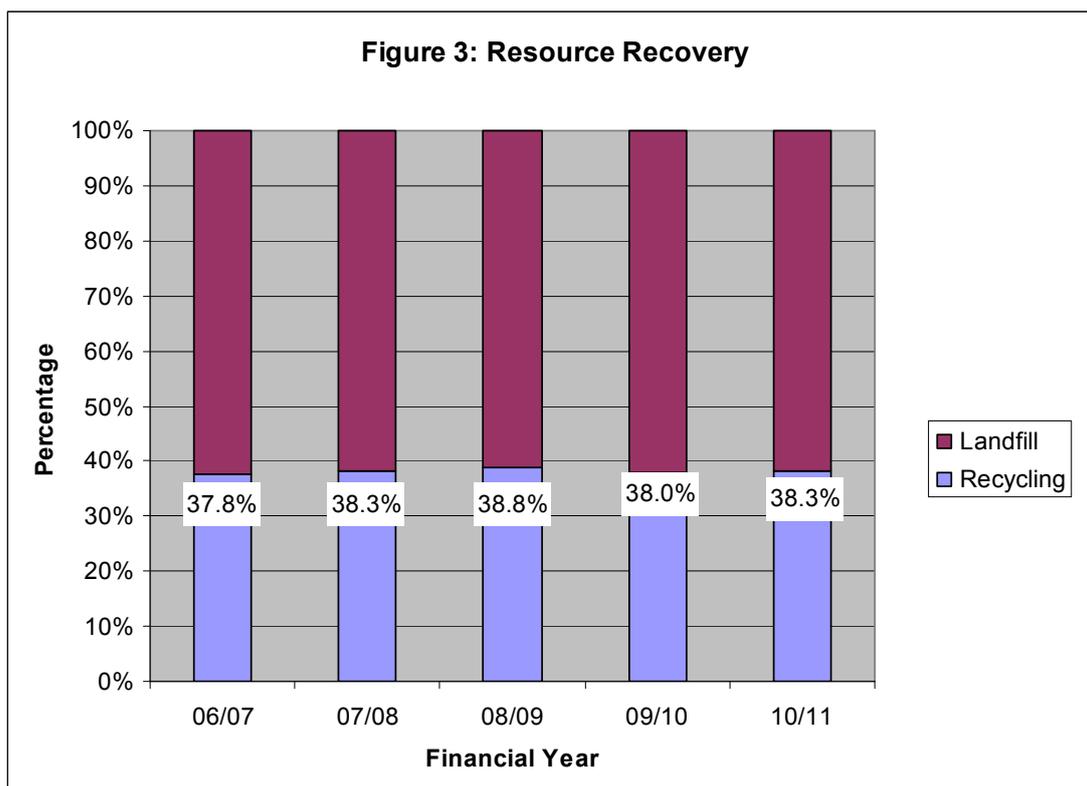
Figure 2: Microbial assessment at Malabar Beach

## Waste

### Updating on Council's resource recovery initiatives

In 2010-11, the total tonnage for recycling is 19,529 tonnes which is a slight decrease of 529 tonnes from the previous year. The decrease in recycling tonnages can be attributed to the reduction in waste tonnage which stands at 31,478 tonnes, a decrease of 1,236 tonnes. Our overall resource recovery rate continues to be around 38 percent, still some way to achieving the 66 percent target set by NSW government legislation by 2014 (refer Figure 3 below).

Two chemical cleanout days have been held at Clovelly beach carpark and Heffron Park carpark respectively. 27 tonnes of hazardous waste was collected at Clovelly beach carpark in May 2011, which is an increase of 3 tonnes or 12 percent from the last cleanout event in May 2010.



Through the Waste and Sustainability Improvement Program (WaSIP), additional resource recovery projects including Public Place Recycling and working with Department of Housing to enhance resource recovery are being carried out in Financial Year of 2010-11.

## **Biodiversity**

### **Updating Council's biodiversity conservation and habitat protection initiatives**

Bush regeneration by specialist contractors is undertaken in 22 bushland reserves. Bushcare Volunteers are supported by council in 9 of these reserves. The amount of hours provided by these volunteers is included in Table 2

**Table 2: Number of bush regenerations hours committed.**

	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
Council land	14,732	15,190	17,036	15,550	15,263	14,603
Non-Council land	4,824	~ 1,333	6,304	1,730	1,058	933
<b>TOTAL</b>	<b>19,556</b>	<b>~ 16,523</b>	<b>23,340</b>	<b>17,280</b>	<b>16,321</b>	<b>15,536</b>

The newest area added to Council's bush and reserve responsibilities is Randwick Environmental Park. The Plan of Management governing the Randwick Environmental Park aims for the protection, conservation and enhancement of bushland and wetland features of the Park while allowing a range of passive recreational opportunities.

Council continue to manage the natural areas under its control according to best practice as recommended by State and Federal government publications and protocols, particularly in relation to the endangered ecological communities, Eastern Suburbs Banksia Scrub and Sydney Freshwater Wetlands and the various endangered flora and fauna species of the area.

## **Revegetation**

Revegetation is undertaken on 6 sites adjoining bushland remnants along the coast and continues the expansion of fauna habitat.

Council continues to support 5 community volunteer groups planting and maintaining native landscaping in council parks.

## **Wildlife Watch**

Council commenced this new volunteer program to tap into the community's extensive knowledge of native fauna. Participants report sightings to Council of native birds, frogs and reptiles according to the Australian Wildlife Atlas' protocols.

## **Surveying and Monitoring**

Data on local organisms in natural areas was collected by Council staff, Council's bush regeneration contractors and volunteers in the Wildlife Watch program. This information was added to the existing databases under the following headings;

- Vascular plants
- Non-vascular plants
- Birds
- Amphibians
- Reptiles
- Mammals
- Algae & Fungi
- Marine Flora
- Marine fauna
- Fresh-water fishes

The expansion of the area of the bushland remnants and improvements in their condition as a result of bush regeneration activities are monitored on a monthly and yearly basis.

## **Conclusion**

Council continues to demonstrate a strong commitment to environmental sustainability and invest extensively in practical and on-ground efforts to deliver stronger sustainability outcomes for the community and the natural environment. This is shown by our continuous improvement of environmental performance over the last few years.

As part of the integrated reporting framework, Council is continuing its improvement in the harmonisation of indicators and datasets used with a medium to long term view aimed at enabling a quicker response to issues as they arise and a wider level of understanding of environmental and social issues needing policy and practical changes to be made. The harmonisation of indicators and details of Council's environmental performance, achievements and initiatives will be further discussed under the Comprehensive State of the Environment Reporting in 2012.