

STATE OF THE ENVIRONMENT

Summary Scorecard 2014 - 2015



Biodiversity | Climate Change and Air Quality | Waste | Transport

Total Water Cycle | Planning, Built Environment and Heritage

Engagement and Education for Sustainability



THE MOSMAN LOCAL GOVERNMENT AREA

The Mosman LGA is located 8km north-east of the CBD on Sydney's lower north shore. It is one of Australia's premier suburbs, with an unmatched harbourside setting. Occupying some 8.7 sq km, Mosman features stunning bays and beaches punctuated by rugged headlands, sandstone cliffs, bushland areas and foreshore parklands.

Mosman's undulating foreshore is approximately 24km and is emphasised by more than a dozen headlands. Mosman is home to many popular swimming and recreation beaches and bays including Chinaman's and Balmoral Beach, The Spit, Cobblers Beach and Clifton Gardens. The majority of the foreshore include significant rocky areas, bushland, including many protected areas, and reserves, such as Sydney Harbour National Park.

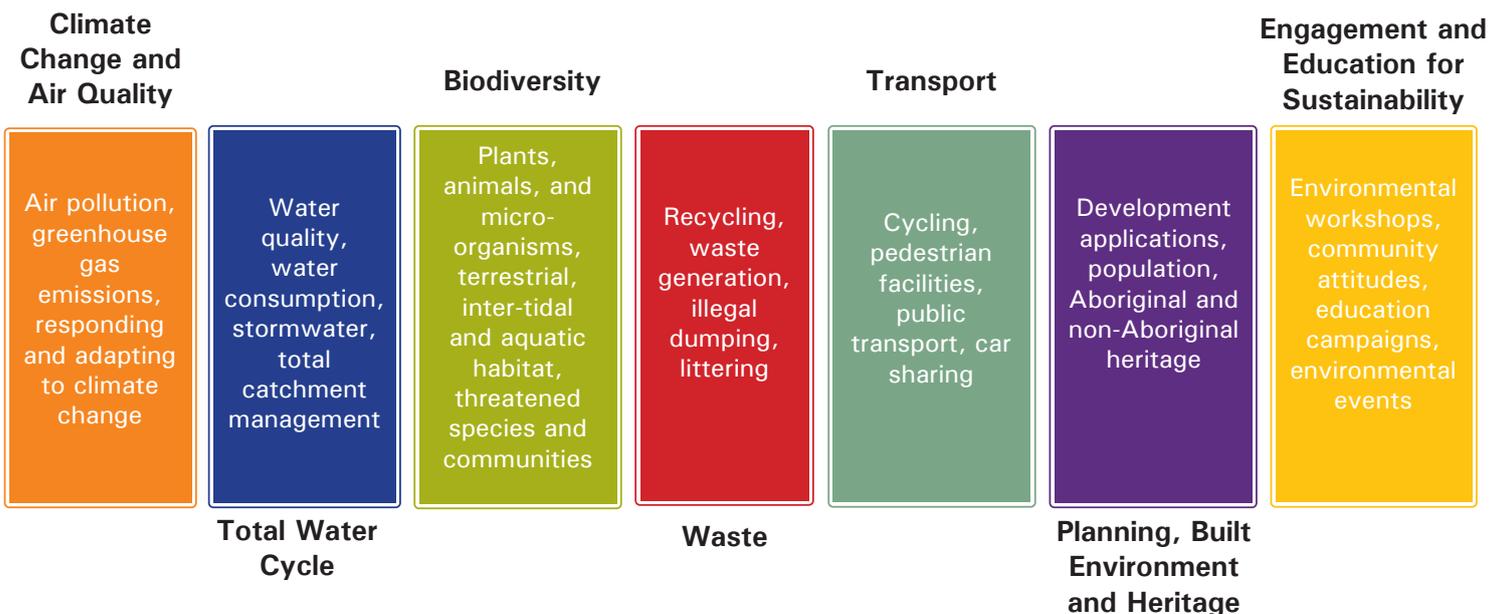
Mosman Council's vision is to preserve and enhance biodiversity, including Mosman's bushland, parks, open space, beaches and marine environment through best practice operational and maintenance programs, infrastructure, regulatory practice and education campaigns.

STATE OF THE ENVIRONMENT REPORTING

A State of the Environment (SOE) Report provides a snapshot of the condition of the environment, impacts on the environment and the Council's response to these impacts. The 2014-2015 SOE takes the form of a "scorecard" providing a quick snapshot of the State of the Mosman local environment and examples of initiatives implemented by Council.

KEY AREAS

This SOE focuses on seven key areas identified in MOSPLAN



A number of standard indicators have been chosen by the State Government to measure each key area. These indicators align with the goals and objectives of MOSPLAN and allow for changes in the environment to be measured over time.



1. CLIMATE CHANGE AND AIR QUALITY

AIR QUALITY	2011-12	2012-13	2013-14	2014-15	Change from previous year
Number of air pollution complaints received by Council	3	2	5	3	↓
ENERGY					
Electricity use Council operations (kWh)	1,826,646	1,811,017	1,628,913	1,554,759	↓
Council energy consumption (GJ)	6,972	7,463	6,740	6,165	↓
GHG emissions from Council energy use (tonnes CO ₂ -e)	1,845	1,841	1,660	1,566	↓
Total residential and non residential electricity use for Mosman (MWh)	146,393	140,698	133,958	138,437	↑
Solar generation exported to the grid (MWh)	470	546	599	640	↑

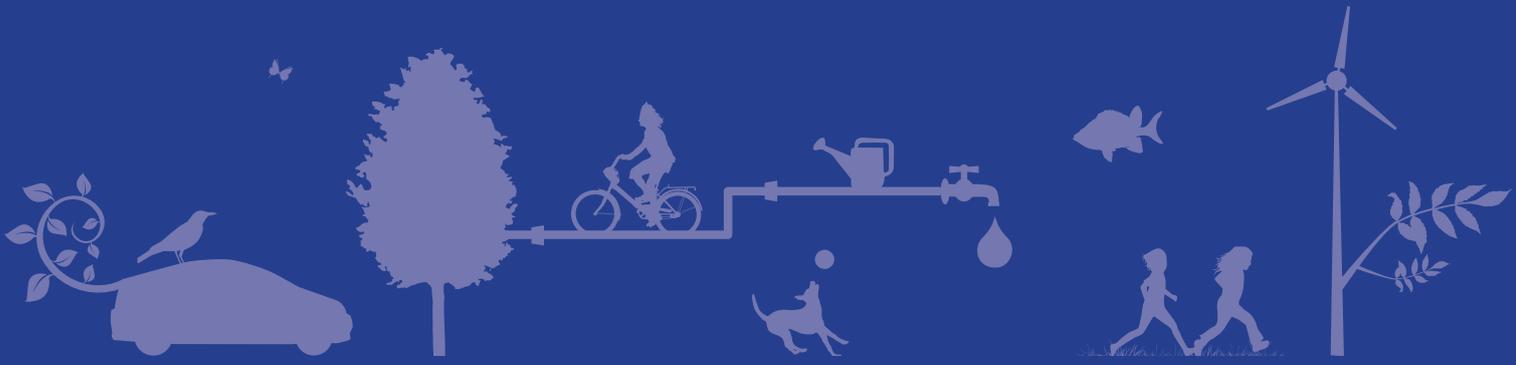
RESPONDING TO CLIMATE CHANGE AND AIR QUALITY ISSUES – CASE STUDIES

Art Gallery Lighting Retrofit

From May - September 2014, Council completed a lighting upgrade of the Mosman Art Gallery. The two phase project saw the replacement of old light fittings in the office and common hall areas with new energy efficient LED tube lights and downlights, as well as the installation of new track and energy efficient lighting within the Gallery rooms. In the first year the project has seen a saving of over \$14,000 and 50 mWh of electricity.

This project completed the lighting retrofitting program of the three main Council buildings- The Library, Civic Centre and Art Gallery.





2. TOTAL WATER CYCLE

STORMWATER	2011-12	2012-13	2013-14	2014-15	Change from previous year
Number of gross pollutant traps (GPTs)	32	33	34	34	↔
Total gross pollutants removed from GPTs (tonnes)	332	406	197	247	↑
WATER CONSUMPTION					
Total LGA potable water use (kilolitres)	2,841,397	3,089,433	3,237,561	3,128,482	↓
Total residential potable water use (kilolitres per capita)	81	104	108	103	↓
Total Council potable water use (kilolitres)	46,489	69,583	82,072*	67,352	↓

*water consumption has increased largely due to the stormwater harvesting system at Balmoral being offline due to mechanical failure. This issue has now been resolved.

RESPONDING TO TOTAL WATER CYCLE MANAGEMENT ISSUES – CASE STUDIES

Mosman Flood Study

The Mosman Flood Study will identify potential flood risk areas including overland flowpaths and inadequate stormwater infrastructure. For the Mosman Flood Study stormwater asset attributes collated as part of the preparation of the Stormwater Asset Management plan was used. Manly Hydraulics Lab (MHL) completed 18 months of stream gauging and this data was used to calibrate the flood model. Additional funding and extensions have been sought and granted by the Office of Environment and Heritage (OEH) to undertake further works to improve the flood study model.

Once the modelling was completed and the draft flood study technical report was issued to Council, the technical committee which consist of personnel from MHL, Council and OEH convened to review the report. Following this meeting, MHL incorporated comments from the technical committee into the final draft flood study technical report.

Council is currently reviewing the final draft report internally.





3. BIODIVERSITY

BIODIVERSITY CONDITION	2011-12	2012-13	2013-14	2014-15	Change from previous year
Noxious weed notices	0	0	0	0	↔
Noxious weed assessments undertaken	23	11	14	21	↑
Number of registered active bushcare volunteers	102	102	77	80	↑
Bushcare Program volunteer hours	2,800	2,511	1,895	1,800	↓
Number of active bushcare groups	17	14	14	17	↑
Total number of native plants supplied to volunteers, contractors and residents	8,500	8,430	8,026	8,455	↑
Number of native plant species recorded in LGA	454	454	454	454	↔
Number of threatened flora species	3	3	3	3	↔
Number of threatened fauna species	4	4	4	5	↑
Number of endangered ecological communities	0	0	0	0	↔
Number of endangered fauna populations	0	0	0	0	↔
Number of feral fauna species targeted through programs (eg. rabbits, foxes, cats)	1	1	1	1	↔

RESPONDING TO BIODIVERSITY ISSUES – CASE STUDIES

Microbat Survey

The Large-footed Myotis (*Myotis macropus*) has been recently detected for the first time foraging in many of Mosman's bays. Their high pitched calls, inaudible to human ears, were picked up on Anabat detectors and identified by Dr Leroy Gonsalves from NSW Department of Primary Industries. In addition, two roosting sites have been identified in Port Jackson and another roost in Middle Harbour was found to be a roost for Eastern Bent-wing Bats (*Miniopterus schreibersii*). Both these species are threatened in NSW.

The Large-footed Myotis is from the suborder Microchiroptera, commonly known as microbats. It has a wingspan around 28cm and weighs up to 9 grams. A membrane of skin extends from their ankles to the tip of their tail, creating a sheath, a key diagnostic feature when identifying microbats. Their defining feature is their large feet with hook shaped claws. They drag these along the surface of the water to catch small fish and insects. This is why they are commonly referred to as fishing bats.

McLeod Street Stormwater Drainage Reconstruction

The McLeod Street Bushcare group have contributed to the restoration of unmade McLeod Street for almost a decade; the group over the years have maintained their site to achieve positive results but noted the negative impacts of stormwater entering their Bushcare site. The Bushcare group's request for drainage reconstruction in Unmade McLeod came to fruition in 2015, when contractors were engaged to undertake careful hand construction using sandstone boulders to rock armour approximately 20 metres of the McLeod Street drainage channel, thus minimising further impacts such as erosion, weed and nutrient influx on the bushland/ Bushcare site by effectively channelling stormwater.

Rural Fire Service 10/50 Vegetation Clearing Scheme

In August 2014 the Rural Fire Service (RFS) brought into effect the 10/50 Vegetation Clearing Scheme. As a result of this scheme properties within entitlement areas have been able to remove any tree within 10m of a habitable building and shrubs and groundcovers within 50m of a habitable building without Council consent. When the scheme was introduced it applied to 56% of residential properties. A detailed and quantified response from Mosman Council and other Councils lead to reductions in this scheme. It was reduced to 37% in September 2014 and in August 2015 only 6% of Mosman properties are affected.

While it was designed to remove the red tape of dealing with local government and expedite personal bushfire protection, its loose guidelines were open to abuse. This was particularly the case in urban settings, where bushland fragments are well managed for bushfire risk. Mosman lost many significant trees under this scheme, for reasons other than threat abatement. Reasons cited included:

- Property Development
- View Improvement
- Nuisance



Many of these cases occurred where consent to prune or remove trees was denied by Council previously. Additionally, some cases of trees removed under the Scheme occurred outside the buffer zone specified. As a result Council has successfully prosecuted cases of non-compliance that have occurred as a result of the Scheme.

Council received numerous calls from concerned residents upset at the loss of trees in their neighbourhoods. In order to alleviate the loss of canopy cover, Council has doubled its 2014/15 budget for street tree planting. The program also identified six areas that were most affected and will plant canopy species on nature strips to improve canopy cover in these areas.

Dinghy Removal

It is illegal to store private property on council public land, except through a permit. While preparing the bushland at Beauty Point for an ecological burn, Open Space staff noted the presence of dinghies on the foreshore. An audit of the reserve found a total of 54 dinghies, kayaks and paddleboards tucked away in the bush. It has been observed that some of these vessels are derelict, left by residents that have given up their moorings.

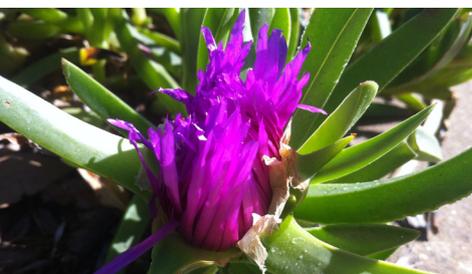
Beyond the illegality, there are a number of ecological concerns this practice raises. To protect against theft, many of these craft are secured to trees using rope or chain, damaging the tree over time. To reach their vessels, boat owners have trampled vegetation, creating 'goat trails' in a number of areas, this increase soil erosion and creates avenues for weed invasion.

Council staff have begun removing these vessels as part of the ongoing bushland management program, starting with the most derelict vessels.

Balmoral Foreshore – Grant Funding

Mosman Council secured grant funding under the Crown Lands Public Reserves Management Fund Program to enhance the environmental assets at Balmoral Park and Lawry Plunkett Reserve. This funding allowed Council to supplement current maintenance works under the Balmoral Reserves Plan of Management and achieve greater biodiversity outcomes in regards to bushland restoration, fire hazard reduction and feral animal control.

The funding increased the number of bush regeneration hours available for each site, expanding the areas of weed control and revegetation works. Additional hours were also put towards preparing for ecological burns. This will provide long term benefit by triggering the germination of native plants and protecting surrounding assets. The program also supported additional feral rabbit control works at both reserves.





4. WASTE

WASTE	2011-12	2012-13	2013-14	2014-15	Change from previous year
Total waste to landfill, including general cleanup (tonnes)	6,195	6,455	6,596	7,102	↑
Total waste to recycling including paper, co-mingled, metal and green waste (tonnes)	5,613	5,450	5,243	5,227	↓
Total waste to landfill, including general cleanup per capita (kg)	211	219	220	234	↑
Total waste to recycling, including metal and green waste per capita (kg)	191	185	175	173	↓
Green waste diverted from landfill per capita (kg)	66	72	65	78	↑

RESPONDING TO WASTE GENERATION ISSUES – CASE STUDIES

Litter Audit

Council engaged Two Hands Project to conduct a litter survey at six Mosman Beaches and five reserves. During May the litter survey was in full swing. First calculations for Micro plastic contribution per square metre suggest an average of 40 pieces on our beaches. This ranges from Chinaman’s with a lower average of 15 to Clifton Garden with more than 65 pieces smaller than a bottle lid.

Other items collected during the survey included thousands of every day single use plastic items such as food wrappers, plastic bags, straws and coffee cups. Some of the more unusual items uncovered include several aluminum cans from the 1980s, a mound of tennis balls and two mouth guards.



“Its in the Bag” Campaign

Mosman business operators had the opportunity to see first-hand the devastating impact of plastics on wildlife and the environment during the launch of a campaign by Mosman Council to switch businesses to paper bags. Owners of local food outlets Don Adan and Bottom of the Harbour learnt about how they could minimise their impact on the environment by reducing the use of disposable plastic before visiting Taronga Zoo’s Wildlife Hospital where they saw green turtles recovering after consuming plastic bags.

Both businesses are among 11 who have already signed up to the free paper bag trial following Council’s It’s in the Bag plastic bag reduction campaign launch which is raising awareness of single use plastic bags as a major litter item in the community and promoting a ‘one less plastic bag’ approach.

The campaign, funded by the NSW EPA’s Waste Less, Recycle More initiative, provides businesses with paper bags to trial as an alternative to plastic while members of the community will be supplied with reusable shopping bags to reduce the number of plastic bags accepted at the checkout. Members of the community are being encouraged to reduce their plastic bag use by refusing plastic at the checkout or taking their own reusable bags because residents need to support the switch to paper bags and recycled packaging.

The Litter Saga- Chalk Art

Over the Australia Day long weekend, artist Anton Pulvirenti from Zest Events International was engaged by Mosman Council to create a storyboard about marine plastics littering our waterways and contaminating the human food chain. Anton’s colourful chalk drawings along Balmoral Beach promenade reached hundreds of beach goers including families enjoying the last week of the summer holidays.

The chalk drawings raise awareness amongst visitors and the broader community about the problems associated with plastics and other litter and the impacts plastics can have not only on the marine environment and marine life but also on us. The chalk drawings are a call to initiate action to reduce plastic use and bin waste properly. In doing so we can reduce harm to birds and marine animals and at the same time ensure that the fish we eat carry minimal plastic contaminants.

New Photocopier Roll Out

Council rolled out a series of new photocopiers across the organisation. Consultation was sought from a number of staff and user groups to ensure that the printers met the needs of the organisation whilst reducing the environmental and economic impact of excess and unnecessary printing. The new printers and photocopiers have default black and white, double sided settings and will only print once released by the staff member’s swipe card. This reduces paper usage and wastage associated with unclaimed and excess printing.





5. TRANSPORT

TRANSPORT	2011-12	2012-13	2013-14	2014-15	Change from previous year
Registered vehicles in Council LGA	18,203	18,871	19,261	19,697	↑
Number of Council fleet vehicles	25	24	22	22	↔
GHG emissions from Council fleet vehicles (tonnes CO2-e)	163	86	76*	116	↑
Number of passengers using the Mosman Rider Bus	49,053	46,325	42,172	46,202	↑
Number of people using the GoGet carshare scheme	330	505	768	982	↑

*72.02t CO2-e was offset via Greenfleet.

^93.7t CO2-e was offset via Greenfleet.

RESPONDING TO TRANSPORT ISSUES – CASE STUDIES

Mosman Bicycle Plan

The Mosman Bicycle Plan was adopted at the end of 2014 and contains half a million dollars of bicycle infrastructure to be funded in conjunction with RMS over 5 years.

The plan was developed through collaboration between Council, consultants and Council's Community Group, the Active Transport Working Group (ATWG) which undertook much of the background work including surveying the proposed routes.

Approximately 25% of the works have already been completed with new bicycle lanes being installed on Canrobert Street, Avenue Road and Middlehead Road in 2014/15. This year a new bicycle lane will be installed on Raglan Street.

Council has received positive feedback about the new infrastructure.





6. PLANNING, BUILT ENVIRONMENT AND HERITAGE

POPULATION	2011-12	2012-13	2013-14	2014-15	Change from previous year
Estimated population of LGA – at 30 June	29,414	29,716	29,983	30,276	↑
Residential density (persons per hectare)	34.5	34.35	34.66	34.99	↑
NOISE					
General noise complaints received by Council	41	77	63	86	↑
Barking dog complaints received by Council	29	33	32	29	↓
DEVELOPMENT APPLICATIONS					
Total number of development applications received by Council	347	343	392	352	↓
Number of development applications approved	391	363	371	325	↓
ABORIGINAL HERITAGE					
Total number of Aboriginal heritage sites	105	105	105	105	↔
NON ABORIGINAL HERITAGE					
Total number of non-Aboriginal heritage items	485	485	485	485	↔
Number of built items*	444	444	444	444	↔
Number of landscape items*	34	34	34	34	↔
Number of archeological items	16	16	16	16	↔
Heritage conservation areas	13	13	13	13	↔

*Some items in Mosman are classified as both built and landscape items, therefore the breakdown figures add up to a number greater than the total number of items.

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RESPONDING TO PLANNING, BUILT ENVIRONMENT AND HERITAGE ISSUES – CASE STUDIES

Mosman Design Awards 2015

The 2015 Mosman Design Awards showcased some of the best examples of residential development and architectural excellence in Mosman. This year we received 15 nominations from many talented architects responding to questions of sustainability during design and construction. Each property was visited in late February and the judges took the opportunity to inspect, ask questions and appreciate the nominated properties. The high standard of the nominations made it a real challenge for the judges in deciding the winning properties.

Award winners included:

- 36 Plunkett Road, designed by Clinton Murray and Polly Harbison – Winner Contribution to the Built Environment
- 3 Prince Albert Street, designed by Tanner Kibble Denton Architects – Winner Heritage Conservation
- 16 Mosman Street, designed by Ian Moore Architects – Winner Alterations and Additions
- 100 Glover Street, designed by PCA Architects and developed by Helm Properties – Winner Multi Dwelling Development
- Mosman Preparatory School and the Greenwall Company – Winner Community Renewal
- 13 Thompson Street designed by Prue Murdoch – Winner People’s Choice Award

The next Mosman Design Awards will be held in 2017

Mosman Heritage Assistance Fund

The Mosman Heritage Fund continues to offer small dollar for dollar grants for conservation work to owners of heritage items and properties located within heritage conservation areas. During the 2014/15 financial year the Fund received 28 applications. Of these projects, nine were heritage items and nineteen were for properties in heritage conservation areas. Some of the projects funded involved the reinstatement of original windows, replacement of tessellated tiles, replacement of front fences, repainting works and tuckpointing of brickwork.

Review of bushland zonings

Over the last 18 months, the Urban Planning and Open Space teams have been reviewing the zoning of bushland areas in Mosman currently zoned RE1 Public Recreation with a view to rezoning suitable sites to E2 Environmental Conservation. A planning proposal is now being prepared to rezone select sites, based on the outcomes of the review and as per the Council resolution of 2 June 2015. This planning proposal is expected to be on public exhibition in late 2015, subject to gateway approval from the NSW Department of Planning and Environment.

Online delivery of DA approvals

On the 9 April 2015 Council’s Development and Services Section introduced the on-line delivery of Development Application (DA) approvals. This is part of a process that has moved Council closer to a more paper-less DA process.

Prior to 9 April DA approvals were issued in paper form which included no less than 12 A4 papers for the “Notice of Determination” as well as the stamped approved plans. Both sets of documents were duplicated and delivered by mail.

When considered in the context of some 300 applications per year Council saves on paper wastage by more than 14 reams of paper. The bigger benefit lies however in the ability for the Notice and Approved Plans to be distributed by the recipient to other parties involved in the detailed design and construction tendering of the project. If the architect, landscape architect, engineer received the document electronically, and the tendering is by electronic delivery of documents, the saving is magnified exponentially.



7. ENGAGEMENT AND EDUCATION FOR SUSTAINABILITY

EDUCATION	2011-12	2012-13	2013-14	2014-15	Change from previous year
Total number of environmental programs (workshops, events, surveys) delivered to the community.	20	63*	88*	78*	↓
Total number of environmental programs (workshops, events, surveys) delivered to Council staff.	8	25*	27*	6	↓

*additional inclusion of marketing campaigns, newsletters.

RESPONDING TO ENGAGEMENT AND EDUCATION FOR SUSTAINABILITY ISSUES – CASE STUDIES

There’s no such thing as the dog poo fairy

Mosman Council’s innovative ‘There’s no such thing as the dog poo fairy’ campaign has scooped the pool as winner in the Excellence in Communication for its (less than 30,000 population) category in the RH Dougherty Awards.

The campaign aimed to address the cleanliness of the streets, parks and reserves, and a reduction in the community’s enjoyment of these spaces caused by the non-compliance of dog owners with the Companion Animals Act through owners not picking up after their dogs.

The campaign was developed to target Mosman dog owners to inform, involve and engage them in the campaign with the ultimate goal of changing behaviour to the social norm expected by Council and the community.

Promoting the campaign to the wider Mosman community helped reinforce the message and encouraged dog owners to act responsibly by picking up after their dogs to ensure the continued cleanliness and health of the suburb and enjoyment of recreational pursuits by all.

The campaign resulted in a 53% reduction in the amount of dog poo found in Mosman Council’s parks and reserves.



Living Mosman Program Honoured

Mosman Council was honoured as a finalist in this year's LGNSW Excellence in the Environment Awards. Council received a Highly Commended for the Living Mosman program in the Community, Education and Empowerment Category (for Division B).

The Living Mosman program is an all-encompassing community education program which focuses on sustainability issues relevant to the residents of Mosman using apps and technology, social media, face to face workshops, guest speakers, and hands on programs to engage with a wide cross section of the community.

Youth Community Garden

In 2014/15 the View Finders environmental sustainability group successfully built a community garden at the Mosman Youth Centre. With the help of Adrian Baida from My Square Metre, the View Finders team created a sustainable edible garden with two more raised garden beds added in 2015. The garden is primarily made up of edible herbs and plants with the purpose of being a sustainable food source for the youth centre, and has recently been used by the community restaurant at Mosman Council's Senior Centre. As well as being a sustainable food source, the garden project has several other purposes including promoting environmental education, enhancing social inclusion through community connections, and promoting local health and wellbeing.

The View Finders team is made up of young people aged 14 to 21 from the Mosman area who volunteer their time to work on environmental projects, raising awareness for important environmental issues and helping to build natural environments.

Smooth Moves

On Saturday 28th March 2015, Mosman Council celebrated Earth Hour with a difference. Nationally Earth Hour aimed to support Aussie food and farmers by not only raising awareness of the Australian agriculture industry, but posing the question what will happen to our Australian farmers and Australian food sources as global temperatures rise. Here in Mosman we combined our love for Australian organic produce with the Earth Hour concept of switching off power, through the humble smoothie. Two bike blenders were set up at Spit West Reserve on Saturday morning, with passersby being encouraged to get on a bike and use pedal power to make their own delicious organic smoothie. Fun was had by all!

The Nappy Collective

Council participated in "The Nappy Collective" for the first time during October/ November 2014. Over a two week period generous Mosman residents donated more than 1200 disposable nappies at drop off points at the Library and Drill Hall. These nappies were then distributed to organisations that support families in crisis or in need such as women's crisis shelters and refuges, mothers facing homelessness, parenting support organisations and community organisations. Nappies are a basic healthcare need and lack of sufficient nappies can lead to an array of problems for disadvantaged families. Donated nappies help these families to focus more of their time and energy on getting their lives back on track.



FUTURE DIRECTIONS

Mosman Council is committed to protecting the environment and reducing its ecological footprint by identifying areas where improvements can be made and to formulate strategies to achieve better environmental outcomes in the future.

2014-15 Successes

There are a number of successes highlighted in this report:

- 5% decrease in Council's electricity usage
- 6% decrease in the amount of greenhouse gas emissions from Council energy usage
- 10% increase in number of passenger trips made on the Mosman Rider
- Discovery of a new threatened fauna species
- Completion of the Art Gallery Lighting Retrofit
- Slight increase in Bushcare Volunteers and Groups

Waste Management

Industry trends for light weighting of packaging means packaging is getting lighter, glass bottles are being replaced with plastic and thick newspapers and magazines are thinner and people are reading their news online. This has influenced the local waste diversion targets and most likely explains reduction in recycling. Waste to landfill is trending upwards with population growth. The need for Council and the local community to reverse these figures remains an imperative if we wish financial and environmental costs to be manageable in the future. Multiple strategies including funding from the EPA's Waste Less Recycle More Grant will assist in programs designed to help householders to reduce their waste and increase recycling by reducing contamination. Regional advertising through SHOROC is scheduled to highlight key areas of recycling to all householders such as recycling items from the bathroom and advertising in the Mosman Daily will target other specific areas of concern relating to waste such as the 'Hang on to the Bag' campaign. School and pre-school programs such as waste to music, growing your own food and how to recycle right workshops in schools further assist to increase public awareness and make a call to action.

2015-16 Planning

Going forward, Council will use the data from this report to help guide programs and actions for the coming year:

- Council will look at investigating funding options to retrofit old lighting in the remaining Council buildings such as amenity buildings
- Promotion of sustainable transport and implementing Council's Bike Plan including installation of bike racks where required
- Engage the community in waste, water and energy saving initiatives
- Update Council's flora and fauna survey
- Continue to engage Council staff on a wide range of sustainability programs
- Offer volunteer activities that support objectives of improving our environment that are not time heavy as people are generally time poor, so can't offer as much time as they have or would have liked
- Review Councils water use including open space irrigations systems





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