

MOSMAN

STATE OF THE ENVIRONMENT
Scorecard 2019-20

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INTRODUCTION

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 in length and is emphasised by more than a dozen headlands. Mosman is home to many popular swimming and recreation beaches and bays including Chinamans, Balmoral The Spit, Cobblers and Clifton Gardens. The majority of the foreshore include significant rocky areas, bushland, including many protected areas, parks and tourist attractions, such as Sydney Harbour National Park and Taronga Zoo.

The 2019 data showed 30,981 people lived in Mosman, with the median age of residents 42 years old. Children aged 0-14 years account for 17.9% of Mosman's population and people aged 65 years and over equate to 18.8% of the population.

Mosman Council's vision is to preserve and enhance biodiversity, including Mosman's bushland, parks, tree canopy, beaches and marine environment through best practice operational and maintenance programs, infrastructure upgrades, regulatory practice and education campaigns. Council's aim is to also reduce its carbon footprint and minimise its waste to landfill.





State of the Environment Report

This report aims to show that Council is sustainable and is actively managing the use of our local environment whilst conserving and protecting it for the enjoyment of future generations.

The State of the Environment (SOE) Report provides an annual snapshot of the condition of the environment, current impacts on the environment and the Council's response to these impacts.

The 2019-2020 SOE Scorecard summarises key areas of operation and projects undertaken by Council to improve the local environment for residents and visitors alike.

Key Areas

This SOE focuses on seven key areas chosen by the State Government, these include:

- Climate Change and Air Quality
- Total Water Cycle
- Biodiversity
- Waste
- Transport
- Planning, Built Environment and Heritage
- Engagement and Education for Sustainability

Within these areas are a number of standard indicators used to measure change. These indicators align with the goals and objectives of Council's MOSPLAN and allow for change in environmental management to be measured over time.

CLIMATE CHANGE AND AIR QUALITY

Air Quality	2016-17	2017-18	2018-19	2019-20	Change from previous year
Number of air pollution complaints received by Council	2	12	12	5	Down √
Energy	2016-17	2017-18	2018-19	2019-20	Change from previous year
Electricity use Council operations (kWh)	1,588,203	1,598,413	1,523,945	1,388,213	Down √
Council energy and consumption (GJ)	6,648	6,880	7,254	6,240	Down √
GHG emissions from Council energy and gas use (tonnes CO2-e)	1,511	1,493	1,414	1,206	Down √
Total residential and non residential electricity use for Mosman (MWh)	136,916	134,219	131, 834	130,397	Down √
Solar generation exported to the grid (MWh)	757	767	997	1,289	Up ↑

Planning for Climate Action

Mosman Council has a proud history of great work in environmental management. As a community we value our natural coastline, open space areas and tree-lined streets. To take the next step in Council's responsibility for environmental stewardship, Council in November 2019 declared a Climate Emergency. In July 2020 Council adopted the followingemissions targets:

- net zero emissions for Council operations by 2030
- aspirational net zero emissions for the community by 2040.

These targets are realistic and in line with many LGAs throughout Australia.

It is considered that the best way to achieve these targets is to prepare a Climate Strategy and Action Plan with extensive input from the community. The Climate Strategy and Action plan will:

- replace Council's current Environmental Management Plan and incorporate existing functions and actions Council is already undertaking.
- establish a clear policy direction for Council in alignment with Council's Strategic plan: MOSPLAN
- outline an emissions reduction pathway for Council
- facilitate prioritisation, scoping and costing of projects.
- provide leadership and build the community's capacity to reduce its emissions.

Council has also formed a Climate Action Community Consultative Committee to provide advice and recommendations to Council on this area.

Solar PV installation MBSC

New solar panels have recently been installed on the Marie Bashir Mosman Sports Centre. It is estimated that the 51kWpDC PV system will generate approximately 68,000kWh per year. This will save 61.2t CO2 in greenhouse gas emissions per year, and reduce electricity purchase by 27%.

Council partnered with PV Industries, a Sydney-based start-up that recycles solar panels, to divert the old components from landfill. The aluminium racking was recycled through a metal recycling partners, and the panels and inverters were transported to PV Industries' facility for future processing. Some panels were also sent to the University of New South Wales, for research and development on advancing PV end of life solutions and recycling technology.

Council reducing energy use

It has been one full year since the Civic Centre and Depot buildings were renovated.

Upgrades included LED lighting with sensors and timers that reflect the building use as well as energy efficient air conditioning units. COVID-19 lockdown also resulted in lower energy consumption due to a large number of staff working from home between March and June 2020.

TOTAL WATER CYCLE

Stormwater	2016-17	2017-18	2018-19	2019-20	Change from previous year
Number of gross pollutant traps (GPTs)	35	35	35	35	Stable ←→
Total gross pollutants removed from GPTs (tonnes)	368	N/A	305	260	Down √
					Change from
Water Consumption	2016-17	2017-18	2018-19	2019-20	previous year
Total LGA potable water use (kilolitres)	2016-17 3,201,659	3,429,718	2018-19 3,262,836	2019-20 3,059,919	previous year Down ↓

^{*} Based on 2019 Estimated Resident Population of 30,981.

Drought

2019 was Australia's warmest year on record, marked by severe, protracted drought throughout New South Wales and Sydney. In response Level 1 water restrictions were introduced by Sydney Water on 1 June 2019 for the first time in more than a decade. Stricter Level 2 restrictions were introduced in December 2019 when dam levels fell to 45%. In response to the restrictions Council limited irrigation of sport fields and turns off it's public water fountains. Heavy rainfall in February 2020 (which boosted Greater Sydney's water supply levels to 81.5%) saw Sydney Water drop restrictions back to Level 1, which remain in place.

Gross Pollutant Traps

The volume of Gross Pollutant varies from year to year based on numerous factors. From the number of rainfall events to the heat which may affect bark shedding, wind gust (which affects leaves being blown off trees) to street cleaning time all affect the volume of litter entering our system. Tonnages are lower in 2019/20, most likely due to drought conditions for more than half the year.

SQIDs

A comprehensive review of SQIDs was undertaken in December 2019. A prioritised list of possible 'upgrades' was recommended. Based on budget availability, Council is working its way through the list.

Kahibah Creek maintenance

In March 2019 Council undertook significant earthworks at Kahibah Creek to reduce stormwater and flooding of Balmoral Oval. The channel was deepened and a sandstone block retaining wall was installed to withstand peak flows and divert water back into the allocated drainage channel.



BIODIVERSITY

Biodiversity Condition	2016-17	2017-18	2018-19	2019-20	Change from previous year
Noxious weed* notices	0	0	0	0	Stable ←→
Noxious weed* assessments undertaken	15	14	22	15	Down ↓
Number of registered active bushcare volunteers	86	86	95	48†	Down √
Bushcare Program volunteer hours	1,860	1,700	2,200	840 ‡	Down √
Number of active bushcare groups	21	22	20	18 ‡	Down ↓
Total number of native plants supplied to volunteers, contractors and residents	13,000	10,000	9,000	7,000 ‡	Down √
Number of native plant species recorded in LGA	490	490	490	490	Stable ←→
Number of threatened flora species	3	3	3	3	Stable ←→
Number of threatened fauna species	5	5	5	5	Stable ←→
Number of endangered ecological communities	2	2	2	2	Stable ←→
Number of endangered fauna populations	0	0	0	0	Stable ←→
Number of feral fauna species targeted through programs (eg. rabbits, foxes, cats)	1	1	1	2	Stable ←→

 $^{^{*}}$ The term noxious is now redundant. Weeds are managed through the Biosecurity Act.

 $^{^{\}scriptscriptstyle\dagger}$ Numbers reduced due to COVD-19 and improved volunteer recordkeeping.

[‡] Numbers reduced due to COVI-19 lockdown.

Revegetation at Balmoral Park

After many months of intensive weed control at Balmoral Park, Council bush regenerators have used favourable spring-time conditions to plant over 1100 endemic native species. This newly revegetated plot runs adjacent to the gully off Coronation Avenue, in an area which was once over-run with weeds such as Morning glory, Lantana and Palm grass. For this project, Council selected a range of sandstone gully forest natives suited to a north-eastern facing aspect and sparse canopy cover. Faster growing shrubs such as Acacia linifolia and Dodonaea triquetra and canopy species Corymbia gummifera will provide a base layer of shade and moisture for other seedlings to establish and, over time, these plants will grow to their full potential through continued on-site maintenance. This will ensure a newly rejuvenated shrub and canopy layer at Balmoral Park.

National Tree Day July 2019

Local families, corporates, bushcarers and Councillors Willoughby and Sherlock gathered on Sunday 28 July 2019 with Mosman Council to celebrate National Tree Day with a community planting session at Spit Reserve West. The aim was to restore native canopy cover using a range of indigenous trees and shrubs. 350 native trees were planted thanks to the overwhelming volunteer turn-out. Council also supplied trees to Mosman Public School, Ballykin Early Learning Centre and Active Kids Group for Schools Tree Day. Every year this event sees 300,000 people around the country take part in the fesitivities, making it Australia's largest nature-care initiative. Council wishes to thank all volunteers, staff and members for a job well done.

Street Tree Planting

Council completed another street tree planting program in 2019/20 with over 300 semi-mature trees planted across Council's streets and parks. Locations were identified to complement existing tree avenues, increase canopy and habitat in Biodiversity and Habitat link areas. The tree planting also revitalises our ageing canopy to maintain the tree lined streets and parks Mosman is well known for. While conditions have been tough with the prolonged drought and high winds, an 85% survival rate was achieved. The 15% lost trees were replaced in Autumn 2020.

Rawson Park wildlife corridor

Last year, Federal Member of Parliament, Ms Zali Steggall OAM, MP announced grant funding for the Communities Environment Program open to Warringah electorate groups for 2019/2020. Mosman Council was successful in receiving support for restoration works adjacent to Rawson Oval. The works were in collaboration with Mosman Parks and Bushland Association.

With significant weed control, debris removal and mulching 500 native plants were installed. The project will enhance a wildlife corridor, allowing safe passage and habitat for native fauna and replenish food sources.

White's Seahorse

In March 2020 Clifton Gardens was chosen as the site for pilot project led by Sea Life Sydney Aquarium in collaboration with the NSW Department of Primary Industries (DPI) Fisheries and the University of Technology Sydney (UTS). This important conservation project aims to help recover this iconic Endangered species. The decline in White's Seahorse is largely due to habitat loss and degradation. Artificial habitats inspired by discarded crab traps (called seahorse hotels) provide a temporary structure for corals, sponges and algae to grow on. The seahorse hotels are biodegradable so they break down over time, leaving a new natural habitat behind. The seahorse colony is monitored regularly and recent reports indicate that they are thriving.

WASTE

Waste	2016-17	2017-18	2018-19	2019-20	Change from previous year
Total waste to landfill, including general cleanup (tonnes)	6,701	7,050	6,695	7372*	Up↑
Total waste to recycling including paper, co- mingled, metal and green waste (tonnes)	4,326	3,928	3,856	4,613†*	Uр↑
Total waste to landfill, including general cleanup per capita (kg)	218	248	217	238*‡	Uр↑
Total waste to recycling, including metal and green waste per capita (kg)	141	138	125	149*‡	Up↑
Green waste diverted from landfill per capita (kg)	49	43	46	68†	Uр↑
Total e-waste collected	59,039	52,871	34,189	24,958	Down √

 $^{^{\}ast}$ 10% increase consistent across other LGAs and attributable to COVID-19 lockdown.

 $^{^{\}scriptscriptstyle \dagger}$ Increase mainly attributed to increase in vegetation due to Autumn rain.

 $[\]ddagger$ Figures based on 2019 Estimated Resident Population of 30,981 for 2019.

Council Depot improves recycling

Enhanced source separation of street sweepings and waste from Council operations, parks and gardens has seen a significant improvement in recycling rates at the Council Depot. The new source separation system was implemented and yielded a 20% recycling rate. 2019/20 is the first full year and yielded a recycling rate of 56%. This was mainly achieved by separating street sweeping and garden waste from other waste streams.

Reducing waste to landfill

Council has partnered with The Bower, a charity committed to reducing landfill, to offer their Collection and Rehoming service to Mosman residents at no cost. Donated household goods, are collected by The Bower and resold at low cost or donated to people in need.

Auditing of MUD's recycling

Media discussions on what can and can't be recycled can cause confusion in relation to home kerbside recycling. In response, Know Waste returned this year to multi-unit dwellings to finish installing educational bin stickers and to audit waste and recycling bins. The programme was co-funded by Council and the NSW EPA (Better Waste and Recycling Grant) with the aim to increase community knowledge on how to use our bin system correctly. A total of 4,963 colour coded bin tags were issued as part of the auditing process. Green tags indicated correct bin usage and red tags highlighted what needed to change. Over a three week period yellow lidded recycling bins had an improvement range from 51% to 69% with a final overall contamination rate of less than 1% recorded.

Where does our recycling end up?

What happens to our recycling:

- Councils recycling goes to Kimbriki Environmental Enterprises. From there it is either processed on site or transported for further recycling.
- Glass and Plastics are converted into road base, cement, sand blast medium and other sand products.
 Hard plastics our washed and flaked locally for remanufacturing in Australia and exported.
- Metals including steel and aluminium are transported to a local metal recycler.
- Paper and cardboard are transported to Visy Smithfield for pulping and manufacture of new cardboard, boxes and packaging locally.
- Garden Organics are processed into compost at Kimbriki. 'Greenlife' compost is sold locally. The remaining material is shredded and hauled firstly to ANL Badgerys Creek where it is composted and blended to make bagged products for re-sale throughout NSW.

TRANSPORT

Transport	2016-17	2017-18	2018-19	2019-20	Change from previous year
Registered vehicles in Council LGA [†]	19,791	19,820	19,697	20,007*	Uр↑
Number of Council fleet vehicles	22	21	21	21	Stable ←→
GHG emissions from Council fleet vehicles (tonnes CO2-e)	117	79	66	32.25†	Down √
Number of carshare members as at 30 June 2020	825	889	996	1,177	∪р↑

^{*} Source: RMS NSW, 2019.

Car Share

Council continues to support car share. The car share service providers have been well supported by the community, particularly after COVID-19 lockdown. As at 30 June 2020 there are a total of 1177 registered car share customers in the Mosman LGA.

Active Transport Strategy

The Mosman Active Transport Strategy (MATS) 2020-2025 is currently underway. Council will use this Strategy to direct planned pedestrian and cyclist infrastructure improvements around Mosman over the next five years. Informed by the recent community input, the Strategy is currently being drafted. The strategy will identify and prioritise walking and cycling infrastructure projects to be implemented by Council over the next five years.

Active Transport infrastructure upgrades

As a part of Councils objective for reducing local vehicles' trips and encouraging cycling and walking, improvements to the cycling network where made at various locations including:

- Prince Albert Street
- Cowles Road
- Bradleys Head Road
- Middle Head Road

Improvement to the pedestrian network were also made at Earl Street, Glen Street, Harnett Avenue, Milton Road, The Esplanade and Wolseley Road.

 $^{^\}dagger$ Decrease attributable to operational changes made to staff useage of cars and COVID-19 lockdown.



PLANNING, BUILT ENVIRONMENT AND HERITAGE

Population	2016-17	2017-18	2018-19	2019-20	Change from previous year
Estimated population of LGA - at 30 June (ERP)	30,465	30,877	30,877	30,981*	N/A
Residential density (persons per hectare)	35.22	35.70	35.70	35.80	N/A
Noise	2016-17	2017-18	2018-19	2019-20	Change from previous year
General noise complaints received by Council	49	83	33	112	Up↑
Barking dog complaints received by Council	25	38	66	60	Down √
Development Applications	2016-17	2017-18	2018-19	2019-20	Change from previous year
Total number of development applications received by Council	260	258	249	152	Down √
Number of development applications approved	197	231	206	118	Down √
Aboriginal Heritage	2016-17	2017-18	2018-19	2019-20	Change from previous year
Total number of Aboriginal heritage sites	105	105	105	105	Stable ←→
Non Aboriginal Heritage	2016-17	2017-18	2018-19	2019-20	Change from previous year
Total number of non-Aboriginal heritage items	483	481	481	481	Stable ←→
Number of built items*	444	445	445	445	Stable ←→
Number of landscape items*	34	34	34	34	Stable ←→
Number of archeological items	13	10	10	10	Stable ←→
Heritage conservation areas	13	13	13	13	Stable ←→

 $^{^{\}ast}$ Based on 2019 Estimated Resident Population of 30,981.

Mosman Public Domain Manual

The Mosman Public Domain Manual sets guidelines, design coordination and material palettes for all public domain, streetscape and maintenance works in the Mosman LGA.

The manual has been written for a broad audience and is intended to be used by Council, residents, designers, developers, building owners and their agents (such as urban designers and landscape architects). In addition, the manual will be used by planners and other staff within Mosman Council to assess proposed development applications within the LGA.

The 'Public Domain Manual' applies to all work carried out in the public domain which are under or will revert to the ownership, care, control and management of Mosman Council

The manual is not intended to initiate an extensive program of works but will be used to inform any works within the public domain that occur under Council's normal operations. This manual works in conjunction with Council's standard details to ensure new works implemented over time are cohesive and consistent.

Local Strategic Planning Statement

During 2019 and 2020, Council undertook a significant project to prepare the Mosman Local Strategic Planning Statement (LSPS), which sets out the Council's 20-year vision for land use planning in Mosman. The Mosman LSPS builds upon the vision expressed in Council's Community Strategic Plan MOSPLAN 2018-2028, identifying that as Mosman grows and changes to meet community needs, a key priority for Council will be to maintain the high levels of environmental amenity, liveability and landscape quality that characterise the municipality. Consultation with the Mosman community undertaken during June-August 2019 confirmed the importance of these values.

Whilst Mosman's population growth is anticipated to be modest compared to other areas in Greater Sydney (increasing from 30,215 people in 2016, to 32,250 people by 2036), the Mosman LSPS notes that challenges will be faced in meeting future housing demands within the limits of available land, preserving Mosman's distinctive character and special sense of place, and ensuring adequate infrastructure capacity to support growth. A suite of planning priorities and actions relating to housing, local centres, infrastructure and the environment will guide future growth. The Mosman LSPS was endorsed by Council on 3 December 2019, and officially made by Council in March 2020 following the receipt of support from the Greater Sydney Commission.



Scenic Protection Area advocacy

Sydney Harbour is widely recognised as one of the most beautiful urban harbours in the world and the gateway to Sydney. Mosman, being prominently located within Sydney Harbour across from The Heads, is an integral part of this landscape, and protecting the visual significance and landscape quality of Mosman's foreshore slopes, and the amenity of existing residential properties, has been a Council priority for many years. Through careful planning and ongoing lobbying by Council, the foreshore lands - known as the Mosman Scenic Protection Area - have been excluded from the NSW Government's Housing Code since 2009.

This exclusion, however, is due to cease on 30 November 2021. Without it, new dwellings and significant alterations to existing dwellings could be built without the need to submit a development application to Council, leaving the foreshore slopes vulnerable to development that had no consideration of Council's policies to maintain the existing landscape, consider submissions from the community and to protect neighbouring properties from view loss, privacy loss and overshadowing. Throughout 2019-2020 Council has continued its campaign of lobbying the State Government to ensure ongoing protection of this important area.

Plan of Management for Mosman's Open Space

At the beginning of 2020 the Council's Urban Planning Team held community drop in sessions at Reid Park and Sirius Cove reserve. The sessions coincided with a consultation program being run to canvass community suggestions, ideas and feedback on the development of a Plan of Management for open space at Reid Park, Sirius Cove Reserve, Harnett Park and Curraghbeena Park.

The sessions were well attended by members of the public who braved the elements to get involved. Issues discussed were varied including off-leash dog walking, kayak and dinghy storage, vegetation management, new ideas for park furniture and much more. Over 250 submissions were received at the drop in sessions and online via Council's consultation webpage. The submissions helped inform the draft Plan of Management which is anticipated to be exhibited in late 2020.

ENGAGEMENT AND EDUCATION FOR SUSTAINABILITY

Education	2016-17	2017-18	2018-19	2019-20	Change from previous year
Total number of environmental programs (workshops, events, surveys) delivered to the community.	87	63	65	40*	Down↓
Total number of environmental programs (workshops, events, surveys) delivered to Council staff.	11	5	12	6*	Down↓
Number of HarbourCare volunteers	19	26	67	29†	Down √

^{*} Decrease attributable to COVID-19 lockdown.

Reuseable Cup Trial

The Huskee Cup Trial was launched in September 2019 in order to reduce the quantity of single -use cups going to landfill. The programme allowed customers to return their used cup in exchange for a clean one. This system was focussed on people who have multiple take away coffees in a day. Thirty two percent of cafes approached registered for the trial and were listed on both Huskee and Responsible Café website sites. One café carefully adapted the trial to better suit their particular clientele. The end result being reusable cups regularly being picked-up and returned by customers on their way to gymnasiums and other exercise facilities. Over the seven week trial it was estimated that 2,300 cups were diverted from landfill.

Seaside forage

In August 2019 Diego Bonetto, experienced forager, hosted a seaside forage at Rosherville Reserve. Residents gathered together at the Reserve to better understand the diversity of weeds, indigenous plants and seaweeds suitable for the dinner plate. (Please be aware when foraging that there are many plants that are poisonous to humans. Do not harvest plants you are not sure about).

Ocean Action Pod

The Ocean Action Pod, a multi-media educational experience created by the Total Environment Centre, appeared on Balmoral Beach in October 2019 to engage the community about the growing problem of plastic pollution.

[†] Decrease attributable to COVID-19 lockdown and enhanced volunteer recordkeeping.



FUTURE DIRECTIONS

Mosman Council is committed to protecting the environment and has set a net zero emission target by 2030 for Council operations.

Future directions include:

- Development of Climate Strategy and Action Plan
- Forming of the Climate Action Community Consultative Committee.
- Monitor SUDs' waste disposal and educate as necessary
- Increase street tree planting to increase canopy cover in areas susceptible to urban heat island effect
- Expand the HarbourCare and BushCare programs and encourage foreshore community engagement and connectivness based on environmental protection works
- Continue bushland restoration works including increase in 90%+ native vegetation cover
- Continue to install solar PV to suitable Council building assets
- Install EV charging station at rear of Council Civic Centre.
- Investigate and prepare Council fleet plan for transition to EV and hybrid models.
- LED lighting upgrades at Vista Street Carpark, Drill Hall and Marie Bashir Mosman Sports Centre.
- Community education
- Textile recycling service to begin in October 2020.
- A public place single-use coffee cup collection and recycle service.

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Mosman Council

