

MOSMAN

STATE OF THE ENVIRONMENT
Report 2017-21



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# **INTRODUCTION**

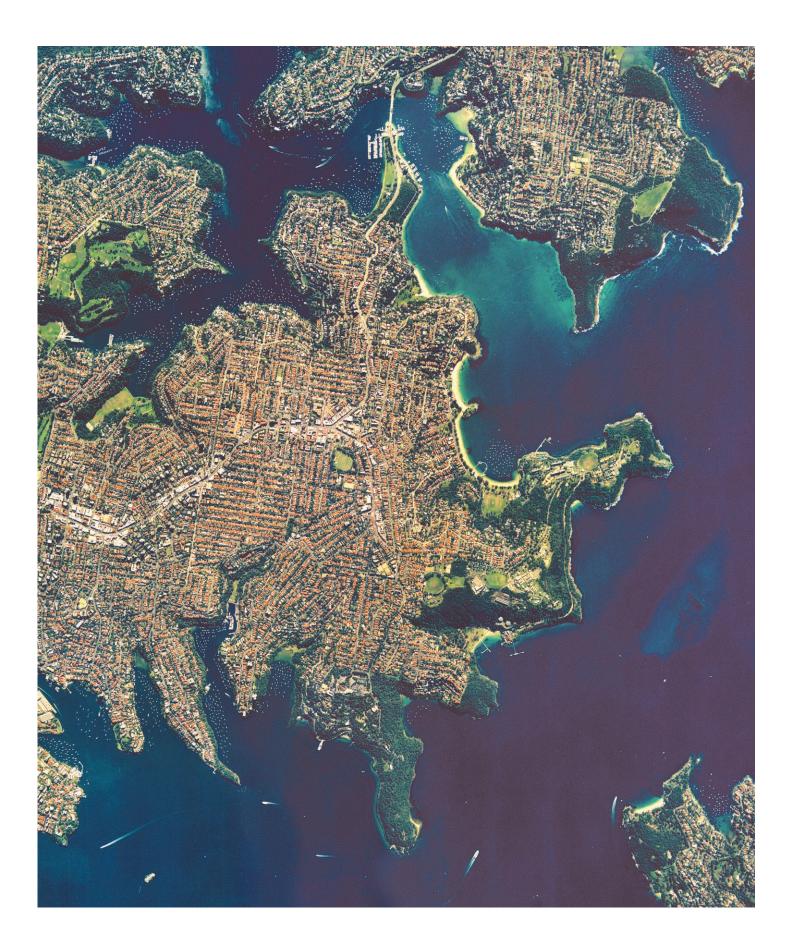
#### The Mosman Local Government Area

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 2017-2021 SOE Report 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	2017-18	2018-19	2019-20	2019-20	Change from previous year
Number of air pollution complaints received by Council	12	12	5	2	Down↓
Energy	2017-18	2018-19	2019-20	2020-21	Change from previous year
Electricity use Council operations (kWh)	1,598,413	1,523,945	1,388,213	1,223,90	Down <b>√</b>
Council energy and consumption (GJ)	6,880	7,254	6,240	5,594	Down ↓
GHG emissions from Council energy and gas use (tonnes CO2-e)	1,493	1,414	1,206	1,082	Down <b>√</b>
Total residential and non residential electricity use for Mosman (MWh)	134,219	131, 834	130,397	130,130	Down <b>√</b>
Solar generation exported to the grid (MWh)	767	997	1,289	2,072	Uр↑

#### **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 following emissions 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.

# **Council's Climate Change Response**

Council in November 2019 declared a State of Emergency in regard to climate change. At the following meeting of 3 December 2019 Council resolved to prepare a Climate Change Action Plan. In July 2020 Council adopted the following targets:

- Net zero emissions by 2030 for its operations, and
- An aspirational target of net zero emissions by 2040 for the Mosman community

It then held several workshops including a community workshop in July 2020 on Mitigation, an Adaptation and Resilience workshop and Future Actions workshop in August 2020. Council then held a Climate Forum in September 2020 with guest speakers from all levels of government. In October 2020 Council established a charter and membership for a new Climate Action Community Consultative Committee. The committee has since held three meetings and helped in the preparation of Council first strategic document in response to climate change the 'Climate Action Plan - Mitigation Strategy' which was adopted by Council in April 2021 after extensive community consultation. Council is also facilitating meetings between schools in regard to action on climate change.

#### **Climate Mitigation Actions**

In recent years Mosman Council has upgraded the lighting in its largest Council buildings to more energy efficient lighting. The latest building to undergo this upgrade was Council's Depot building. In March 2018 the lights at the Depot were upgraded to energy efficient LED lights. Further upgrades to Civic Centre and Library were also completed in 2019 as part of the broader renovation work. This included:

- Installation of motion sensors and lights
- Automated light control units throughout Civic Centre to match lighting with usage requirements
- Upgrade of the Council Civic Centre air conditioning units to provide energy efficiency

Council has also progressed the acceleration of residential street lights to LED. Since mid-February 2021 Ausgrid has been replacing luminaires with LEDs as part of the acceleration program. The project is 93% complete with the existing 80W MBF – Sylvania Suburb luminaires changed to 17W LED Aldridge luminaires. When complete the Program will reduce carbon emissions from streetlights by 200 tonnes per year and reduce Council's energy cost for streetlighting.

Council also upgraded its solar panels on Marie Bashir Sports Centre. It is estimated that the new 51kW 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 also supported public schools in the installation of solar panels by providing the Solar my School program. Each school through this program was able to get an assessment of cost benefits in solar installation. The program so far has resulted in Mosman and Beauty Point primary schools having solar systems installed.

These programs build on the community's take-up of solar, which has seen the number of households with solar increase by more than 15 per cent from 2019 to 2020, contributing to a reduction in the local carbon footprint. The number of Mosman households with solar has almost doubled since 2014 to nearly 600 properties last year with a corresponding doubling in the volume of surplus energy exported from Mosman to the grid over the same period.



# **Get Climate Clever and cut energy costs**

Want to do your bit to address climate change but not sure where to start? Council has made an arrangement with ClimateClever to help you understand your carbon footprint and what you can do to reduce it.

Council's partnership with ClimateClever entitles Mosman residents and schools to a 50% discount on a year's subscription.

Following years of research, ClimateClever has created an innovative, data-driven platform. Their apps enable schools and homes in Mosman to easily:

- calculate and track their carbon footprint;
- conduct an audit of their buildings/houses; and
- create a personalised action plan to reduce consumption, costs and carbon emissions across all utilities (electricity, gas, water and waste).

Mosman Council has also partnered with Wattblock, a specialist in energy efficiency for apartment buildings, with a series of four webinars to help strata committees make good decisions, save tenants money and boost property valuations. Strata bodies are also able to arrange a free assessment of individual unit blocks to personalise actions to minimise energy use.

# **TOTAL WATER CYCLE**

Stormwater	2017-18	2018-19	2019-20	2020-21	Change from previous year
Number of gross pollutant traps (GPTs)	35	35	35	35	Stable ←→
Total gross pollutants removed from GPTs (tonnes)	-	305	260	350	Uр↑
Water Consumption	2017-18	2018-19	2019-20	2020-21	Change from previous year
Total LGA potable water use (kilolitres)	3,429,718	3,262,836	3,059,919	3,506,150	Uр↑
Total residential potable water use (kilolitres per capita*	113	105	99*	113	Uр↑
Total Council potable water use (kilolitres)	63,313	60,739	63,273	48,664	Down <b>√</b>

<sup>\*</sup> 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 on sport fields and turned 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.

#### **Water Refil Stations**

Following the success of previous installed water refill stations Council continues to install refill water stations at popular parks, walking trails and playgrounds. The water stations are provided to encourage residents and visitors to refill their own water bottles, rather than purchasing single use plastic bottles of water.

## **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.

# Storwater Quality Improvement Devices (SQIDs)

There are over 30 SQIDs throughout Mosman which Council maintains and operates. These units filter flows from over 80% of Mosman's drainage catchment before they enter the harbour. Significant works undertaken on Mosman SQIDs during the last four years included:

- Botanic Road Stormwater Harvesting System Upgrade The Botanic Road Stormwater Harvesting Scheme was originally completed in 2008. Following a review of the system in 2016, upgrades were undertaken in late 2017 and the unit has been reliably supplying irrigation waters for Balmoral Oval since.
- Cowles Road SQID Upgrades were carried out to the Cowles Road SQID in 2017 and 2019, Including an upgrade to the lid, introducing a diversion weir and installing surcharge points for the unit.
- Balmoral Oval/Balmoral Sailing Club SQID The Balmoral Sailing Club SQID is one of the oldest SQID units in NSW. In 2020 exclusion bars were constructed to stop large debris reaching and damaging or blocking the SQID, which is now operating with improved efficiency.
- Drill Hall Common Stormwater Harvesting Upgrade the Drill Hall Common Stormwater Harvesting Scheme was originally completed in 2009. Following a review in 2020, upgrades were undertaken in early 2021 and the unit continues to supply irrigation waters for Rawson Oval.

# **BIODIVERSITY**

Biodiversity Condition	2017-18	2018-19	2019-20	2020-21	Change from previous year
Noxious weed* notices	0	0	0	0	Stable <b>←→</b>
Noxious weed* assessments undertaken	14	22	15	16	Up <b>↑</b>
Number of registered active bushcare volunteers	86	95	48	63	Uр↑
Bushcare Program volunteer hours	1,700	2,200	840	1,180	Up <b>↑</b>
Number of active bushcare groups	22	20	18	22	Up↑
Total number of native plants supplied to volunteers, contractors and residents	10,000	9,000	7,000	12,000	Up↑
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 <del>← →</del>
Number of endangered fauna populations	0	0	0	0	Stable ←→
Number of feral fauna species targeted through programs (eg. rabbits, foxes, cats)	1	1	2	2	Stable <del>← →</del>

 $<sup>^{\</sup>ast}\text{The term}$  noxious is now redundant. Weeds are managed through the Biosecurity Act.

### **Tree Management**

In July 2017 Council adopted a revitalised Street Tree Masterplan for Mosman LGA. The aim of the new Street Tree Master Plan is to sustain and further enhance Mosman's streetscape. Street trees provide habitat corridors for local fauna, increase shading of hard surfaces (such as parking lanes, roadways and infrastructure) and provide significant amenity and character to the local area. Further, the amendments are aimed at reducing long-term maintenance costs and nuisance through more appropriate species selection. Each year in addition to several thousand native tubestock being planted and Council National Tree Day participation, Council plants new trees. On average about 300 semi-mature street trees are planted throughout Mosman streets and parks.

Council in 2017 also updated its Urban Forest Management Policy. This new policy represents the consolidation of various tree-related policies and aims to provide clarity, easier access and transparency for both staff and members of the community when managing trees in Mosman.

Council also launched a new app called Trees Mosman. Trees Mosman offers a simplified way to submit a tree permit application, request a street tree planting, report suspicious tree work and determine tree protection zones when planning construction or development works.

Trees Mosman houses all tree information in one handy app and will simplify the tree permit process and better define tree-related policies while providing images and descriptions of exempt tree species.

#### **Habitat trees**

Over the past several years Council has been working to increase native fauna and preserve local biodiversity. Council has created several species specific 'Habitat Trees' and terrestrial habitat areas in dead or declining trees using techniques developed in-house. Through this initiative, Council hopes that these creations will become nesting sites for native birds, small mammals and reptiles, allowing wildlife to steadily increase while preserving the local natural beauty that Mosman is renowned for.

Trees generally kept have numerous habitat hollows at many different heights up and down the tree.

### **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.

#### **Environmental Volunteer Programs**

Council's Bushcare and HarbourCare Programs prior to COVID continued to grow in numbers as Council welcomed more volunteers on board. Council has volunteers regenerating natural areas and collecting rubbish from along our foreshores and beaches, helping to keep our Harbour clean. Data is then reported back to Council to help shape bushland restoration works, education campaigns and infrastructure development.

#### **Bushland Management**

In 2019, Council conducted in depth mapping of native vegetation through managed bushland sites, including studies on weed density and comparisons to the 2011 and 2016 studies. Findings were positive and reflected the quality work conduced across managed bushland in Mosman. The survey recorded 74% of Mosman's Bushland reserves at the top tier for native resilience, meaning an overall 10% increase from the previous survey conducted in 2016. The survey also reaffirmed 490 indigenous flora species (including two threatened species) and two significant ecological communities within our LGA. As a result of the survey, Council resolved in May 2019 to extend the bushland restoration contracts for a further and final three years until the end of May 2022.

Council was successful in receiving support through the Communities Environment Program for restoration works adjacent to Rawson Oval. The project enhanced a wildlife corridor, allowing safe passage and habitat for native fauna and replenished food sources through the planting of indigenous trees, shrubs and ground covers between Sydney Harbour National Park and Bradley Bushland Reserve. In preparation, Council contractors have been hard at work targeting Asparagus Fern (Asparagus aethiopicus), Morning Glory (Ipomoea indica) and Coastal Morning Glory (Ipomoea cairica) across the site. One Weed of National Significance - Madeira Vine (Anredera cordifolia) - was also recorded and targeted for eradication by our contract teams.

Recent improvement works have been undertaken by Council at Kahibah Creek to reduce stormwater and flooding of Balmoral Oval. The creek functions as headwaters for the catchment and in recent times has reached capacity due to heavy rainfall and increased storm activity. These events would regularly cause flooding to adjacent buildings and whilst the works will not eliminate this it will reduce the frequency. Significant earthworks were required to deepen the channel and a sandstone block retaining wall was installed to withstand peak flows and divert water back into the allocated drainage channel.

The project also provided an opportunity for Council to carry out significant bush regeneration works in the bushland directly adjacent to the creek. Improved access along the HMAS Penguin boundary also called for comprehensive primary weed control of vines and woody weeds above the escarpment and has greatly assisted the long term restoration goals of Council contractors who continue to service the area. Other project works included the revegetation of disturbed creek banks with native sedges and other planting work using local native species directly adjacent to the creek.



# **WASTE**

Waste	2017-18	2018-19	2019-20	2020-21	Change from previous year
Total waste to landfill, including general cleanup (tonnes)	7,050	6,695	7,372	6,921	Down <b>√</b>
Total waste to recycling including paper, co- mingled, metal and green waste (tonnes)	3,928	3,856	4,613	4,360	Down <b>√</b>
Total waste to landfill, including general cleanup per capita (kg)	248	217	238*	223	Down <b>√</b>
Total waste to recycling, including metal and green waste per capita (kg)	138	125	149*	141	Down <b>√</b>
Green waste diverted from landfill per capita (kg)	43	46	68	52	Down <b>√</b>
Total e-waste collected (kg)	52,871	34,189	24,958	23,744	Down <b>√</b>

<sup>\*</sup> Figures based on 2019 Estimated Resident Population of 30,981.

# **Recycling Initiatives**

Each February and August approximately 800 mattress and 30 tonnes of e-waste are collected from Mosman residents. This means the diversion of approximately 60 tonnes of waste going into landfill. The mattress is taken apart and recycled. The metal springs are removed and turned into products like roof sheeting. The foam is removed and recycled into carpet underlay. The timer and husk is used for kindling, weed matting, mulch and animal bedding.

The e-waste is taken to a processing facility were items are stripped back bare and components recycled. TV's and computers are still the most common items collected.

In 2018 Council, through the Northern Sydney Regional Organisation of Councils agreed to contribute to a Community Recycling Centre located at Artarmon for one year. The Community Recycling Centre provides a valuable free collection service to Mosman residents to dispose items not permissible in landfill sites through normal waste disposal practices. The majority of items are recycled and include paints, gas bottles, ink cartridges, x-rays, car oil and other types of oil. The site at Artarmon is roughly 15 minutes from the Mosman Local Government Area and Mosman contribution cost equates to \$4.13 per Mosman household.

Soft plastics, unwanted clothes and e-waste can now be easily recycled for free for six months through Council's partnership with RecycleSmart.

# Kerbside collection of domestic waste recycling

With the introduction of the China Sword policy the exporting of recycling material to China is strictly limited to high quality recycling materials. This led to a significant change in the recycling market within Australia and recycling material ending up in landfill. Fortunately for Mosman through a tender process run by Kimbriki was able to ensure all its kerbside collected recycling material was recycled locally. This includes;

 Glass and Plastics (yellow lidded bin): 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 (no bans on flake).

- Metals (yellow lidded bin): Steel and aluminium are transported to a local metal recycler.
- Paper and Cardboard (blue lidded bin): All clean cardboard and paper transported to Visy Smithfield for pulping and manufacture of new cardboard, boxes and packaging locally.
- Garden Organics (green lidded bin): Made into compost at Kimbriki. 'Greenlife' compost is sold locally. The remaining vegetation is shredded and hauled firstly to ANL Badgerys Creek where it is composted and blended to make bagged products for re-sale throughout NSW.

#### **Residential and Park Waste Bins**

Over the last four years Council has extensively audited residential waste bins including multi- unit dwellings and single use dwellings. Original audits lead to Council placing stickers on bins advising residents of waste types suitable for each colour lid bin. Stickers were also provided for unit bin rooms. After the stickers were placed a further audit was conducted. 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.

All reserves received bin upgrades in early 2018. The new bins incorporate specially designed enclosures that prevent wildlife, especially birds, from accessing the bins and prevent light plastics from escaping bins on a windy day. This will help keep the area clean and support the positive action of people using the bins. Recycling bins have been included in the roll out. New signage on the bins has been installed to highlight what can be recycled in public place bins and what items need to be placed in general waste.



# Disposal of Domestic Mixed Solid Waste

Council entered in new waste disposal contract directly with Lane Cove Council for the disposal of domestic mixed solid waste and parks and reserves waste from 1 July 2020 to 30 November 2025. This new arrangement allows Council to position itself to influence change and protect Council's financial position in this market, and join the Northern Sydney Regional Organisation Councils Waste Alliance. This will allow Council to be part of a large waste disposal contract achieving waste management efficiencies and providing opportunity and potential to drive better environmental outcomes for mixed solid waste servicing in the future.

# **Council Depot recycling**

Enhanced source separation of waste from Council operations, street sweepings, parks and gardens has seen a significant improvement in recycling rates at the Council Depot. The new source separation system was implemented in 2018. In its first full year a recycling rate of 56% was achieved. In 2020/2021 more than 89% of waste moving through the depot was recycled.

# 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	2017-18	2018-19	2019-20	2020-21	Change from previous year
Registered vehicles in Council LGA <sup>†</sup>	19,820	19,697	20,007*	19,725	Down ↓
Number of Council fleet vehicles	21	21	21	21	Stable <b>←→</b>
GHG emissions from Council fleet vehicles (tonnes CO2-e)	79	66	32.25†	35.7	Uр↑
Number of carshare members as at 30 June 2020	889	996	1,177	1,280	Uр↑

<sup>\*</sup> Source: RMS NSW, 2019.

#### **Walking Trails**

Significant walking track improvements occurred at Quakers Hat Park. This track winds around Pearl Bay and the Beauty Point foreshore where visitors can enjoy the beauty of Mosman's unique flora and fauna. Works included the addition and/or upgrade of boardwalks and sandstone steps along the 1.5km track therefore providing greater ease of access.

The 80km Bondi to Manly Walk was launched in December 2018. Council is one of the many participating Councils connecting Sydney in this iconic 80km walk. The walk starts at Bondi Beach, passes around South Head, over the Harbour Bridger and along to North Head Sanctuary before finishing at Manly Beach The Walk is rich in Indigenous heritage and includes four iconic Australian landmarks. It will provide an unsurpassed experience to explore Sydney, and discover our beautiful natural harbour, cultural gems and rich heritage. Council has installed numerous way finding markers and completed minor track upgrades at Sirius Cove and Clifton Gardens to improve useably of trail.

# **Using Electricity to power Vehicles**

An Evie Networks fast electric vehicle charger installed in December 2020 at Mosman Square Car Park had saved about 4.5 tonnes of carbon emissions by the end of May 2021. It is averaging 2.5 charging sessions per day and has proven popular with motorists.

Emissions savings are made because electricity supplied through the charger to electric vehicles is renewable, avoiding the burning of fossil fuels. Council expects charger use to grow as more people opt for electric vehicles in coming years and is currently assessing the need for more chargers as ownership grows.

While Council only has a small fleet of motor vehicles that support its operations, a study was undertaken in 2020 to assess where fleet improvements could be made. Following careful analysis and consultation with external experts, Council's first fully electric vehicle was purchased in 2021 to replace one of its fleet. This first acquisition is serving as a test case for other potential replacements and a further step towards reducing Council's carbon footprint. The motor vehicle purchase was also complemented in 2021 by the purchase of Council's first electric bicycle for local use by Council staff.

<sup>†</sup> Decrease attributable to operational changes made to staff useage of cars and COVID-19 lockdown.





#### **Car Share**

In February 2019 Council reviewed its car share policy to further support car share in Mosman and to achieve an appropriate balance of public car spaces and designated car share spaces. Other objectives where to encourage multiple operators and to balance the cost to the operator for a designated car share space with the use of Council property for a commercial operation.

In order to assist Council in assessing the demand from the broader market, car share operators were contacted and expressions of interests sought. Car share policies adopted by other councils were also reviewed and this allowed

for a more strategic review of car share spaces and gave Council an indication of an appropriate fee structure.

Council continues to support car share with the policy allowing multiple car share providers to provide services within Mosman. Council now has 13 designated car share spaces and multiple floating share cars.

# **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.

Recent projects included education on 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 Military Road, Earl Street, Glen Street, Harnett Avenue, Milton Road, The Esplanade and Wolseley Road.

# PLANNING, BUILT ENVIRONMENT AND HERITAGE

Population	2017-18	2018-19	2019-20	2020-21	Change from previous year
Estimated population of LGA - at 30 June (ERP)	30,877	30,877	30,981*	30.981	N/A
Residential density (persons per hectare)	35.70	35.70	35.80	35.80	N/A
Noise	2017-18	2018-19	2019-20	2020-21	Change from previous year
General noise complaints received by Council	83	33	112	82	Down <b>√</b>
Barking dog complaints received by Council	38	66	60	62	Up <b>↑</b>
Development Applications	2017-18	2018-19	2019-20	2020-21	Change from previous year
Total number of development applications received by Council	258	249	152	229	Uр↑
Number of development applications approved	231	206	118	180	Uр↑
Aboriginal Heritage	2017-18	2018-19	2019-20	2020-21	Change from previous year
Total number of Aboriginal heritage sites	105	105	105	105	Stable ←→
Non Aboriginal Heritage	2017-18	2018-19	2019-20	2020-21	Change from previous year
Total number of non-Aboriginal heritage items	483	481	481	481	Stable <b>←→</b>
Number of built items*	444	445	445	445	Stable ←→
Number of landscape items*	34	34	34	34	Stable <del>← →</del>
Number of archeological items	13	10	10	10	Stable <del>← →</del>
Heritage conservation areas	13	13	13	13	Stable <del>← →</del>

<sup>\*</sup> Based on 2019 Estimated Resident Population of 30,981.

# **Updated Archaeological Site listings**

In February 2018 an amendment to the LEP was gazetted to update the heritage listing of archaeological sites on properties in Avenue Road and Royalist Road relating to former quarries and a tram terminus. This followed a comprehensive review of Mosman's archaeological sites undertaken by specialist consultants during 2015-16, and an update to Mosman's Development Control Plans in 2017 to ensure the ongoing protection of significant rock faces and retaining walls.

#### **Public Domain Manual**

The public domain, as it relates to local government, is any area or space that is owned or readily accessed by the general public. The character of a public domain derives from the elements contained in it and the relationship between them, including use of land and landscape features both built and natural.

The key objectives for the Public Domain Manual was to:

- Establish a distinctive and consistent approach to public domain throughout Mosman's urban, coastal and park areas;
- Deliver efficiencies to the design, documentation, procurement and construction of works on public land;
- Respond to significant, sensitive and/or heritage areas or items;
- Provide transparency to the selection of materials; and
- Create public spaces that are attractive, comfortable, accessible and easy to navigate.

This 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. The result of which will establish a consistent and high quality public domain throughout Mosman over the long term.

# 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 2021.

## **Local Housing Strategy**

The Mosman Local Housing Strategy (LHS) was endorsed by Council at its meeting on 10 November 2020, following public exhibition during August-September of that year. The LHS is a plan for housing Mosman's population until 2036-2041. It considers projected housing demand and population change in Mosman, identifying how housing growth is to be managed, the right locations for additional housing supply and the delivery of housing supply targets set by the Greater Sydney Commission. The LHS was approved by the NSW Department of Planning, Industry and Environment in June 2021.



# **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.

#### **Local Environmental Plan Review**

A review of Mosman Local Environmental Plan 2012 (the LEP) undertaken in 2018 found that generally the LEP is closely aligned to the North District Plan, although a number of potential amendments to the LEP were identified. These have been included as actions in the

Mosman LSPS. Council is undertaking a staged approach to updating the LEP over the coming years. The LEP Review report was endorsed by the Greater Sydney Commission in December 2018.

# ENGAGEMENT AND EDUCATION FOR SUSTAINABILITY

Education	2017-18	2018-19	2019-20	2020-21	Change from previous year
Total number of environmental programs (workshops, events, surveys) delivered to the community.	63	65	40*	46	Up↑
Total number of environmental programs (workshops, events, surveys) delivered to Council staff.	5	12	6	3	Down↓
Number of HarbourCare volunteers	26	67	29	3	Down <b>√</b>

<sup>\*</sup> Decrease attributable to COVID-19 impacts.

# **Living Mosman Program**

Council continued to run its 'Living Mosman' environmental education series over the past four years. Workshops included foodwaste and pickling workshops, make your own insect hotel, waterwise gardening, introduction to modern cloth nappies, rockpool rambles, organic skin care, and decluttering workshops. Over 400 people attend the Living Mosman series each year and have extended their skills in a wide range of sustianability issues and topics. Council also send an e-newsletter 6 times a year to over 800 residents informing them about current projects, Council works and opportunities for residents.

# **Single Use Coffee Cups**

In 2018 a young team of volunteers from Mosman High School and the Mosman Youth Centre hit the pavement and asked local café owners if they would like to be part of Responsible Cafes program. Cafe owners who joined the program have their name registered on the Responsible Cafés website and offer customers a discounted price for their take-away coffee if a reusable cup is supplied.

A Huskee Cup Trial was then 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.

COVID set back these programs so in 2021 Council started a trial with EPA grant funding to place Simply Cup bins in the public domain. The bins and a service that allows users of single use coffee cups to separate their cups from other waste streams. Liquids, lids and cups are sorted into separate slots within a dedicated public place coffee cup bin. There are four bins in total located at Mosman Bay, Civic Centre and two at Balmoral along the Esplanade. Council is the first public authority to place the bins in the public domain.

The liquid and lids are eventually discarded into general waste streams. The cups are collected and sent off for reprocessing into new products. Products include reusable cups (rCUP), car parking stops, recycled road surfacing and aircon mounting blocks.

Council however cannot stress enough that waste avoidance in the first instance remains best practice.





# **Environmental Education Campaigns**

Council has run numerous environmental campaigns and workshops over the last four years. Almost 500 local residents and visitors came to join in the Rethink Rubbish activities, all focussing on raising awareness about the damaging effects of single-use plastics and rubbish in our waterways.

Retink rubbish activities occurred at Clifton Gardens and Balmoral focused on cigarette butts, outdoor party litter, single use plastics and fishing tackle. The Ocean Action Pod and a pop- up marine education display run by Shark in a Bus guided many participants through waste reduction educational activities and interactive displays. An artist taught people how to weave discarded plastics to create works of art. A giant jellyfish was compiled over several days and was built by many hands.

The ever popular Seaside Scavenge was held annually where litter is collected on the beach and exchanged for tokens which in turn were swapped for previously donated second hand goods. Over 10,000 pieces of rubbish were collected and 141 kg of second hands goods were swapped. Collectively over 1600 programme interactions took place.

Council's runs an annual Plastic Free July event. Activities include workshops on activities and items to replace plastic use. Council run several free composting and worm farm workshops in conjuction with Kimbriki Environmental Enterprises and an electrical repair workshop with the Bower. Council also run several film nights. Over 100 people attended the screening of A Plastic Ocean at the Mosman Art Gallery and over 500 attended the screening of 2040.

# **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.

# **FUTURE DIRECTIONS**

Mosman Council is committed to protecting the environment and has set a net zero emission target by 2030 for Council operations and an aspirational target of net zero emissions for community by 2040.

#### Future directions include

- Implementation of actions within Council's adopted Climate Action Plan Mitigation Strategy
- Finalisation and adoption of second strategic Climate Change document the Climate Action Plan Resilience and Adaptation Strategy
- Renewal Flora and Fauna Survey for bushland and selected unmade road natural assets
- Investigate future options for collection and recycling of food organics from domestic waste bins
- Increase street tree planting to increase canopy cover in areas susceptible to urban heat island effect
- Investigate and install battery storage system for solar PV system at Marie Bashir Sports Centre
- 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
- LED lighting upgrades at Vista Street carpark
- Procure 100% renewable energy for Council's electricity supply for operations and public lighting
- Community education including continued support for Schools Sustainability Network
- Coffee pod collection and recycling trial for domestic properties

STATE OF THE ENVIRONMENT Report 2017-21

**Mosman** COUNCIL