MOSMAN STATEOFTHEENVIRONMENT REPORT 20212024 The State of the Environment Report 2021-24

Availability The State of the Environment Report 2021-24 is available on Council's website mosman.nsw.gov.au

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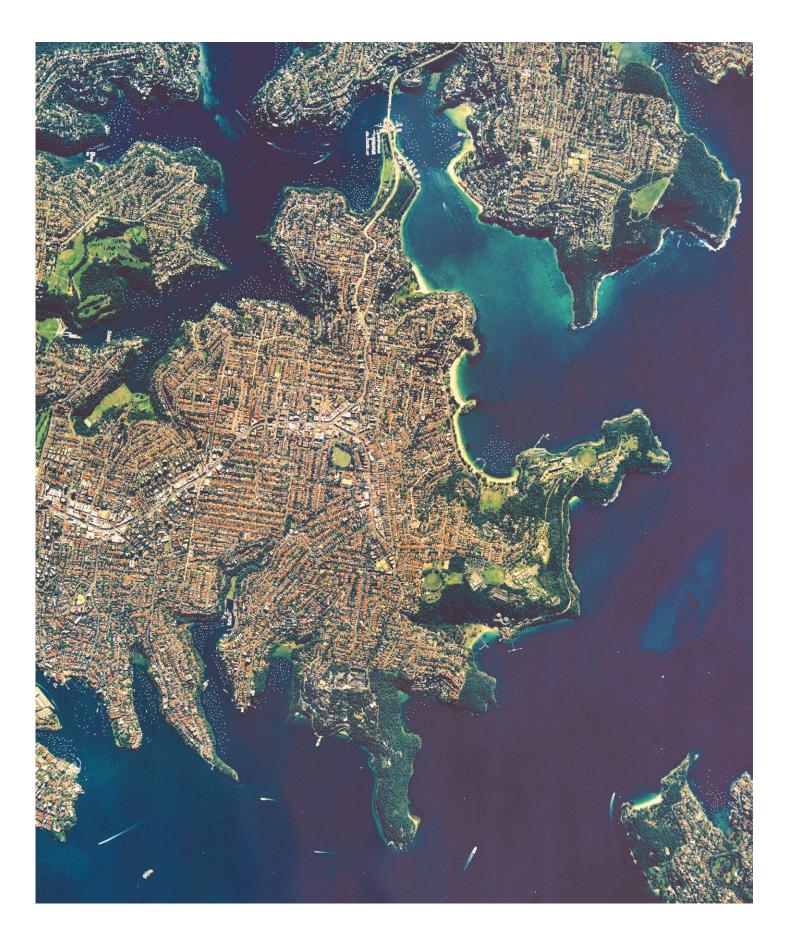
Introduction

The Mosman Local Government Area

The Mosman Local Government Area 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 population estimate for Mosman Council area as of the 30th June 2024 is 29,071. Since the previous year, the population has increased by 3.26%. Population growth in Greater Sydney was 2.48%. The last census showed 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 implement best practice waste management.





State of the Environment Report

This report aims to show that Council is sustainable and is actively managing the use of the 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 2021–2024 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	2020-21	2021-22	2022-23	2023-24	Change from previous year
Number of air pollution complaints received by Council	2	15	33	9	Down↓
Energy	2020-21	2021-22	2022-23	2023-24	Change from previous year
Electricity use Council operations (kWh)	1,223,908	994,696	1,106,849	1,174,199	Up 🛧
Council energy and consumption (GJ)	5,594	5,293	5,406	5,187	Down ↓
GHG emissions from Council energy and gas use (tonnes CO2-e)	1,082	894	20	49	Down 🗸
Total residential and non residential electricity use for Mosman (MWh)	130,130	128,574	126,048	Waiting for Ausgrid data	-
Solar generation exported to the grid (MWh)	2,072	2,620	3,409	Waiting for Ausgrid data	-

Solar panels, batteries and LED installations

Solar panels have been installed on Mosman Civic Centre, Council's works depot, Allan Border Oval Pavilion and George's Heights amenity building. These conversions to renewable energy for Council's buildings continue to reduce energy needs from the grid and helps meet a target of net zero by 2030 for Council's operations. In total Council has over 150 kW size of solar array on its buildings. This is equivalent to 83 Mosman homes powered for one year.

Battery installation works have also occurred at Council's works depot and battery storage was installed for Marie Bashir Sports Hall's solar array.

As well as the rooftop solar PV installations, facilities and buildings are being switched to LED lighting. Recently, Mosman Council installed new LED lights to the Vista Street carpark and the Marie Bashir Sport Centre (MBSC) to enhance energy efficiency and reduce the carbon footprint of the buildings.

100% Renewable Electricity Purchase

Mosman Council joined forces with 24 other participating councils in securing one of the largest renewable energy deals for local government. The councils are supplied with energy by three NSW solar farms which was brokered by the Southern Sydney Regional Organisation of Councils (SSROC) with electricity retailer ZEN Energy. Worth approximately \$180 million, the landmark retail electricity agreement delivers more than 214 gigawatt hours of electricity per year to 25 councils which collectively represent more than 3 million people or almost 38% of the NSW population, with 83% of their total electricity supply covered by renewable energy.

Council has opted for 100% renewable energy under the agreement which has helped power council facilities and streetlights throughout the area. Electricity is Council's most significant source of emissions and reducing consumption has been a major priority. This deal is key in reaching Council's net zero emissions by 2030 target. Council has been steadily reducing emissions and will continue to see further cuts in coming years. The agreement commenced in July 2022 and runs to 2026, with an option to extend to 2030.

Mosman Council Emissions Platform

NSROC went to tender to secure a Greenhouse Emissions Monitoring & Reporting Service. Trellis Technologies Pty Ltd was secured as the preferred provider based on cost and service performance. The Mosman Council Emissions Platform provides an online centralised data storage, analytic and management which assists in monitoring, analysis, calculation and reporting on Scope 1, 2 and 3 emissions (energy - electricity, gas and fuel; water, waste, refrigerants, and other scope 3 sources) compliant with Climate Active certification. It has involved a whole of Council approach and provides an opportunity for collaboration across departments. The platform will support Council's business case developments, measure and verify water and energy saving projects, enable monitoring of solar PV systems and EV charging stations for generation and on-site consumption. The Mosman Council Emissions Platform helps provide transparency for both Council and the community and clearly articulate Council's carbon footprint to assist with reaching net zero targets.

Council Depot charging station

As part of its commitment to reducing its operational emissions to zero, Mosman Council has been supporting its cleaning contractors to convert petrol powered blowers to battery powered.

A charging station has been established at the Council Depot where batteries are charged by renewable energy sourced from 11 kWh rooftop solar panels and 14 kWh battery storage which were recently installed at the depot.

Mosman Council is encouraging residents to install rooftop solar and convert their home garden tools to electric to reduce noise and minimise environmental impact.

Strata sustainability program

The Mosman Apartment and Strata Savings Program, offered by Mosman Council in partnership with consultant Wattblock, offers free independent advice to eligible residential apartment buildings to help improve sustainability, reduce greenhouse gas emissions and cut expenses.

Residents of the Braebrook building on Military Road, through their strata committee, have increased the focus on sustainability in common property areas to reduce running costs and achieve a lower carbon footprint. A program review made recommendations on lighting, water and electricity supply, which the Braebrook committee acted on over an 18-month period, most recently installing solar panels on the building's roof in March 2024. Other projects at Braebrook have included upgrading lights in common areas of the building from fluorescent to LED systems and installing motion sensors. Carbon monoxide sensors were fitted to the building's car park fan, to run when required rather than 24 hours a day by default. This has saved many hours of electricity consumption and reduced greenhouse gas emissions.





Total Water Cycle

Stormwater	2020-21	2021-22	2022-23	2023-24	Change from previous year
Number of gross pollutant traps (GPTs)	35	35	35	35	Stable ←→
Total gross pollutants removed from GPTs (tonnes)	350	380	335	374	Up↑
Water Consumption	2020-21	2021-22	2022-23	2023-24	Change from previous year
Total LGA potable water use (kilolitres)	3,506,105	2,815,493	2,755,724	Waiting on Sydney Water	-
Total residential potable water use (kilolitres per capita)	113	85	98	Waiting on Sydney Water	-
Total Council potable water use (kilolitres)	48,664	44,991	43,598	47,333	Up↑

Infrastructure

Stormwater Quality Improvement Device (SQID) units were installed as part of a comprehensive program of works related to the Community Environmental Contract. To continue benefiting from this infrastructure, SQID units need to be appropriately operated and repaired as required. Due to heavy rainfall events, the majority of funding was spent on cleaning and maintenance.

Drill Hall stormwater reharvest system

The underground tank was cleared of sediment and flanges were cleared of dirt. The UV disinfection system was upgraded, and a new water meter was installed. The system was also enhanced through the upgrade of a new 20,000 litre receiving tank at Rawson Oval. This allows increased run time for oval irrigation meaning less water from town water is required to complete the oval irrigation cycle.

Mosman Flood Study

Council received and noted a report outlining the current status and projected timeline for completion of the Mosman Flood Study. In June 2023 Manly Hydraulics Laboratory was engaged to assist with the Flood Study project, including data collection and modelling of areas that will be flooded, together with options and a plan to reduce flood risk. The Flood Study is ongoing, with several variations for cost having been approved by DCCEEW. DCCEEW have also approved a funding term extension to 30 March 2026. In June 2023, the Flood Risk Management Manual was published and this superseded the previous 2005 manual which resulted in additional modelling and GIS processing. A community consultation including a survey was launched along with an expression of interest to join the Flood Risk Management Committee. Whilst Council received a high response rate to the survey, there was no interest to be part of the Flood Risk Management Committee and as such a FRM Committee was not formed

Biodiversity

Biodiversity Condition	2020-21	2021-22	2022-23	2023-24	Change from previous year
Biosecurity notices	0	0	0	0	Stable $\leftarrow \rightarrow$
Biosecurity assessments undertaken	15	16	9	6	Down ↓
Number of registered active bushcare volunteers	48	63	55	62	Up↑
Bushcare Program volunteer hours	1,180	1,500	782	1,043	Up ↑
Number of active bushcare groups	22	20	20	20	Stable $\leftarrow ightarrow$
Total number of native plants supplied to volunteers, contractors and residents	12,000	10,500	18,800	10,000	Down ↓
Number of native plant species recorded in LGA	490	499	499	499	Stable ←→
Number of threatened flora species	3	2	2	2	Stable $\leftarrow ightarrow$
Number of threatened fauna species	5	4	4	4	Stable $\leftarrow ightarrow$
Number of endangered ecological communities	2	2	2	2	Stable $\leftarrow ightarrow$
Number of endangered fauna populations	0	0	0	0	Stable $\leftarrow ightarrow$
Number of feral fauna species targeted through programs (eg. rabbits, foxes, cats)	2	2	2	2	Stable $\leftarrow ightarrow$

Bushland plantings and renewal

As part of Mosman Councils efforts to improve the local bushland, Reid Park was chosen as 2023/24 National Tree Day planting location. A selection of native trees, shrubs and ground covers were planted in and around the park to improve biodiversity and environmental outcomes. In an effort to improve bushland access Council obtained a NSW Government Grant which was used to upgrade and improve the foreshore walk that links The Spit Reserve to Quakers Hat. The upgraded track improves access to the bushland so that local residents and visitors can appreciate the native flora and water vistas throughout this area.

Mosman Living Seawall

The first Living Seawall in Mosman was installed at Ellery Park in February 2023. The special modular habitat panels fitted to seawalls increase the surface area for marine life and also provide protective habitats, mimicking features of nature, such as rockpools, crevices and hollows. 12 months after its installation, Living Seawalls researchers conducted ecological surveys to assess the impact these habitat enhancement structures have had on the coastal ecosystem around The Spit. Researchers found a total of 33 species of seaweed and invertebrates inhabiting the Living Seawalls panels. This number is expected to increase over time, as older Living Seawalls installations in neighbouring Clontarf continued to increase in species richness 2-3 years after installation. The Ellery Park Living Seawall will continue to be monitored by Living Seawalls researchers over the next year to assess the continued impact of the Living Seawall in the area around The Spit.

Living Seawalls encourage species to thrive which improves foreshore water quality and so can also indirectly help enhance recreational activities including swimming, fishing and water sports in and around urban waterways so there is a benefit for humans and marine species alike. The Sydney Institute of Marine Science Living Seawalls program was funded by Mosman Environmental Foundation's inaugural grants program and supported by Mosman Council.

Environmental Volunteer Programs

Council's Bushcare and HarbourCare Programs have continued to welcomed more volunteers on board. Council volunteers help to regenerate natural areas and keep our foreshores and beaches clean. Data is reported back to Council to help shape bushland restoration works, education campaigns and infrastructure development.

Restoring Riparian Habitat

Recent improvement works have been undertaken by council at Clifton Gardens to restore riparian vegetation. The creek functions as headwaters for the catchment and in recent times has reached capacity due to heavy sedimentation. This would regularly cause flooding to adjacent park and whilst the works will not eliminate this it will reduce the frequency. Significant earthworks were required to deepen the channel and provide ponds for future sediment capture. Site works also included the revegetation of disturbed creek banks with native sedges and other planting work using local native species directly adjacent to the creeks.

Flora and Fauna Survey

The survey conducted in 2022 highlighted that Council has done excellent work in its management of flora and fauna. Mosman flora, fauna and ecological health of bushland sites are stable and continue to improve. Results from the survey reflect that the current bushland management activities are achieving the desired outcomes as weed percentage cover has reduced and native vegetation cover is stable and has increased since the last survey. Further, all sites surveyed showed adequate fauna habitat.

Six bushland sites have a Threatened Ecological Community including Swamp Oak Floodplain Forest found at Quakers Hat Park, Sirius Park East, Wyargine Point, Reid Park and Harnett Park and Littoral Rainforest at Morella Road.

Whilst there were 64 native fauna species recorded, it is highly likely that more fauna species are present as this survey is only a snapshot in time. Staff are aware of other species anecdotally and anticipate that the number and variety of birds is understated. It is noted that the fauna of Mosman is considered "slightly impoverished". This is expected and is owing to a combination of the peninsular locality, long history of settlement and development and loss of regional connectivity.



Waste

Waste	2020-21	2021-22	2022-23	2023-24	Change from previous year
Total waste to landfill, including general cleanup (tonnes)	6,921	6,996	6,460	6,510	Up ↑
Total waste to recycling including paper, co- mingled, metal and green waste (tonnes)	4,360	4,572	4,070	3,831	Down ↓
Total waste to landfill, including general cleanup per capita (kg)	223	247	230	224	Down ↓
Total waste to recycling, including metal and green waste per capita (kg)	141	161	145	132	Down ↓
Green waste diverted from landfill per capita (kg)	52	62	63	52	Down ↓
Total e-waste collected (kg)	23,744	12,888	25,138	22,000	Down ↓

FOGO study

Mosman Council in participated in the Northern Sydney Regional Organisation of Councils' study into the financial and greenhouse implications of the NSW Environment Protection Authority's (EPA's) push to institute collection of domestic food waste separately to other mixed/ residual waste, either by collecting the food waste with garden organics (known as FOGO – food organics garden organics), or in a separate food organics bin (FO). The study followed trials by NSROC councils last year of such collections, the full report on which is available on NSROC's website.

The NSW EPA's intention in requiring collecting food waste separately to residual waste is that it would reduce greenhouse gas emissions as food waste degrades, in landfill sites, to methane, a potent greenhouse gas. It would also provide a means of increasing resource recovery.

The NSROC council trials found that participants generally did not dispose of the majority of food waste into the FOGO or FO bins – instead, it remained in the mixed/ residual waste bin. In addition, food waste in the garden organics bin increased the level of contamination in that bin (through food packaging and the like), degrading what is usually a high purity organics stream, and separate food waste bins also experienced a significant level of contamination by food packaging. Mixed/residual waste collected by Council is processed at Woodlawn bioreactor landfill, which captures a high level of the methane produced at the site, meaning that greenhouse gas emissions from waste collected in Mosman are significantly lower than for many other parts of Australia.

Given this context, the purpose of the organics implications study was to determine, from a complex range of factors, the optimal FO or FOGO arrangement for the NSROC area in terms of costs and greenhouse gas emissions reductions, and the cost effectiveness of each option in terms of costs per tonne of carbon dioxideequivalent emissions averted. The study finding showed that no system is ideal, and that emissions reductions and resource recovery are questionable for FOGO and FO processes. The study also showed the lack of infrastructure in Sydney to process and recover food organics and that cost saving are questionable. Further work and discussions are required with the EPA to solve this complex issue.

Council will continue to investigate food organic recycling including detailed assessment of source separation and onsite processing options. Council is unlikely to implement food organic recycling before 2029.



E-waste

More than 700 people attended the free event in February 2024, with most dropping off unwanted household items. The collection included over 335 computers, 152 televisions, 28 mobile phones and 224 electrical items such as vacuum cleaners and kettles. A former physiotherapy ultrasound unit, electrocardiogram machines and a heat lamp were among the more unusual items recycled through Council's recent e-waste recycling day in February.

Recycling e-waste enables material to be recovered and recycled into new products and avoids potentially environmentally toxic material, such as lead and mercury, going to landfill. Between e-waste event dates Mosman residents can drop e-waste off for free at the Artarmon Community Recycling Centre or Kimbriki.

Reducing food waste

Federal Government research shows that Australians waste about 7.6 million tonnes of food per year, and industry analysts estimate that the cost of food waste to the national economy is \$36.6 billion annually.

The Mosman @HOME series created by Good for the Hood is available to Mosman residents through a partnership with Council's Sustainability Team. Sustainability webinars that are part of this series included 'Cooking with Leftovers' aimed to inspire home chefs to get creative in the kitchen, with tips on repurposing leftover meats, vegetables and eggs into meals, saving produce from the scrapheap.

Transport

Transport	2020-21	2021-22	2022-23	2023-24	Change from previous year
Registered vehicles in Council LGA	19,725	17,828	17,778	17,050	Down ↓
Number of Council fleet vehicles	21	21	21	20	Down ↓
GHG emissions from Council fleet vehicles (tonnes CO2-e)	35.7	45.67	29.56	26.32	Down ↓
Number of carshare members as at 30 June 2023	1,280	1,596	1,704	1,867	Up ↑

Electric vehicle

As Mosman's electric vehicle public fast charging network passes another major milestone, saving more than 100,000 kg of CO2 since the chargers' installation, Council is supporting the move through its own vehicles, with its Hyundai loniq now sporting a distinctive digital livery in blue.

The fully electric vehicle offers a range of more than 250km after reaching full charge, which takes about 47 minutes when using a fast charger.

Fast chargers

Mosman's fast charger network for electric vehicles expanded from one to three chargers during the 2022/23 financial year as Council continued to support the uptake of electric vehicles. The number of charging sessions averaged 123 per month between July-September 2022, when there was only one charger, and between April-2023, when there were three chargers, the monthly average rose to 699. Total usage is surging, as is use per charger. The number of registered purely electric vehicles garaged in Mosman also rose sharply, from 212 at the end of July 2022 (the earliest available data from the State government) to 425 by the end of June 2023.

The chargers help curb Mosman's carbon footprint as electricity supplied through the charger to electric vehicles is renewable, avoiding the burning of fossil fuels, with usage monitored so that Council can anticipate the expected growth in the use of chargers as more motorists opt for electric vehicles in coming years.

Walking and Cycling Strategy

Council recognises the great importance of walking and cycling as a means of travel and is dedicated to improving walking and cycling infrastructure and education to make Mosman a more liveable and attractive area. Consequently, Council drafted a "Walking and Cycling Strategy", which was placed on public exhibition and finalised as the "Walking and Cycling Strategy 2023-2028", considering community feedback. This Strategy was then endorsed and approved by Council in June 2023.

Informed by the "Walking and Cycling Strategy", Council has begun to develop two programs – "BusWalk", and "Walk to School", which aim to promote walking as an environmentally and community conscious alternative to driving. Mosman is fortunate to be serviced by an extensive bus network. The aim of the "BusWalk" initiative is to promote the combination of walking and bus-riding as a transport method within Mosman and beyond. The promotion is intended to commence summer 2023/2024. "Walk to school" is a program intended to encourage walking as a method of travel for Mosman schoolstudents. At this stage Council is engaging a consultant to conduct an audit of existing pedestrian infrastructure to identify safety and infrastructure issues and improvement opportunities.



Planning, Built Environment and Heritage

Population	2020-21	2021-22	2022-23	2023-24	Change from previous year
Estimated population of LGA – at 30 June (ERP)	30,981	28,329	28,123	29,071	¶ qU
Residential density (persons per hectare)	35.80	32.56	32.47	33.59	Up ↑
Noise	2020-21	2021-22	2022-23	2023-24	Change from previous year
General noise complaints received by Council	82	103	91	59	Down ↓
Barking dog complaints received by Council	62	35	48	33	Down ↓
Development Applications	2020-21	2021-22	2022-23	2023-24	Change from previous year
Total number of development applications received by Council	229	206	221	168	Down ↓
Number of development applications approved	180	168	182	138	Down ↓
Aboriginal Heritage	2020-21	2021-22	2022-23	2023-24	Change from previous year
Total number of Aboriginal heritage sites	105	105	105	105	Stable $\leftarrow ightarrow$
Non Aboriginal Heritage	2020-21	2021-22	2022-23	2023-24	Change from previous year
Total number of non-Aboriginal heritage items	481	481	481	481	Stable $\leftarrow ightarrow$
Number of built items	445	445	445	445	Stable ←→
Number of landscape items	34	34	34	34	Stable ←→
Number of archeological items	10	10	10	10	Stable ←→
Heritage conservation areas	13	13	13	13	Stable $\leftarrow \rightarrow$

Our Community

Mosman is home to approximately 29,071 residents, having experienced a small increase in population compared to previous years. The local population is forecast to remain relatively stable, with the most significant demographic shifts expected to be in the age structure of the population as the proportion of residents aged 60 and over continues to grow.

Bushland Unmade Road Reserve Zoning Review

Mosman Council considered a review the zoning of unmade road reserves under Mosman's Local Environmental Plan following release of the Mosman Flora and Fauna Study 2022. Whilst the review did not recommend rezoning of any sites, five sites were assessed as having a medium priority for conservation. Council resolved to reassess these five sites with the next flora and fauna study and that in the intervening period that Council staff endeavour to improve the environmental qualities of the sites before the next flora and fauna study in approximately five years.

Tree Planting in Hard Surfaces

Mosman Council was also successful in receiving a \$30,000 grant through the NSW Government's Greener Neighbourhoods program. The aim of the grant was to generate a report, Mosman Street Tree Priorities Strategy, that investigated and prioritised tree planting opportunities across Mosman.

The report identified poor performing tree species primarily along Military and Spit Roads and has recommended new species to increase canopy cover and opportunities for shade in hard stand areas. The report endorsed minor amendments to the Street Tree Masterplan to make species consistent with its findings.

The report also aligns with Council's action on Climate Change and seeks to create avenues of trees along road corridors, increasing the amenity and providing the benefit of increased shade of hard areas. This project provides an opportunity to work towards this objective whilst also enhancing Mosman's habitat corridors for local fauna.

As a result of the Mosman Street Tree Priorities Strategy, a new round of grant funding from the Greening our City program was awarded to Mosman Council. This round of funding focuses tree planting on the high priority locations indicated in the report. This project is now underway with tree and green cover planting occurring along Military Road at the entry to Mosman.

Over the last few years Mosman Council has increased canopy cover by planting more trees in street verges and parks across the suburb. In addition to Council funding, a series of Greening our City grants from the NSW government have been awarded to Mosman Council allowing hundreds of additional new trees to be planted.



Walking Trails

Significant improvements and maintenance to Councils bushland and walking trails were completed during the Council term. Improvements in materials have allowed the introduction of Fibreglass Reinforced Plastic (FRP) that improves both durability and a non-slip walking surface to boost safety.

A joint project with North Sydney Council saw the complete replacement of the Harnett Park footbridge Bridge connecting North Sydney and Mosman Councils. A NSW government grant funded project at Quakers Hat Park has seen the addition of raised FRP walkways and viewing platform, sandstone steps sand handrails to improve access and highlight the natural beauty of the area.

New concrete pathways have been installed in Mandolong Lane and Bullecourt South Unmade Roads which have improved access and reduced erosion of pathways as rainfall has caused problems reducing accessibility. Similar to the concrete pathways two new sections of asphalt walkway in Rosherville reserve and Parriwi Park have helped to reduce erosion and improve the long term maintenance of these tracks. Two new sections of steps and landing on the western side of Sirius Cove were upgraded and more recently the installation of timber post and wire fencing at Chinamans Beach will help to retain sand dunes whilst a new set of steps will maintain access for local residents and visitors that frequent the area.

Climate Resilience and Adaptation Actions

On 8 November 2022 Council adopted EP/39 Climate Action Plan - Resilience and Adaptation Strategy. This report provides details and an update to Council on the actions listed within the plan.

This document, Climate Action Plan - Resilience and Adaptation Strategy, is a sister document to Councils Mitigation Strategy and together provide Council's overall response and actions to Climate Change. Whilst there is obvious cross over, this document is to be used to inform Council and the community on what actions are required to reduce the impact of climate change. It provides a pathway to identify both public and private assets that will need to be modified to adapt to predicted impacts of climate change. It also provides avenues and future directions that Council will take to build resilience in Mosman's people so the community is well connected and can prepare and recover from major incidences caused by a changing climate.

The strategy identifies that further studies are required to better understand the predicted impacts of climate change on Mosman and to help improve community connectiveness. This document is a living document and regular updates are incorporated as further information becomes available.

Engagement and Education for Sustainability

Education	2020-21	2021-22	2022-23	2023-24	Change from previous year
Total number of environmental programs (workshops, events, surveys) delivered to the community.	46	46	52	85	Up ↑
Total number of environmental programs (workshops, events, surveys) delivered to Council staff.	3	6	10	12	Up ↑
Number of HarbourCare volunteers	3	39	29	22	Down ↓

Workshops and education programs on sustainability

Mosman Council hosts a number of environmental workshops and events for residents throughout the year. These are run and organised by the Environment team, often involving collaborations with expert presenters, other Councils or community focused groups. The workshops build Mosman residents capacity to make sustainable changes within their household and the wider community.

Waste is one of the core themes of these workshops and events. For example, single use plastic reduction is a continuous challenge given how readily available and cheap product uses remain. Encouraging the public to say 'no', to single use coffee cups, ensuring rubbish is binned and placed in the correct bins, recycling and to purchase items that have less packaging are commonly addressed. Most people know what to do hence educational programs are designed around a call to action. This might include beach clean up events such as Seaside Scavenge or Harbour Care. Residents are supported to recycle through events such as E-waste. Reduction of food waste is encouraged through pickling, cooking with leftovers, growing your own food and composting workshops.

Sustainable living has been another core theme of Council workshops for many years. Workshops encourage the community to make sustainable food choices which are healthy for our bodies and the environment. Other workshops incorporate, conserving water, waste, DYI projects such as making your own gifts, building an insect hotel, and making your own body care products or growing your own food. Learning to accommodate biodiversity through habitat improvements and the introduction of native bees have formed additional subject areas in recent years. Climate Change is an emerging theme in workshops and education programs organised by Council. Everyday actions contribute to the GHG emitted into the atmosphere, from the car we drive, the food we eat and the goods we buy, to the lights and appliances we use at home. Workshops help to empower the community to take climate action by highlighting simple steps they can follow to reduce energy usage and save money. For example, incorporating solar infrastructure or by purchasing renewable energy for household needs. Education on passive house design and other sustainable ways to improve the thermal comfort of a home are investigated in some workshops. Information sessions on EV cars has also been provided to the community.

Information about our current workshops and events are available on the Events Mosman website.

Climate Action Community Consultative Committee

The Climate Action Community Consultative Committee was established in October 2020 to provide advice and recommendations to Council to assist in Climate Action by Council and its Community. The Committee meets four times a year and has helped with updates of Council's two strategic documents in response to climate change the 'Climate Action Plan - Mitigation Strategy' and the 'Climate Action Plan – Resilience and Adaptation Strategy'. The Committee also provides advice and/or recommendations facilitating community action around climate change.

Sustainable Schools Network

In partnership with Mosman Council, Zero Emissions Sydney North initiated a schools sustainability network. The network was designed to offer teachers and students support amongst an increasing and complex body of information being made available to school educators.

In February 2021, the initiative held its first meeting in the Council Chambers. The network was called Zero Emission Schools Network - Mosman. Mosman Schools were given the opportunity to share their sustainable journey, collaborate and to learn from each other.

Schools take turns to host a meeting which offers a practical option for schools to showcase their journey towards greater sustainability outcomes. Generally, students initiate their own projects and can present these projects at the network meetings. Students have engaged in all manner of activities including food waste reduction and composting, converting an old 1975 van into an electrical vehicle, and have engaged indigenous knowledge to build bush tucker gardens out of reused materials. Other projects initiated include waste free canteens and the installation of beautiful wall and roof top gardens. The exchange of ideas and embracing the sharing of knowledge has created a well spring of sustainable action. The network helps schools save money, reduce greenhouse gas emissions, and embrace climate solutions.

The network's name has now changed to Green Schools Collective. This year was kick started at The Sydney Institute of Marine Science (SIMS). A wonderful talk was presented by marine scientists on seahorses and marine habitat conservation and restoration. The presentation concluded with a tour around the SIMS facility gave students a rare glimpse into how a marine research centre operates.

A positive pathway forward and continues to progress in innovative ways.

Sustainable gardens for young green thumbs

Early learning centres in Mosman received a boost to education and environmental outcomes with Mosman Council funding installation of new sustainable watering systems for garden beds. The WaterUps wicking systems were installed at two sites, The Northern Nursery School and Ballykin Mosman, following a call to early learning centres across the local government area for expressions of interest. The recycled plastic modular units, constructed to custom shapes and sizes, provide a low maintenance, water-saving garden bed irrigation system.

Future Directions

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

Future directions include

- Update of Council's strategic response to climate the Climate Action Plans
- Continuation of the Climate Action Community Consultative Committee
- Investigate operational implications for Food Organic source separation and processing from domestic waste bins
- Increase street tree planting to increase canopy cover in areas susceptible to urban heat island effect
- Encourage foreshore community engagement and connectiveness based on environmental protection works including continued investment in the HarbourCare and BushCare programs
- Continue bushland restoration works including increase in 90%+ native vegetation cover for bushland and unmade road sites
- Install further EV fast charging stations
- Community education and collaboration
- Continue support and promotion of State Governments Single Use Plastic Ban
- LED lighting upgrades of Council offices, Youth Centre, Library and Art Gallery to improve energy efficiency
- Accelerate replacement of main street lights to LED
- Investigate heating and cooling improvements for Drill Hall building
- Reduce gas usage and convert what we can to electricity

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