

Environmental Sustainability Strategy 2016–2026 Annual Report 2018-19 and Progress Review

Acknowledgement of Country

Monash Council acknowledges and recognises the Kulin Nation as the traditional owners of the land now known as Monash. On behalf of the residents of the municipality, Council pays respect to indigenous elders, past and present and values the lessons of indigenous experience.

Victorian Charter of Human Rights and Responsibilities

Council has a role to play in the development of a socially just, healthy, inclusive and sustainable community where all members irrespective of their ability, gender, social, ethnic, or economic background can fully and fairly participate in community life. The delivery of the Environmental Sustainability Strategy 2016-2026 has been guided by the principles of the International Human Rights and Social Justice Charter. Monash City Council observes the rights incorporated in the Victorian Charter of Human Rights and Responsibilities Act 2006 when making decisions, developing policies and strategies and providing services.

Environmental Sustainability Strategy 2016-2026

The Environmental Sustainability Strategy 2016-2026 (ESS) has a broad agenda to deliver against key priorities which impact on current and emerging sustainability issues facing the City of Monash and its residents. It sets Council's environmental goals for the future and proposes actions that will help to reach these goals, which will promote the development of a sustainable and resilient community and to reduce Council's impact on the environment.

Our Vision

An innovative and environmentally sustainable garden city: resilient, diverse and thriving.

Our Mission

Making a difference through environmental sustainability, commitment, expertise and leadership.

This is the third annual report prepared for the Environmental Sustainability Strategy 2016-2026 and highlights achievements across the priority areas during 2018/19

Monash Council's Environmental Sustainability Strategy is delivered under seven key priorities:

Built Environment

Planning and implementing a sustainable future

Urban Ecology

Protecting and enhancing our natural environment

Climate Change

Mitigating and adapting to climate change and reducing energy use

Waste & Resource Management

Reducing waste, litter and resource consumption

Integrated Water Management

Supporting better use of water

Partnerships & Leadership

Collaboration and influencing behaviour

Education, Engagement & Reporting

Supporting community engagement and reporting

Strategic Alignment

This Strategy addresses elements of all four themes in the current Council Plan 2017-2021:

- A Liveable & Sustainable City
- An Inclusive Community
- Inviting Open & Urban Spaces
- Responsive & Efficient Services

Built Environment

Context

The way that a city, its suburbs, its buildings and its transport are designed, built and managed can have a large impact on long-term environmental sustainability, how its inhabitants live, work, commute, participate in recreational activities and the overall quality of life.

Objectives

- 1. The garden city character of Monash is retained and improved.**
- 2. Development is designed along Environmentally Sustainable Development (ESD) and Water Sensitive Urban Design (WSUD) principles.**
- 3. Urban environments are designed and planned to promote and encourage integrated and active transport.**

Key achievements

Investment in cycling and walking paths

Construction of funded initiatives in the Integrated Transport Strategy in 2018/19 were completed and Council has been working with TAC and VicRoads through the Safe System Road Infrastructure Program (SSRIP) to introduce safety improvements for cyclists and pedestrians. Improvements have been rolled out along two strategic cycling corridors from Syndal to Clayton Railway Stations via Monash University, and along Scotchmans Creek Trail from Atkinson Street, Oakleigh to Crosby Drive, Glen Waverley. The projects are fully funded by the State Government's \$100 million Safer Cyclists and Pedestrian Fund.

The following is a summary of the works funded in Monash under the SSRIP program in 2018/19:

- Six new sets of pedestrian signals
- Three new pedestrian crossings across slip lanes on Forster Road
- Two new sets of pedestrian flashing lights in Oakleigh
- Around 2.3 kilometres of shared paths
- 11 raised intersections
- 10 raised crossings
- Eight road humps.

These projects will provide our community with improved connectivity to public transport interchanges, increased pedestrian and cycling pathway options, which support safer commuting by bike and foot.

Bicycle education trailer

Constructed in 2017/18, the bicycle education trailer is available for schools to run bicycle education programs, to increase student awareness of active and sustainable transport options.

Monash Open Space Strategy

In October 2018, Council also adopted the Monash Open Space Strategy, to meet community expectation for more available open space now and in the future. The strategy looks at the changing needs and expectations of current residents and the additional demands that will be placed on the public open space network. The

strategy identifies the open space needs of existing and future residents of Monash, gaps in the provision of open space and opportunities to address those gaps.

Protecting our 'garden city' character

In October 2018, Council adopted the Monash Urban Landscape and Canopy Vegetation Strategy to support the protection of our Monash 'garden city' character. Extensive community consultation was undertaken between May and August 2018 to give residents an opportunity to provide their feedback on the strategy which has the following key outcomes:

- 30% canopy vegetation cover by 2040. Monash's tree canopy is currently 22% which is lower than local municipalities of Whitehorse (23%), Stonnington (25%) and Boroondara (28%)
- Identifying the existing and referred landscape character types
- New planning scheme controls and/or a local law to protect significant canopy and trees
- Guidelines to maximise the retention of mature trees on private and public land and provide guidance on appropriate plant selection and planting.

Implementing the Environment Sustainability Design in Monash

The expiry date for the Environment Sustainability Design Policy for developments of three (3) or more units has been removed by the Minister for Planning and it will now be valid until the State Government has a replacement policy. This policy has been in place since September 2016 to provide guidance to developers wanting to build in Monash. Sustainable Monash is providing support to the Statutory Planning team to assess applications under the ESD policy when requested.

A draft of the Sustainable Building and Infrastructure Policy for Council-owned buildings was completed following two internal stakeholder meetings and is awaiting feedback from key internal stakeholders.

A case study has been prepared for the Council for a Sustainable Built Environment (CASBE) to showcase the work at the Eastern Innovation Business Centre:

www.casbe.org.au/casestudies/eastern-innovation-business-centre

Urban Ecology

Context

Protecting biodiversity is vital to life on earth. It helps sustain the earth's life support systems (ecosystem services) that provide us with clean air and water, fertile soils and food. Biodiversity provides an important source of scientific information and gives us natural places to explore and enjoy, which may be of cultural and spiritual significance.

Objectives

- 1. A strategic approach to landscape planning is established which recognises biodiversity, habitat connectivity and builds ecosystem resilience.**
- 2. Long-term biodiversity outcomes are achieved on Council owned and managed conservation reserves.**
- 3. Increased community understanding of and participation in urban ecology and local biodiversity stewardship is achieved.**
- 4. Roles, responsibilities and involvement relating to community food gardens are defined and implemented.**

Key achievements

\$62,000 Caring for Our Local Environment grant was received from the Victorian Government for the Green Shoots program, contributing to ongoing projects such as tree protection education, Bush Kinder spaces, Gardens for Wildlife and Mulgrave Friends.

Monash Urban Biodiversity strategy

Council adopted the Monash Urban Biodiversity Strategy 2018-2028 in November 2018, which is the first overarching plan to guide the protection, management and enhancement of Council's biodiversity assets for the next 10 years. The strategy includes a 3-year implementation plan which will guide Council's biodiversity management directions and provide a long-term approach to protect and maintain our rich natural environment and enhance our local bushlands.

Six main objectives have been identified to underpin and guide biodiversity action:

- 1. Increase community understanding, active engagement and appreciation of biodiversity.**
- 2. Enhance biodiversity through revegetation and protection of remnant vegetation.**
- 3. Collaborate with other public land managers to create broad-scale biodiversity gain.**
- 4. Proactively reduce biodiversity threats.**
- 5. Identify ecological baseline and indicators to monitor and assess environmental conditions.**
- 6. Strengthen biodiversity policy and legislation.**

This new strategy is another pillar in Council's approach to protecting Monash's garden city character and improving our urban forest. It will be accompanied by a summary document which communicates biodiversity priorities clearly and links it to both the Open Space Strategy and the Monash Urban Landscape and Vegetation Canopy Strategy. Plant lists to complement the Urban Biodiversity strategy are being developed for each reserve in Monash, while strategy actions are being actively implemented.

As part of the strategy development, ecological assessments were undertaken to record baseline data for high priority conservation reserves under Council management and to identify habitat corridors across the municipality and catchment scale.

The development of the strategy provided the opportunity for Council's Sustainable Monash and Horticulture teams to collaborate on community engagement and bushland protection activities under the Green Shoots program which brings together our work with schools, community and early learning under the Gardens for Wildlife program, Skink Link project, and our work with Friends groups.

Green Shoots Program

The Green Shoots Program is the overarching community engagement program to support the delivery of our Urban Biodiversity Strategy, in partnership with Horticulture. The idea behind Green Shoots is to grow new knowledge, people, plants, locations, connections and partnerships aimed at current and future generations and in keeping with Monash's 'garden city' aspirations.

Green Shoots connects all generations and cultural and social groups in Monash to our local natural environment, encouraging residents to take a positive, collective responsibility towards stewardship of these important spaces. The program has been gaining traction in the community and is working towards bringing Council's garden city reputation to life through increased community engagement in biodiversity improvement and awareness programs. Examples include the installation of new bush kinder spaces in two sporting reserves, and an expanded Gardens for Wildlife program to include volunteer garden mentors to support residents and schools to create their indigenous gardens.

1) Tree planting and protection

In 2018/19, numerous community planting events have been held to reach the target of 70,000 plantings. Across Monash, 105,353 trees, shrubs and ground covers were planted in parkland and bushlands. Included in this annual total is 1,500 new street trees which is well over the target of 1,000.

To complement planting efforts, a tree protection education program has been initiated to review the internal processes on how Council manages tree requests from the community.

Friends of Damper Creek hosted an event at Alvie Hall with expert Dr Greg Moore in order to educate the community on the value of trees.

2) Skink Link project

Initiated in 2018 and one of the key programs of Green Shoots, the Skink Link project is focussed on the rehabilitation of the original habitat along the Scotchmans Creek from Warrigal Road to Huntingdale Road, to help Southern Water Skinks and other wildlife thrive. Since then a Friends of Skink Link Project has been created where community members work alongside the Bushland Crew and Sustainable Monash team to coordinate and participate in planting days, weeding, and creation of an identity/logos and organisation of community events. A Skink Link Hub has also been created, with 'skink/lizard lounges' and interpretive signage to educate others on the project to support our local wildlife and bushland areas. The Skink Link Group has created a page on iNaturalist (a citizen science app) to collect data on skink sightings.

www.inaturalist.org/projects/skink-link

Oakleigh Primary students collected seeds from the Red gums close to Huntingdale Road and Brandon Park Secondary School Green Team helped repot some of the small seedlings which were planted in this section of Scotchmans Creek. Holmesglen TAFE students propagated 1,500 seedlings and planted them along the creek with the Oakleigh Primary students. This new biodiversity area is now thriving. This project demonstrates a high-level multi-stakeholder community engagement in biodiversity. Subsequently, over 8,000 plants have been planted by the community along Scotchmans Creek, greatly contributing to the biodiversity of Monash.

3) Gardens for Wildlife

Monash's Gardens for Wildlife program encourages residents to use indigenous plants in their gardens to create better habitats for local wildlife. Monash has hosted six workshops in 2018/19 to this end, giving residents an opportunity to learn more about indigenous gardening. These workshops complement the updated Gardens for Wildlife booklet. Bushland crew staff are supporting community presentations. The Monash Biodiversity poster by The Connies has been updated. New biodiversity sticker booklets and biodiversity collector cards have also been developed in partnership with The Connies and have proved to be very popular with all members of the community.

www.connies.com.au

As part of the Sustainability Hub at the Mackie Road Neighbourhood House the surrounding garden was turned into a Gardens for Wildlife project, which included the installation of a granitic sand path bordered by native plantings and a small swale and frog bog. The plantings, fed by a rainwater irrigation system, were put in place with the help of the community. The biodiverse nature of the garden will attract various native wildlife over time whilst educating the community on the value of native gardening; bee hotels, habitat boxes and external signage are due to be added next year.

4) Bush Kinder Spaces

Brandon Park, Kanooka and Monash Vale Children's Centres run bush kinder programs and have asked Council to add a few natural elements so the children can benefit physically, socially and emotionally from the unique and creative opportunities that open up within a natural play setting. In response, Council created two new bush kinder spaces at Fregon Reserve and near Brandon Park Preschool. Significant tree trunks and large rocks were repurposed to create some inviting nature play spaces for children in kinder and others who visit these reserves. The children from these centres are also growing indigenous seedlings that have been planted into the bush kinder spaces with their families and local residents. This will improve the habitat for our wildlife and provides an opportunity for young people to play an active part in improving the environment for their future.

5) Bush Kinder professional development with Boroondara

In conjunction with the City of Boroondara, Council offered a professional development opportunity for educators from family day care, long day care, kindergarten and primary school who were all interested in the concept of setting up a 'bush kinder' program in a natural setting. Sue Elliott, a well-known academic in this space, presented at the session which was attended by over 250 participants. We also ran two more sessions – with Nuts and Bolts with 80 educators on Nature Play and bush kinders with the Royal Botanic Gardens facilitator with 100 educators.

6) Wetland Wonders: Family Nature Days

Monash hosted two Family Nature Days in local wetlands at Huntingdale and Mulgrave, to introduce 150-200 residents to the myriad wildlife which live in the area, in the hopes of inspiring the next generation of environmental stewards. The Huntingdale Family Nature Day was hosted in partnership with Melbourne Water. Children and adults learned about local frogs, birds and water bugs to highlight the value of biodiversity, as well as Aboriginal Cultural knowledge and a bush tucker tour through Mulgrave Reserve. Monash has since received expressions of interest from the community to start a habitat rehabilitation program for the Mulgrave Wetlands.

Climate Change

Context

In Victoria, we are becoming increasingly aware of our community's vulnerability to climate change. Melbourne's east is expected to experience hotter and drier conditions with more frequent extreme weather events. These events not only impact our natural and built environments, they have an impact on health and resilience of individuals and communities.

Objectives

1. **Best practice climate change thinking is integrated into Council's corporate and operational functions.**
2. **A strategic approach to reducing Council's corporate greenhouse gas emissions is established.**
3. **Increased community preparedness for the likely impacts of climate change.**

Key achievements

Environmental Upgrades for Businesses

Four Monash businesses have signed Environmental Upgrade Agreements (EUAs) with Council to improve the sustainability of their operations. The EUAs allow businesses access to Environmental Upgrade Finance (EUF) which is a type of long-term low interest loan that the owner repays through their Council rates. Council then transfers the repayments to the finance provider. Council offers access to the EUF program, in partnership with Better Building Finance, to assist Monash businesses in saving utility costs and improving economic and environmental performance, as well as reducing greenhouse gas emissions. EUA's to date include:

- **Tibaldi**, a food manufacturing business in Clayton, installing a 1.04 megawatt solar-system worth \$1.4 million – Victoria's largest solar EUA and will result in annual electricity cost savings for the company of around \$339,000 per year
- **Titomic building**, which is part of Monash University's Notting Hill campus to install a 100kW solar panel system (Owner Saul Ryan)
- **Clayton Road commercial building** to upgrade to LED lighting, window solar film and 100kW solar
- **Jowett Properties** – BMW Waverley site in Springvale Road, Mulgrave.

Energy Performance contracts

Council hopes to enter its large facilities into Energy Performance Contracts (EPCs) in order to reduce energy use and emissions. The EPCs are in partnership with Whitehorse Council and supported by Yarra Ranges Council. Monash has selected Ecosave to complete a detailed study of six major Council sites, including the redevelopment of Oakleigh Recreation Centre.

Utility tracking

Since the installation of a utility tracking system to monitor and evaluate energy data, data verification has identified \$68,000 worth of savings as at June 2019. The new system has been helpful to quantify Council's total greenhouse gas emissions from buildings, fleet and operations, improve our efficiency and reduce cost. It also allows the evaluation of water and waste data.

Feasibility study on Greenhouse Gas Emissions Reduction

A study was completed to determine an achievable science-based greenhouse gas emissions reduction target for Council and the community, with guidance on how to feasibly meet that target. The emissions profile of the Council is being clarified and reduction actions are being prioritised to report to Council in February 2020.

Adoption of responsible investment principles

In June 2018, Council adopted responsible investment principles for the whole organisation. As significant customers of financial institutions, Monash Council has the potential to influence our level of investment in fossil fuels and responsible funding practices.

In addition, Council adopted an amendment to investment policy which allows for long-term investments in financial institutions receiving a BBB or higher credit rating. Council has advocated to our financial institutions with fossil-free investments to improve their credit rating, financial rate of return and interest rates to increase the opportunities for our organisation to invest more responsibly. This will encourage the diversification of investment portfolios, with a greater emphasis on fossil-free and responsible investments.

Positive Charge workshops

Over 200 residents attended two information sessions in July 2019, to learn about solar panels and energy efficiency in the home, with the chance to speak face-to-face with an energy expert from Positive Charge. The program will offer recommendations on energy efficiency solutions and renewable energy technologies like solar panels and battery storage options, along with referrals to vetted suppliers and products, and an opportunity for households to purchase solar power systems through a carefully selected supplier at a discounted cost.

Solar Savers

Through Council's involvement in the Eastern Alliance for Greenhouse Action (EAGA) Solar Savers program, eligible low-income and vulnerable houses can install solar panels, take control of their bills and protect themselves from electricity price rises. The project has the potential to deliver immediate net savings of at least \$100 per year in electricity costs for each household.

These programs are complementary to the State Government's Solar Victoria program. Monash has facilitated 41 solar installations in the last financial year, improving those households' preparedness for the impacts of climate change. The ability of solar PV to provide low cost energy throughout the day means these householders can cool their homes during heatwaves without fear of 'price shock', further protecting a vulnerable sector.

How well are we adapting?

Monash is participating with nearly 20 councils in data collection and in the development of indicators for Assets and Infrastructure for the 'How well are we adapting' tool to track our climate adaptation activities and in the development of a Climate Change Adaption Research Hub for local government and universities.

Local Government Power Purchasing Agreement

Monash was the first of 48 Victorian councils to sign up to the Local Government Power Purchasing Agreement, with the support of the Council's CEO, Councillors and EAC. This initiative supports local governments in purchasing 100% renewable source electricity.

Waste & Resource Management

Context

Waste management has rapidly evolved from a singular focus upon protection of public health into a highly mechanised and progressive industry committed to waste minimisation and resource management. Community expectations for environmental sustainability and the efficient use of resources have driven and supported this transformation.

Objectives

- 1. Best practice waste and recycling collection and litter reduction services are delivered in a strategic municipal-wide approach.**
- 2. A strategic approach to reducing Council's corporate waste and environmental impacts is established which recognises the waste hierarchy, life cycle analysis and has sustainable procurement integrity.**
- 3. Reduced community consumption of resources and improved recycling is achieved.**

Key achievements

Grants

- \$100,000 Infrastructure Update grant: from Sustainability Victoria for electronic waste storage at the Waste Transfer Station, continuing into 2019/20
- \$30,000 Graffiti Prevention grant: from the Victorian Government Department of Justice, for a new mural in Mount Waverley
- \$10,000 grant from Sustainability Victoria to run a community event to promote new electronic waste collection.

Recycling crisis

In 2018, China introduced new trade measures that limited the import of recyclable materials with a 0.5% or more contamination rate. This caused widespread disruption to global recycling markets, including Victoria's recycling industry, which exports significant quantities to China for processing.

The policy has most directly impacted kerbside recycling services, as recyclables from households are usually on-sold in a mixed form, with many recycling processors in Australia increasing pricing for accepting such recycling. Fortunately, Monash did not experience any disruption to our recycling service because Visy is our recycling contractor, until April 2023.

However, China's ban on some recycling materials resulted in an unexpected net cost in the past financial year to Council of \$1.5 million resulting in the introduction of a limited recycling levy of \$22 per ratepayer to meet these increased costs. We know that recycling is important to our community and it is critical that our recycling service continues and that items put out for recycling not be sent to landfill.

Food Organics in the Green Organics bin

Delivering on a key commitment of the Monash Waste Management Strategy (2017-2027), Council is getting ready to introduce a food and green waste recycling service in July 2020. This would reduce the amount of food waste going to landfill by over 40%, avoid greenhouse gas emissions, provide valuable composting for Victorian agriculture, and improve levels of community waste disposal. A communication program has been

designed to increase community awareness. This project was a popular topic during community consultation for Council's Waste Management Strategy.

Kerbside collection

The tonnes of material collected for our kerbside services in 2018/19 was 67,211 tonnes of waste (garbage, recycling and green waste). This is a marginal decrease compared to previous years. Volumes do vary throughout the year due to seasonal factors however this year saw lower tonnages than previously experienced despite a higher number of bins in service.

Council is exceeding its customer service guarantee target for waste collection, bin repair and replacement, and 93% of dumped waste reports were investigated within one day of being reported. This is above industry average.

The increased use of lightweight packing by manufacturers contributes to the ongoing decrease in recycling tonnages. The tonnes of green waste collected was also comparably low compared to previous years which is likely a result of the drier season we experienced during this time.

Illegal dumping

In 2018/19, there was a historically high number of dumped rubbish requests from the community. Council received a total of 2,923 for the financial year, disappointingly representing a 32% increase of what is an illegal activity. This is despite a 2% increase in patronage at the transfer station with 88,368 customers in 2018/19, where half of these are bringing in recyclable items only.

Excess household items left beside clothing donation bins has presented an ongoing challenge. Council introduced a Permit for Clothing and Recycling Bins from 1 July 2019. All charities and recyclers that currently have bins on Council owned or managed property were asked to apply for this permit.

While recognising that clothing, charity and recycling bins are an important way for people to recycle and divert materials away from landfill, unsightly and illegally placed bins were a cause of concern for Council and the community. As part of the new arrangement everyone must apply for a permit but charities that prove they are registered under the Charities Act and hold current membership of the National Association of Charitable Recycling Organisations (NACRO) are not charged a fee.

Sustainable procurement

Improving the use of resources in procurement will help to reduce Council's waste and environmental impacts and ensure integrity, setting an example for the rest of the community. In 2018/19, Council's spend on environmentally preferred or socially responsible goods and services was approximately 4.8%; this figure can be improved (up from 4.3% in 2017/18). Therefore, Monash is reviewing contracts and procurement documents to devise areas where plastic waste can be reduced, and how recycled content products can be used.

New hard waste collection

The new At Call User Pays Hard Waste has been well received by local residents. It was introduced as part of a review of Council's hard waste collection following extensive community consultation with 105,785 residents and ratepayers receiving direct mail which asked them to choose from two options. Of the 30,900 responses received, 77% chose option 1 which was to maintain the existing service which offered one free pick up a year plus an additional at-call hard waste collection cost of up to \$143.

Over the year residents have been able to book over the phone for a paid collection of hard waste, and in the first 12 months there was a total of 693 At Call User Pays Hard Waste collections.

This improves accessibility to waste disposal services for Monash residents, as well as helping the community to be more engaged in waste and recycling processes.

Murals

In a continuation of previous years' projects, Monash used a new grant from the State Government for a graffiti prevention mural. The mural was developed and designed with help from Huntingtower School students and the local community to inform the brief. The mural was painted on the side of a Mount Waverley IGA by the artist TWOONE. Murals like this, Monash's seventh, create positive change in the community by improving the perception of safety in these areas and reducing behaviour like littering. This mural completes a 3-year project in partnership with Huntingtower School, which began with Year 9 visual arts students conducting public consultation on local flora and fauna and ancestry of residents, in 2016 and 2017.

The Clayton Zone Project

This project was initiative to address a litter hotspot in Clayton close to Monash University. Many of the littering issues relate to residential kerbside collection bins including contamination of recycling bins, overfilled waste bins, nature strip litter, illegally dumped waste and bins being left out after collection. The Sustainability Team is working collaboratively with Waste Services, Community Laws and Environmental Health to educate the community on correct waste and hard waste disposal. Over 2,000 inspections were completed by waste officers (also Monash University students) to confirm these concerns and it was found over 32% of recycling bins were contaminated and around 15% of all bins were overfull. Illegally dumped waste in the areas surrounding Monash University is the highest in the City of Monash.

In 2018, there were 569 instances of illegally dumped waste in Clayton alone. This project will continue to work with Monash University on ways to reduce illegally dumped waste in the Clayton area and educating residents in the surrounding streets.

Stage 2 of the project included distribution of education materials and messages related to kerbside collection, in addition to further inspections. After the education stage was completed, Council met with Monash University to discuss the issues, as they often relate to student accommodation. Stage 3 of the project will consist of a repeat inspection of the entire zone to ascertain if behaviour change has been achieved following more education in 2019/20. This project is valuable for changing the waste disposal habits of the community, so that a cleaner and safer environment is achieved.

Composting discount

Monash introduced a Council rebate for compost bins, worm farms and Bokashi bins, in partnership with Circular Foods. Residents can now purchase these products for up to 70% discount with free delivery. Over the year, 208 orders were placed including 191 worm farms, 105 compost bins, 62 compost tumblers, and 60 Bokashi bins and it was found over 99% were happy with the service.

Civic Centre recycling station

A new recycling station has been installed in the Glen Waverley Civic Centre, for residents to dispose of small items responsibly such as: batteries, mobile phones, lightbulbs, x-rays, CDs and DVDs. Council sends these items to specialist recyclers.

Clean Up Australia Day event

For Clean Up Australia Day in 2019, there were a total of 24 community clean-up events across Monash, collecting 60 bags of rubbish in total. Of these events, 16 were held on the day, while the rest were hosted by 13 schools, three businesses and two youth groups through the week. Monash supported these events by checking on the sites and collecting the rubbish bags, as well as hosting an event of its own along Scotchmans Creek in conjunction with its Skink Link project. This event alone collected 40 bags of rubbish. These events are

important for the community, as they help residents appreciate the environment and thereby reduce littering tendencies in the first place, as well as removing litter.

Improvement of Council waste habits

Monash has made a number of changes to improve the waste disposal habits of Council, setting an example for the community and businesses. New recycling bins have been rolled out at Active Monash and Monash Libraries to increase recycling.

Firstly, Monash has moved to A4 copy paper made of 100% recycled content, which is also Australian-made and carbon neutral, in nearly all Council facilities. This doubles the amount of recycled paper content previously used by Council. In conjunction with this switch, Council installed 50 new multi-function printers in 17 Council sites. In the same month as installation, the printers saved over 9,000 sheets of paper – saving trees, energy and over \$1,200. Furthermore, the Statutory Planning department announced that it will be paperless from July 2019, making a significant contribution to Council's waste reduction efforts.

Finally, Monash contributed to a submission by the Municipal Association of Victoria to the State Government review of the Product Stewardship Act 2011. This review aims to improve resource recovery and increase responsibility for the environmental impact of products.

#msnobutts Cigarette Butt Litter Initiative

As part of the Council's Litter Action Plan 2018-2022, Monash partnered with the City of Greater Dandenong in a community education project to reduce cigarette butt litter, with the assistance of funding from Sustainability Victoria's Litter Innovation Fund. The funding was utilised for purchase of a cigarette butt costume, mini ashtrays and educational materials.

The costume, called Ms. No Butts was used by Monash staff whilst handing out mini cigarette butt bins in Glen Waverley, Oakleigh, Pinewood and Mount Waverley. Staff discussed cigarette butt litter with pedestrians, educating smokers on the impact of butt litter on local waterways, wildlife and the environment.

The community responded positively to this initiative and showed a good level of engagement. Education projects such as this are important for reaching out to community members who may not typically engage with Council and raises awareness of the impacts of litter.

Waste Achievements and Initiatives

Paintback

Monash Transfer Station has been named the top site again in Australia for paint recycling, second year in a row, thanks to strong community interest in recycling and diverting waste from landfill. In 2018/19, the Monash Transfer Station in Notting Hill collected 330,403kg of paint (2017/18 – 345,590kg and 2016/17 – 285,388kg). Monash was the first in Victoria to sign up to Paintback, a scheme where a levy of 15 cents is added to the price of all paint to cover its recycling costs. The service is free for people who want to dispose unwanted paint. Under the program, the paint packaging and waste liquid are separated, and the containers recycled.

Planet Ark toner cartridge recyclers

Council and Monash residents diverted 1,269kg of waste from landfill through Planet Ark at our offices and libraries, making us the sixth highest collection site for toner cartridges in Australia. A total of 127km of roads has been constructed with recycled toner cartridges since July 2018.

https://planetark.org/news/display.cfm?news_id=2720

Mobile Muster

In 2018/19, Monash collected 20.12kg of mobile phones and accessories for recycling. This service accepts includes all makes and models, phone batteries, chargers and accessories, mobile wireless internet devices and smart watches. All data on mobile devices is destroyed during the recycling process and 95% of material is recovered and used in the manufacture of new products.

'Snap Send Solve' for Monash Waste problems

Residents can now report issues including graffiti, dumped rubbish, overgrown vegetation or footpath obstructions to Council through Snap Send Solve. The free app is available on both iPhone and Android phones. A total of 2,664 incidents were reported via the app between September 2018 and the end of June 2019. Once an issue is reported via the app, a report is sent to Council with the location, a photo of the concern, and an email. Council keeps residents informed on what action has been taken to resolve the issue.

Reduction of single-use plastics

Based on the 2016/17 commitment from Council to reduce the use of single-use plastics across Council business and events, a survey was conducted in different Council departments to identify consumption habits. Monash hopes to integrate the single-use plastic reduction commitment into procurement policy, stakeholder guidelines and leasing agreements in the future. In addition, a 'Big Belly' solar bin has been installed in the Monash Operations Centre to trial its suitability for collecting plastic film from deliveries.

Integrated Water Management

Context

Water is an essential resource for sustaining life. It is a renewable resource but its availability and quality is highly dependent on environmental influences, land use, human activities and consumption.

Objectives

- 1. A strategic approach to integrated water management is established and implemented which recognises and values the health of waterways, wetlands and catchments, water conservation, water reuse and water sensitive landscapes.**
- 2. Best practice integrated water management, water reduction and water reuse principles are included in all Council corporate and operational functions.**
- 3. Increased community understanding of and participation in waterway health, water conservation and water reduction is achieved.**

Key achievements

Waterway and wetland management

Council is responsible for the management of a number of wetlands and riparian environments. Works and activities in 2018/19 included redevelopment of Holmesglen Reserve in Ashwood, with drought tolerant turf and a highly efficient irrigation system.

Water Sensitive City forum

Monash undertook a Water Sensitive Cities benchmarking and assessment exercise in October 2018. The exercise brought together staff from across Monash who work towards integrated water management led by the City Design and Sustainability teams, along with representatives from the water authorities and neighbouring councils. The exercise rated Monash's current performance across seven goals (governance, community capital, equity, efficiency, ecological health, quality urban space and adaptive infrastructure). The index scores allow for benchmarking against similar municipalities, which showed that Monash is well on its way to becoming a waterway city but more work is needed to get to being a Water Sensitive City. A 10-point action plan was provided to provide guidance on progress towards a Water Sensitive City. The 10-point plan included prioritising water and storm water management capabilities, increasing tree canopy cover and improving irrigation efficiency, and improving community understanding of integrated water management.

Water Efficiency Feasibility study

In addition to the greenhouse gas reduction feasibility study and plan to become a Water Sensitive City, Council initiated a water efficiency feasibility study to understand what it can do to reduce water and decrease a reliance on potable water.

Water Watch update

Through Melbourne Water's Watch Program, members of the community and Friends groups volunteer their time to measure water quality of local waterways to give us a better understanding of our waterways' long-term health. In 2018/19, Monash community members made over 565 observations of water quality parameters such as pH, turbidity and dissolved oxygen during 90 visits at seven sites within Monash. To view the data collected, visit: www.vic.waterwatch.org.au

For information on improving waterway health, see: www.melbournewater.com.au/what-we-are-doing/waterways-local-updates

Partnerships & Leadership

Context

Integrating sustainability across the organisation and fully utilising the resources available requires strong and consistent commitment from all staff. Leadership, cross-department collaboration and ongoing support is required to ensure staff have the awareness, information, capacity and confidence to deliver appropriate environmental outcomes through their daily work functions.

Objectives

- 1. Sustainability is integrated into Council decision-making processes.**
- 2. Develop and strengthen partnerships that achieve Council's sustainability objectives.**

Key achievements

Environmental Advisory Committee

The purpose of the Environmental Advisory Committee (EAC) is to inform and advise Council on environmental and sustainability related issues and Council's role in improving the natural environment of Monash. This includes input into the development of the Environmental Sustainability Strategy 2016-2026 and resulting strategic projects.

The EAC has advisory capacity only and has no delegated authority to make decisions as if they were Council. Advisory Committees provide advice to Council and staff to assist them in their decision making. EAC is represented by 13 community members and three Councillors. The term for the community membership is two years. Community members are appointed by Council following a public expression of interest. The current membership is from June 2018-2020.

The Environmental Advisory Committee actions over the past two years have included input and feedback into the:

- Final Urban Biodiversity Strategy
- Responsible Investment – Divestment in Finance Policy
- Review of Emission Reduction Strategy brief and report
- Review of Water Feasibility Study brief and report
- Development of Council report – Prioritising Council's response to Climate Change
- Evaluation of City Power Partnership and TAKE2
- Community Gardens policy development
- Reusable coffee cup review
- Review and feedback on Biodiversity Strategy
- Review and feedback on Green Shoots
- Review and feedback on FOGO roll out, and Litter Action Plan
- Challenging Council on new program delivery opportunities.

In 2018-2020, 13 members have been approved to participate on the Environmental Advisory Committee and meet six times a year.

TAKE2 pledge

Monash joined Victoria's climate change pledge program called TAKE2. Monash took the pledge to "play our part and take action on climate change". Council joins 118,000 other pledge-takers which includes Victorian homes, businesses, schools and community organisations. TAKE2 focuses on collective action for huge change, with the target of net zero emissions from Victoria by 2050. Not only does this link Monash with important community action, but it demonstrates a dedication to reducing Council's own corporate emissions.

Cities Power Partnership

Monash has become a member of this Cities Power Partnership (CPP), which is Australia's largest local government climate network. The network will give Monash greater support in reporting on and reducing corporate emissions and in helping the community with climate change impacts.

Eastern Alliance for Greenhouse Action

The Eastern Alliance for Greenhouse Action (EAGA) is a formal collaboration of eight Councils in Melbourne's east including Monash, working together on regional programs that reduce greenhouse gas emissions and facilitate regional adaptation. The Alliance implements joint initiatives that provide economies of scale and enable projects typically beyond the reach of individual councils. EAGA's project work is complemented by advocacy, capacity building and regional partnerships.

Some benefits of this partnership and highlights from 2019/20 include:

- Councils receive \$2.30 for every dollar contributed in membership fees
- 6 of 8 councils are involved in the Energy Performance Contract program; in the first tranche councils each saved \$200,000 per year and avoided 1,500 CO₂e tonnes
- Solar Savers project delivered 434 solar systems across Victoria, generating 1.6MWh in power and saving 1,749t CO₂e per annum, 40% in EAGA region
- EAGA and Victorian Greenhouse Alliances initiated a business case for a sector-wide renewable energy Power Purchasing Agreement (PPA) project with 48 councils
- Business cases were prepared for behind the meter solar on 53 second tier council facilities
- EAGA has initiated a pilot 'metering' program aiming to ensure savings generated through smart energy saving controls on public lighting infrastructure
- EAGA has partnered with Ironbark Sustainability and the Australian Energy Market Operator (AEMO) to progress changes to the National Electricity Rules
- EAGA collaborated with the Victorian Greenhouse Alliances to deliver the third joint conference attended by over 300 local government (and other) representatives
- Five formal advocacy submissions prepared regarding energy market reform and climate change policy, and led to modifications of the State Government's solar rebate program.

Living Links

Monash continued to be an active member of Living Links; a collaborative network of councils, government agencies and community groups. This group works together to create more green spaces across Melbourne's south-east, forming green corridors throughout the urban area which both provide habitats for wildlife and connect the community to nature.

In the second year of the Our Corridors Our Community grant funding, Living Links projects continued at Mulgrave, Napier and Drummies Bridge Reserves. Revegetation, weed management and community

engagement were the focus in these locations, to improve the quality of Monash's bushland. In 2018/19, 7,575 native trees were planted, 500m of recreational trail was improved, and 213 volunteer hours were spent along the 2km waterway connected to these sites.

Living Melbourne: Our Metropolitan Urban Forest Strategy

In April 2019, Council endorsed the Living Melbourne: Our Metropolitan Urban Forest Strategy, which meant supporting Living Melbourne's vision, goals and actions and committing to working in partnership with other organisations on board with this strategy towards its implementation. The metropolitan urban forest in Melbourne is made up of all the trees, shrubs, grasses, soil and water on public and private land across metropolitan Melbourne. The strategy was led in development by The Nature Conservancy and Resilient Melbourne with input from 32 Metropolitan councils (including officers from Monash Council), the State Government, statutory authorities and academics.

City of Monash Open Gardens Day

Saturday 10 November 2018 saw eight Monash households open their gates to visitors to share and celebrate the great gardens of Monash as part of Monash's first Open Gardens Day.

A diversity of gardens were on show with styles ranging from courtyard to cottage to edible, with features such as fruit trees, native species, wicking beds and low-maintenance designs, all showing the opportunities available to residents. The inaugural event was deemed a great success with over 400 visitors to each garden.

Sustainability Leadership Award

The Sir John Monash Awards recognise the Monash community's achievements to improve the lives of others and celebrate the outstanding work of volunteers in Monash. The 2019 Winner of the Sustainability Leadership award was Ian Moodie, wildlife photographer and officer at Whitehorse City Council.

Ian Moodie is the author of many of the photos in this report.

Precious Plastics

Council worked with Monash University engineering students to involve 10 local schools in a plastic recycling project. Students collected plastics which were recycled and turned into signs for their schools. Not only does this project demonstrate the future of localised recycling and manufacturing, but it encouraged students to consider the environmental impact of waste and how the community could better use its resources. Monash has committed to support innovation in the waste industry, and its partnership with Monash University's Precious Plastics club is an important aspect of this.

Education, Engagement and Reporting

Context

Many opportunities exist for everyone in the community to change daily behaviours that will reduce their lifestyle impacts. Monash Council supports such behaviour change through ongoing targeted environmental education and initiatives.

Objectives

- 1. Environmental education and behaviour change programs relating to all priority areas are developed, delivered, monitored and evaluated.**
- 2. Sustainability outcomes and targets are monitored, evaluated and reported using best practice sustainability indicators and accounting processes.**

Key achievements

Community workshops and festivals

The Sustainable Monash team held a series of community events to engage and educate residents on sustainability topics such as solar power and battery storage, gardening with native plants and food waste reduction. With a total of 24 workshops, Council had 1,300 interactions with the community.

Some workshops presented by Council include:

- Sustainable building tour of the Eastern Innovation Business Centre
- Gardens for Wildlife workshops for residents
- Positive Charge workshops about solar
- Decluttering and Reducing Waste workshop at the Glen Waverley Civic Centre
- Zero Waste Living Workshops hosted by Erin Rhoads
- Composting and worm farming workshops;
- 'War on waste' tour of the Waste Transfer Station
- Bird Walks to celebrate National Bird Watching Week
- Reducing food waste at home
- Screening documentaries about waste – including *Rubber Jellyfish* and *A Plastic Ocean*.

Sustainable Monash also attended the Chinese New Year and Lantern festival, engaging with over 250 people in a waste sorting game to spark discussions about waste, while another stall was set up at Clayton Festival and the Hawkers Night Market about the benefits of cycling across Monash.

Council runs a number of events each year to educate the community about sustainability.

In 2018/19 these included:

- A number of planting events including the Skink Link Project that involved planting 800 plants to create habitat for the Southern Water Skinks. The project aims to bring back the water skink and other wildlife to Scotchmans Creek
- Workshops at Batesford Hub covering topics including worm farming, bee keeping, permaculture, healthy soils, growing edible plants and Indigenous plants and food, learning different ways to reduce single use

plastics, reduce rubbish bin by half, tips for making simple and safe personal care and home cleaning recipes

- Screening of sustainability movies such as *A Plastic Ocean* and *Rubber Jellyfish*
- Community tours of the waste transfer and recycling station
- Sustainability displays and activities at Monash's major community events
- Solar campaigns and presentations with Positive Charge and Solar Savers to encourage uptake of solar for residents including pensioner homeowners
- Recycling Education stall with Visy at both the Brandon Park and Oakleigh Shopping Centres. The stall was at each centre for three days – lots of interest on how to recycle right
- Community and preschool recycling education was provided to 144 children and 21 adults
- Wicking beds installed at Mount Waverley Library with Waverley Garden Club and Glen Waverley Library.

School education and Sustainability Summit

Council delivered over 30 education sessions at local schools on a range of sustainability topics such as biodiversity and recycling. The sessions resulted in engagement with nearly 1,000 students and teachers.

Furthermore, Monash partnered with Boroondara to organise a Sustainability Student Leaders' Summit. Six Monash schools sent 40 students to the CERES Environment Park in Brunswick, where they learned how to be a sustainable leader in their school and brainstormed ways of implementing sustainable projects in their school. Students came up with a range of ideas about initiatives they can enact in their own schools to save water, energy and waste and improve biodiversity.

In the Precious Plastics Project, Monash University engineering students worked with 10 participating schools, and Council, to involve students in a local plastics recycling project while learning about the future opportunity of localised recycling and remanufacturing.

Teachers have been highly engaged through the Environment Network with Monash and Boroondara. Council met with the Network to discuss building frog bogs and about Bush Kinders.

ResourceSmart

There are 16 ResourceSmart Sustainable Schools in the Monash Council area. Since 1 January 2019, these schools have saved an estimated \$76,088.13 on resource usage through the ResourceSmart Schools program including 290kL water, 450 trees planted, 196 tonnes GHG emissions avoided and 380 cubic metres of waste diverted from landfill.

Mackie Road Neighbourhood Sustainability Hub

Located at the Wellington Reserve Community Centre in Mulgrave, the Sustainability Hub has been created in partnership with the Mackie Road Neighbourhood House and its tenants. A councillor-driven initiative with \$85,000 investment, the Hub aims to provide the community with demonstrations and information on being more sustainable in the household. It is a valuable opportunity for Monash to increase its capacity to provide ongoing education to the community about safe and sustainable lifestyles, renewable energy, and strategies for adapting to a changing climate.

Demonstrations, interpretative signage and fact sheets are planned to cover topics such as: energy efficient features, 10kW solar panels and battery backup, safer lighting, Gardens for Wildlife native garden, frog bog, rain garden and water efficiency activities. The Sustainability Hub will create a positive environment in which the community can learn about sustainable lifestyles.

Priority 1: Built Environment

1.1 The garden city character of Monash is retained and improved

Action	Timeline	Status	Implementation Comments	
1.1.1 Planning of future strategic growth, especially Structure Plans, is to consider garden city character principles.	a. Consider, and include, where practical, the garden city characteristic principles within Structure Plans and development proposals.	2016-2026	Ongoing	This is being addressed under the development and implementation of the Open Space Strategy.
	b. Assessment of planning applications is to continue to consider the garden city characteristic principles of Monash as expressed within the Planning Scheme.	2016-2026	Ongoing	This has been addressed under the development and implementation of the Monash Urban Landscape and Canopy Vegetation Strategy.
1.1.2 Pursue opportunities for sustainable strategic plans and policies to be incorporated within the Planning Scheme including the Municipal Strategic Statement (MSS).	a. Consider environmental sustainability, landscape criteria and enhanced garden city character principles within all future Planning Scheme and MSS reviews where applicable.	2016-2026	Ongoing	Second part of Amendment C125 for the Monash Planning Scheme has been approved by the Minister.
	b. Include environmental sustainability principles within residential zone schedules including permeability, site coverage, rear set back and landscaping requirements.	2016-2026	Ongoing	This has been addressed under the Monash Urban Landscape and Canopy Vegetation Strategy and C125.
	c. Ensure Monash's planning policies and processes consider and implement environmental protection and, where possible, enhancement principles.	2016-2026	Ongoing	ESD Policy Amendment 113 has been approved by the Minister (9/2016) under the Monash Planning Scheme for Council to encourage Sustainable Development in the Planning Process.
1.1.3 Build community and staff understanding of garden city character.	a. Develop and implement education and advocacy activities that increase the capacity of staff and community to better understand and deliver on Monash's garden city principles.	2016-2026	In progress	Council has membership to CASBE and BESS tool to support assessments. Online training is available to all planning staff. Monash planners have access to the IMAP fact sheets and can provide to developers.

1.2 Development is designed along Environmentally Sustainable Development (ESD) and Water Sensitive Urban Design (WSUD) principles

Action	Timeline	Status	Implementation Comments	
1.2.1 All development assessed against best practice Environmentally Sustainable Development (ESD) and Water Sensitive Urban Design (WSUD) principles.	a. Implement the ESD assessments and referrals through the planning scheme and develop the ESD skills and knowledge of Council staff.	2016-2026	Ongoing	Statutory Planning Staff are using BESS reports provided by applicants to determine how they are addressing ESD.
	b. Ensure public and private spaces deliver connectivity, liveability and sustainability outcomes at the catchment scale.	2016-2026	In progress	Supported by delivery of Open Space Strategy and Monash Urban Landscape and Canopy Vegetation Strategy.
1.2.2 Council buildings and infrastructure are to be designed, built, operated and maintained to reflect Environmentally Sustainable Development (ESD) and Water Sensitive Urban Design (WSUD) principles.	a. Develop and implement a Sustainable Building and Infrastructure Policy.	2017-2026	Initiated	Draft work completed internally and collaborated with EAGA councils to develop an ESD Policy in 2020.
	b. Develop and incorporate ESD/WSUD criteria into asset condition auditing cycle processes.	2016-2026	Initiated	Will be prepared following completion of the new ESD policy. Some WSUD projects are already in place.
	c. Develop and implement best practice ESD/WSUD operating standards for capital works project development and asset maintenance aligned to budget processes.	2016-2026	Initiated	Due to be initiated following completion of the ESD Policy. Some WSUD projects are in place and are monitored.
1.2.3 Build industry and staff understanding of Environmentally Sustainable Development (ESD), Urban Heat Island (UHI) and Water Sensitive Urban Design (WSUD) principles.	a. Develop and implement education activities that increase the capacity of developers and staff to better understand ESD, UHI and WSUD principles relating to the Planning Scheme development assessment processes, and Council projects including maintenance.	2016-2026	In progress	Web text has been drafted for Sustainable Development in the Planning Process and provided to Statutory Planning. IMPA factsheets are available in hard copy.
	b. Implement ESD education and behaviour change programs relating to operating and using Council buildings.	2016-2026	Not yet underway	Will commence once ESD policy is in place.
	c. Demonstrate leadership by actively communicating Council's sustainable built environment achievements.	2016-2026	Not yet underway	Will commence once ESD policy is in place.

1.3 Urban environments are designed and planned to promote and encourage integrated and active transport

Action		Timeline	Status	Implementation Comments	
1.3.1	Integrated and active transport principles are implemented throughout the municipality.	a. Develop and implement an Integrated Transport Strategy.	2016-2018	Ongoing	Engineering is continuing to implement this strategy.
		b. Implement the Walking and Cycling Strategy.	2016-2026	Ongoing	New cycling pathways in place include the Syndal to Clayton path.
1.3.2	Build community and staff understanding of integrated and active transport principles.	a. Implement education and advocacy activities to increase the capacity of staff and community to better understand and participate in integrated and active transport.	2016-2026	Initiated	Active Monash advocates for more activity. Now cycling tracks have been put in place to improve access to safe travel routes.

Priority 2: Urban Ecology

2.1 A strategic approach to landscape planning is established which recognises biodiversity, habitat connectivity and builds ecosystem resilience

Action	Timeline	Status	Implementation Comments	
2.1.1 Planning processes are to protect and enhance Monash's biodiversity and landscape character.	a. Complete a municipal-wide review of vegetation and landscape character and incorporate approved recommendations into future planning scheme provisions.	2016/17	Complete	This included the adoption of C125 Amendment in the planning scheme and development of the Monash Urban Landscape and Canopy Vegetation Strategy.
	b. Implement the vegetation and landscape assessments and referrals through the planning scheme and develop the arboricultural skills and knowledge of Council staff.	2018/19	Ongoing	More arborists have been appointed and are working closely with our Statutory Planning team. They have been successful in a number of prosecutions.
	c. Implement the Street Tree Strategy.	2016-2026	Ongoing	Year 3 actions of the Street Tree Strategy were successfully delivered in 20 streets which included the assessment of 700 trees for renewal. Of these 125 trees needed to be removed and 96 were planted. Another, 242 new trees were planted on vacant sites. A grand total of 338 trees were planted as a result of the Year 3 implementation program.
	d. Investigate, develop and implement the Urban Forest Strategy.	2016-2026	Adapted and ongoing	Open Space Strategy, Urban Biodiversity Strategy, Street Tree Strategy and the Monash Urban Landscape and Canopy Vegetation Strategy form the framework of our Urban Forest Strategy. Monash is also a key member of the Resilient Melbourne's Living Melbourne Strategy for wider Melbourne.
	e. Develop and implement the Open Space Strategy.	2016-2026	Ongoing	Open Space Strategy was endorsed by Council in October 2018, implementation underway to try an increase tree canopy from 19% to 30%.
2.1.2 Enhance biodiversity values and habitat connectivity	a. Undertake ecological assessments to record baseline data for conservation reserves under Council management and to identify habitat corridors across the municipality and at the catchment scale.	2016-2018	Complete	Completed in 42 reserves including detailed assessment in 15 high priority conservation sites. Conservation status is being considered for some high priority sites.

	across the municipality.	b. Develop and implement a municipal-wide Biodiversity Action Plan (BAP) from the baseline ecological and habitat corridor data.	2018-2026	Ongoing	An Urban Biodiversity Strategy has been developed and endorsed by Council in October 2018, following the detailed assessment and background desktop review of species in Monash.
		c. Promote and implement the Nature Strip Planting Guidelines.	2016-2026	Ongoing	Promotion has been completed as part of our Gardens for Wildlife program and some demonstration sites have been implemented. Currently reviewing and updating guidelines to support indigenous corridors.

2.2 Long-term biodiversity outcomes are achieved on Council owned and managed conservation reserves

Action	Timeline	Status	Implementation Comments	
2.2.1 Continue to manage Council's conservation reserves in accordance with best practice conservation and land management principles.	a. Manage Council's conservation reserves using best practice conservation and land management principles.	2016-2026	Ongoing	Bushland team manages this which includes planting at least 100,000 trees, shrubs and grasses each year.
	b. Investigate, research and monitor indicators that will demonstrate potential impacts of climate change on local biodiversity values and the resilience of ecological sites.	When opportunity arises	When opportunity arises	Baseline completed as part of Biodiversity Strategy development. Have applied for a number of grants to support this – but unsuccessful. Investigating how citizen science activities can support this.
	c. Review, update and implement Council's Conservation Reserve Management Plans and procedures.	2016-2026	TBC	Recommended in the Biodiversity Strategy and is managed by bushland crew.
	d. Investigate and implement suitable techniques and approaches to reduce domestic and feral animal impacts on Monash's native wildlife within an urban context.	2016-2026	Underway	Understory planting can reduce problems with birds. Residents are asked to have dogs on leads in bushland areas. We are collaborating with other councils on a Pest Management Strategy.

2.3 Increased community understanding of and participation in urban ecology and local biodiversity stewardship is achieved

Action	Timeline	Status	Implementation Comments	
2.3.1 Raise local knowledge and appreciation of biodiversity and urban ecology.	a. Develop, implement and support education, behaviour change programs and incentives that deliver biodiversity stewardship and enhancements on public and private land, especially properties adjoining Council's conservation reserves.	2016-2026	Excellent progress	Green Shoots was developed to support the delivery of actions under the Urban Biodiversity Strategy and create more opportunities for the community to connect with nature. Skink link and wetland wonders events have been some of the success stories.
	b. Deliver Responsible Pet Ownership education and behaviour change programs.	Ongoing	Underway	Conducted by Community Amenity at festivals. The Domestic Animal Management Plan 2017-2021 was endorsed in October 2017. It included the provision of a cat curfew which will be rolled out in 2021, providing information to cat owners about the benefits of keeping cats in at night and stencils on footpaths to remind dog owners to clean-up after their dogs.
2.3.2 Continue to support the activities of existing local environment and similar groups.	a. Facilitate access to Council's Neighbourhood Matching Grants Program to local groups wanting to undertake environmental projects that bring people together and form connections.	2016-2026	Initiated	Informally promoted through community groups.
	b. Support Neighbourhood Houses and Men's Sheds to strengthen their connections to local community gardens leased and licensed through Council.	2016-2026	To be confirmed	Many neighbourhood houses and the men's sheds already have community gardens which they managed themselves. On their own property and gardens not leased through Council.

2.4

Roles, responsibilities and involvement relating to community food gardens are defined and implemented

Action			Timeline	Status	Implementation Comments
2.4.1	Understand Council's role relating to community gardens.	a. Investigate and develop a framework articulating Council's role, responsibilities and involvement in community gardens.	2016-2018	Underway	Background research was completed on how other community gardens are managed. Preferred role for Council appears to be one of lease management. No new gardens proposed at this stage. EAC committee has reviewed other council policies to develop one for Monash.
2.4.2	Raise local awareness, knowledge and appreciation of growing food and the sustainability and wellbeing issues relating to food.	a. Implement education programs relating to community and household food production and healthy eating.	2016-2026	Ongoing	Regular workshops on vegetable growing and preserving undertaken as part of community workshop program. Grant received to undertake Love Food Hate Waste series of workshops.

Priority 3: Climate Change

3.1 Best practice climate change thinking is integrated into Council's corporate and operational functions

Action	Timeline	Status	Implementation Comments	
3.1.1 Establish a whole of organisation approach for effective and efficient climate change action.	a. Develop and implement a Climate Change Action Plan which recognises a whole of council approach to mitigation, adaptation, risk management, innovation and alternative energy sources. Developed from data from 3.2.1 (a) and (b).	2016-2026	Underway	Emission Reductions Study is complete and now we are completing Carbon Neutral Modelling for Council. This will be used to develop the Climate Change Action Plan.
	b. Continue working in partnership with other local, state and federal governments and relevant organisations to achieve climate change adaptation and mitigation outcomes.	2016-2026	Ongoing	As a member of the Eastern Alliance for Greenhouse Action, Monash is involved in collaborative delivery of projects such as Energy performance contracts and Solar Savers and also with the other Greenhouse Alliances working on the How Well Are We Adapting indicators and the development of a Climate Change Exchange Research Hub.
3.1.2 Build staff understanding of climate change and the potential impacts and opportunities.	a. Implement staff education and behaviour change programs that improve understanding of climate change, especially the impacts and opportunities relating to their role.	2016-2026	Underway	Working closely with Strategic Asset Management, Capital Works, City Design and Procurement to integrate sustainability and energy efficiency into our building projects.
	b. Ensure Council keeps abreast of and communicates to staff current climate change science, research, technology and monitoring and delivery of best practice outcomes.	2016-2026	Underway	Membership with EAGA and the alliances keeps our teams up to date with current technology.

3.2 A strategic approach to reducing Council's corporate greenhouse gas emissions is established

Action	Timeline	Status	Implementation Comments	
3.2.1 Pursue new strategic plans and policies to reduce Council's	a. Complete a feasibility study to determine an achievable greenhouse gas reduction target for Council and provide recommendations on how to achieve the target.	2016/17	Complete	Completed as part of the Emission Reduction Study which developed science-based targets for corporate and community emissions.

	operational emissions.	b. Complete a feasibility study to determine an achievable renewable energy target for Council and identify council assets suitable for alternative energy infrastructure including the analysis of life cycle costs and benefits of the infrastructure.	2016/17	Compete	Completed as part of the Emission Reduction Study which identified projects to support delivery of the proposed reduction target. Monash is a member of the Local Government Buy Recycled Alliance which is looking to source 100% renewable energy electricity for 48 councils – Monash has committed 90-100% of our load.
		c. Develop and implement an environmental and cost benefit analysis criterion for asset management, capital works and other internal decision-making processes.	2016-2018	Underway	Will be completed as part of the Carbon Neutral Modelling Project.

3.3 Increase community preparedness for the likely impacts of climate change

Action		Timeline	Status	Implementation Comments	
3.3.1	Support community's preparedness for the likely impacts of climate change.	a. Participate and support collaborative community related advocacy, activities and programs.	2016-2026	Ongoing	Participation in Resilient Melbourne and EAGA activities.
		b. Continue to support and implement community and business education programs to increase understanding of the local impacts of climate change and how to be climate ready.	2016-2026	Underway	Run workshops on energy efficiency and solar bulk buy programs through Positive Charge and now Solar savers.
3.3.2	Encourage energy efficiency and the use of renewable energy sources.	a. Participate in regional and council-specific energy efficiency, renewable energy and climate-ready programs that assist the community and businesses to understand and reduce their greenhouse gas emissions and increase their energy resilience.	2016-2026	Underway	Monash offers access to Environmental Upgrade Finance for businesses to take on environmental and energy efficiency measures. We also offer Solar Savers for residents which can also help residents access the Vic Government Solar Victoria program.

Priority 4: Waste & Resource Management

4.1 Best practice waste and recycling collection and litter reduction services are delivered in a strategic municipal-wide approach

Action	Timeline	Status	Implementation Comments	
4.1.1 Establish a best practice, business case approach for waste and recycling management and collection.	a. Develop and implement recycling and waste management and collection contracts and services based on a best practice business case approach.	2016-2026	Ongoing	New kerbside collection contract was initiated in 2019 to be started in April 2020, which includes the introduction of a Food Waste in the Green Bin service. An 'at call' hard waste service was introduced in 2018 in addition to the annual collection.
	b. Develop and, if business case deems viable and funding provided, implement kerbside food waste collection and management services.	2017-2026	Complete	Food waste collection will be part of the new kerbside service. Education will be rolled out over the following 12 months.
	c. Develop waste services criteria for new apartments and multi-unit dwellings (MUDs), commercial and industrial development that defines appropriate waste and recycling collection processes.	2016-2018	Ongoing	Guidelines have been drafted. In line with the Metro Waste Resource Recovery Group (MWRRG) guidelines. Transfer Station accepts polystyrene for recycling, as well as many other items.
	d. Review and update waste and recycling clauses in relevant Council contracts and tenders to ensure best practice waste management and collection practices are included.	2017-2026	Ongoing	Working with MWRRG on collaborative procurement of collection contracts. Working with Strategic Procurement to review clauses in tender documents to ensure Sustainable Procurement Policy is met.
4.1.2 Implement a strategic approach to litter prevention.	a. Review, update and implement the Litter Prevention Plan 2009-2012.	2016-2026	Ongoing	Litter Prevention Plan updated to the Litter Action Plan (2018-2028). The Clayton Project is a key initiative under this Plan. Working with Monash University to combat issues, including students monitoring bins and educating residents. Business case in development for Litter Prevention Officer.

4.2 A strategic approach to reducing Council’s corporate waste and environmental impacts is established which recognises the waste hierarchy, life cycle analysis and has sustainable procurement integrity

Action	Timeline	Status	Implementation Comments	
4.2.1 Reduce waste to landfill from Council’s corporate operations.	a. Develop and implement a waste and recycling audit, management and monitoring program for identified Council buildings with staff offices and for office retrofits.	2016-2026	Ongoing	Audit completed in 2017/18 for offices. Trialing plastic film collection with staff.
4.2.2 Build the understanding of staff and cleaners about the impacts of waste generation and improve recycling.	a. Implement education and behaviour change programs to increase the capacity of staff and cleaners to reduce waste and paper usage and to improve recycling.	2016-2026	Ongoing	Council moved to 100% recycled and carbon neutral paper from April 2019 and on demand printing.
4.2.3 Complete a strategic asset and procurement whole of Life Cycle Analysis (LCA) business case.	a. Research and develop the business case to incorporate LCA into the strategic asset and procurement financial assessment processes with a view to setting realistic targets.	2017-2019	Complete	Fact sheets on this developed by Eco Buy for buying recycled and life cycle assessments.
4.2.4 Improve staff understanding of their procurement responsibilities.	a. Implement education and behaviour change programs to increase staff awareness and understanding of the environmental sustainability, corporate social responsibility, ethical consideration and life cycle analysis (LCA) responsibilities of Council’s Procurement Policy.	2016-2026	Ongoing	Internal working group formed including members from Capital Works, City Design, Asset Management and Procurement to discuss how to increase sustainable procurement and to educate staff.
	b. Update contracts and tenders with best practice sustainability, social and ethical procurement clauses.	2020-2026	Complete	A review of the tender documents to address best practice social, sustainable and ethical procurement clauses was completed and changes were adopted in December 2018.
	c. Research and, where relevant, implement new and innovative green materials, products and services.	2016-2026	Ongoing	Considering the use of recycled content materials.

4.3 Reduced community consumption of resources and improved recycling is achieved

Action	Timeline	Status	Implementation Comments	
4.3.1 Encourage correct use of bins and avoid contamination of recycling.	a. Continue implementing the kerbside bin inspection and monitoring program.	Annually	On hold	The kerbside bin inspection program will commence in 2020 to provide targeted feedback on recycling habits.
	b. Implement education and behaviour change initiatives to increase the capacity of residents and businesses to correctly dispose of their waste and improve recycling.	2016-2026	Underway	To assist the introduction of a Food Waste in Green Bin program, a Zero Waste Champion will be appointed in 2020. The Zero Waste Champion will adopt a behaviour change approach to design an engagement and education program and materials for residents for use of all three bins.
4.3.2 Educate and support community to implement correct waste disposal and improve resource recovery practices including reducing consumption of resources.	a. Implement a strategic approach to community waste and litter infrastructure, education, monitoring and evaluation, dependent on funding.	Annually	Underway	The Litter Action Plan is piloting a Litter Prevention Project in Clayton with students inspecting bins and providing education materials to residents. Future stages (2020) will include face-to-face education and fines.
	b. Implement waste and recycling infrastructure, signage and educational information at Council facilities including halls, community centres, sports facilities and other leased facilities.	2016-2026	Underway	Waste and recycling signage and internal waste bins have been provided to a number of halls, Council buildings, aquatic centres and libraries. Drop off recycling hubs have been installed at the Civic Centre, Oakleigh, Clayton and libraries.
	c. Continue to upgrade waste and recycling infrastructure and signage in activity centres and shopping strips.	2016-2026	Ongoing	Public place litter and recycling bins are repaired and replaced as required. Trial new 240L public place recycling and waste bins are being designed.
	d. Implement monitoring and research projects to improve understanding of waste disposal behaviours of community and businesses.	When opportunity arises	Ongoing	A waste audit was conducted in February 2019 to understand the waste disposal behaviours of the community. Plans next year (2020) for waste monitoring intern projects including litter audits.
	e. Advocate for and support community waste reduction initiatives – for example water refill stations, plastic bag free and litter patrol campaigns – where they align to Council objectives and funding is available.	2016-2026	Ongoing	The Love Our Street 3150 litter campaign (community led program) is supported through the free disposal of the community litter collected each month, on Clean Up Australia Day and any time during the year.

4.3.3	Advocate for reduced product packaging, improved resource recovery and improved litter management.	a. Support and participate in appropriate initiatives and opportunities that advocate for reduced product packaging, resource recovery opportunities and improved responses to litter management.	2016-2026	Ongoing	Council has advocated to State and Federal Governments for Product Stewardship improvements, a Container Deposit Scheme and the Circular economy policy on behalf of residents. Grant was received to implement electronic waste resource recovery.
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Priority 5: Integrated Water Management

5.1 A strategic approach to integrated water management is established and implemented which recognises and values the health of waterways, wetlands and catchments, water conservation, water reuse and water sensitive landscapes

Action	Timeline	Status	Implementation Comments	
5.1.1 Utilise a full range of planning scheme and compliance tools to protect waterways, wetlands and catchments and conserve water resources.	a. Include water sensitive and integrated water cycle design principles in Local Planning Policies and all Structure Plans as appropriate.	2018/19	Ongoing	All relevant applications were assessed according to Melbourne Water guidelines and tools (such as STORM tool) where suitable. Principles are included in structure plans like the current Glen Waverley Major Activity Centre Structure Plan which references the Integrated Water Management Plan 2014.
	b. Develop an Integrated Water Management Protection Policy that identifies best practice principles for planning applications to ensure water and catchments are protected.	2017-2026	Not started	No formal policy in place at present but may be developed to address the recommendation from the water-saving feasibility study.
	c. Promote and include integrated water cycle management and water sensitive urban design guidelines in residential and non-residential development applications.	2017-2026	Ongoing	The BESS tool also provides guidance and assessment to developers on managing water on their property.
	d. Educate planning applicants in integrated water cycle management and water sensitive urban design principles and requirements within the planning scheme.	2019-2026	Ongoing	Information is only provided in relation to the developer's planning application.
	e. Improve the internal planning permit referral process to ensure relevant Council officers respond to the specification, approval and inspection, and maintenance of integrated water sensitive urban design systems.	2016-2026	Ongoing	Engineering recommend that a detention system is required for hard surface area (roof area concrete areas etc.) of apartment buildings when it exceeds two thirds of the total site area. Under this, developers have an option of constructing a detention system to Council's conditions or pay a drainage levy whereby Council uses this levy money to construct major drainage systems to

					minimise flooding issues within the municipality.
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5.2 Best practice integrated water management, water reduction and water reuse principles are included in all Council's corporate and operational functions

Action	Timeline	Status	Implementation Comments	
5.2.1 Embed integrated water cycle management and water sensitive urban design throughout Council's operations and policies.	a. Implement the Integrated Water Management Plan (IWMP).	2016-2026	Ongoing	Current IWMP has expired. Waste Saving Feasibility Study might identify new opportunities.
	b. Include best practice water sensitive urban design and integrated water cycle management principles and tools within relevant capital works and asset renewal projects.	2016-2026	Ongoing	This is currently done on a case-by-case approach. Engineering recently completed Stage 1 of a project to identify gaps associated with WSUD (completed Nov 2019). Council will try to follow Melbourne Water Guidelines where possible. Study is underway to review how wetlands are managed.
	c. Implement the Stormwater Management Plan.	2016-2026	Ongoing	Stormwater Management Plan is currently being updated by Strategic Asset Management.
5.2.2 Reduce Council's water use supplied from potable water sources and increase water from non-potable water sources.	a. Complete a water saving feasibility study that identifies water saving and non-potable water recommendations for Council's facilities and operations with a view to setting targets.	2016-2017	Underway	Water Feasibility Study underway and due to be completed in late 2019.
	b. Develop and implement a Sustainable Water Use Plan (SWUP) that incorporates the analysis and recommendations from 5.2.2(a).	2017-2026	Underway	Recommended actions from the Water Feasibility Study will be used to form a Sustainable Water Use Action Plan.
5.2.3 Maintain waterway quality and health.	a. Implement water quality actions from the Integrated Water Management Plan.	2017-2026	Ongoing	Current IWMP has expired. Waste Saving Feasibility Study might identify new actions which build on the key actions set out in the IWMP.
	b. Investigate and, where relevant, implement other local and state government approaches to reducing debris and litter entering waterways and wetlands via stormwater system.	2018-2026	Ongoing	Gross Pollutant Litter Traps are installed and regularly maintained, Keeping Kingsway Clean trader education program completed to reduce stormwater pollution.

5.2.4	Build staff understanding of integrated water cycle management, water sensitive urban design and water conservation principles.	a. Implement staff education and behaviour change programs that improve understanding of integrated water cycle management, water sensitive urban design and water conservation principles.	2016-2026	Ongoing	Water Sensitive Cities benchmarking completed. The project was a collaboration between City Design and Sustainability teams and involved representatives from across council and of neighbouring councils.
		b. Ensure Council keeps abreast of and communicates to staff current integrated water cycle management science, technology, research and monitoring and delivery of best practice outcomes.	2016-2026	Ongoing	Champions in Engineering, Horticultural, City Design and Sustainability keep up-to-date with integrated water management networks, including with neighbouring councils, Living Links program and Water Authorities.

5.3 Increased community understanding of and participation in waterway health, water conservation and water reduction is achieved

Action	Timeline	Status	Implementation Comments		
5.3.1	Encourage integrated and efficient water usage and improved waterway quality and health.	a. Participate in and advocate for initiatives and programs that assist local government, residents and businesses to conserve water, provide alternative water sources and building community and environmental resilience.	When opportunity arises	Underway	Partnership projects in development to construct stormwater harvesting projects for both businesses and Council use, in partnership with water authorities.
		b. Continue to support local water conservation and waterway initiatives, community groups and activities including Waterwatch.	2016-2026	Ongoing	Monash community members made over 565 observations of water quality parameters such as pH, turbidity and dissolved oxygen during 90 visits at seven sites within Monash.
5.3.2	Raise local awareness, knowledge and appreciation of water quality and stream condition.	a. Implement in partnership, community education and behaviour change programs that improve understanding of integrated water cycle management, water sensitive urban design and water conservation principles relating to households and businesses through specific educational programs and activities.	2016-2026	Not yet underway	Awaiting recommendations from Water Feasibility Study to determine how best to achieve.

Priority 6: Partnerships & Leadership

6.1 Sustainability is integrated into Council decision-making processes

Action		Timeline	Status	Implementation Comments	
6.1.1	Establish a whole of organisation approach to environmental sustainable leadership.	a. Establish an internal cross-directorate Sustainability Advisory Group to guide the implementation of this Strategy and actions.	2016-2026	Re-considered	It was determined more value to work in smaller project driven teams on key issues rather than one overarching program.
		b. Continue to coordinate Monash's community Environmental Advisory Committee.	2016-2026	Ongoing	We run six meetings per year for 13 community representatives and three councillors.
		c. Continue to implement and build capacity of Council's internal Green Team.	2016-2026	Ongoing	Educational competition and giveaways have been completed to build internal knowledge.
		d. Integrate environmental criteria, leadership and partnership considerations into Council's policies and priorities including Community Plan, Corporate Plan, Departmental Plans, staff appraisal processes and individual work plans at all levels.	2016-2026	Ongoing	Environmental criteria has been provided for contract management, leasing and licensing and procurement schedules and documents. Input has also been provided for e-learning procurement.
		e. Demonstrate leadership and commitment to sustainability by ensuring Council reports and decisions consider environmental impacts.	2017-2026	Ongoing	Regular Council papers have been presented to discuss and support environmental issues. But the Council report template does not clearly consider environment impacts.

6.2 Develop and strengthen partnerships that achieve Council's sustainability objectives

Action		Timeline	Status	Implementation Comments	
6.2.1	Establish successful sustainability partnerships.	a. Implement partnership and leadership outcomes from Built Environment, Urban Ecology, Climate Change, Waste and Resource Management and Integrated Water Management priority areas.	2016-2026	Ongoing	Our small team works across the organisation to support delivery and integration of sustainability into Council activities and encourages other Council staff to attend workshops to help embed sustainability in their work (e.g. Procurement, Planning, Engineering, and Horticulture).
		b. Strengthen partnerships that lead to sustainability networking,	2016-2026	Ongoing	The team is active members of EAGA, Living Links, Behaviour Change network,

	capacity building, innovation, research and monitoring outcomes and opportunities.			and Waste networking groups (CLEAN, EDNET, FOGO working group).
	c. Provide staff with ongoing support, capacity building and information to assist them to deliver sustainability outcomes.	2016-2026	Ongoing	Staff attend regular conference, professional workshops and training to build their knowledge and capabilities in this field.
	d. Develop and strengthen relationships with local universities, TAFEs, innovation and research organisations to deliver evidence-based sustainability outcomes and research across the priority areas.	2016-2026	Ongoing	Partnership developed with Monash University to take on student interns – 1-2 per annum. They support the team in a range of activities. Collaborated with the Monash University on the Micro Grid Communications Project. Working with RMIT on the HWAWA project and the Climate Change exchange hub.

Priority 7: Education, Engagement & Reporting

7.1 Environmental education and behaviour change programs relating to all priority areas are developed, delivered, monitored and evaluated

Action	Timeline	Status	Implementation Comments	
7.1.1 Design and deliver sustainability education and behaviour change programs and services that are culturally inclusive and cater for different demographics.	a. Develop and implement an Environmental Education Plan.	2017-2026	Ongoing	Annual workshop calendars prepared each year with key themes for workshops and festivals.
	b. Investigate best practice sustainability and environmental educational approaches being delivered by other organisations.	2016-2026	Ongoing	Regular attendance at behaviour change workshops and State Government and Council networking (LGPro) to share and build knowledge.
	c. Implement the education and engagement objectives from Built Environment, Urban Ecology, Climate Change, Waste and Resource Management and Integrated Water Management priority areas.	2016-2026	Underway	This has been integrated into workshop program and website resources. Educational booklets also support activities.

7.2 Sustainability outcomes and targets are monitored, evaluated and reported using best practice sustainability indicators and accounting processes

Action	Timeline	Status	Implementation Comments	
7.2.1 Monitor, evaluate and report on the goals and actions within this Strategy.	a. Develop and implement sustainability indicators, targets and processes for the purpose of monitoring and reporting on Council's progress in delivering the Built Environment, Urban Ecology, Climate Change, Waste and Resource Management and Integrated Water Management priority areas.	Annually	Ongoing	Annual reports are prepared each year. Monthly meetings are held with team to track program over the year. Priorities are tracked in annual action plans on a monthly basis and results are reported in CEO Quarterly Report, in Pulse and in the Council e-Bulletin. Progress is also reported at the EAC meetings six times a year.