



# OUR NATURAL AND SUSTAINABLE CITY

The City of Ryde's open spaces and natural areas provide breathing spaces. People can easily access protected catchments and waterways. The built environment retains local character and heritage while providing contemporary energy and resource savings and sensible waste solutions.

## PRIORITIES FOR THIS OUTCOME:

### PRIORITY 1

#### SUSTAINABLE PLANNING

##### Reducing our environmental footprint and protecting our natural and built environments

- Being active environment leaders in all that we do and leaders in ecologically sustainable development.
- Using planning controls to encourage developments that use less water and energy and maximise recycling.
- Innovating our waste and recycling services to achieve the highest level of resource recovery.

### PRIORITY 2

#### PROTECTING NATURAL AREAS

##### Reducing our impact on our natural systems and strengthening the health of our natural corridors

- Continuing investment in programs that protect and enhance the City of Ryde's natural areas including our bushlands, waterways and ecosystems.
- Collaborating with volunteers, businesses and the community to care for and enhance our natural areas.





Blue Wren



Community gardens build communities, reduce food waste and enhance the natural environment

**PRIORITY**  
**3**

**RESILIENT  
INFRASTRUCTURE**

**Managing infrastructure to reduce risk and impacts**

- Building the City's resilience to natural hazards and working to reduce long term and immediate climate related risks and impacts.
- Upgrading and managing stormwater, drainage and seawall infrastructure to improve service levels and reduce risks to the environment and the community.



Gardeners hard at work for Our Common Ground Sustainable Food Program

QUARTER 4 RESULT FOR THIS OUTCOME

('000)	BUDGET	ACTUAL
Income	-24,298	-24,121
Expenditure	32,848	30,458

Every year, the City of Ryde residents generate over 46,000 tonnes of waste and recycling of which we send 56.5% to landfill.

13 waste trucks in the City of Ryde fleet



**205 ha**  
of natural areas  
distributed  
over 71 parks and reserves

**5**  
regional  
and  
**7**

local biodiversity corridors  
connecting to major rivers

**40**  
reserves  
that contain threatened  
ecological communities



Anti-littering mural in Gladesville



**5**  
main creeks/waterways  
monitored for water quality and  
ecosystem health



**22**  
different vegetation  
communities  
have been mapped, with over 570  
species of native plants recorded in  
Ryde bushland



Problem Waste Drop-off  
Recycling Stations located  
throughout the City of Ryde



## Building our Natural and Sustainable City

Over the next decade, the changing climate and forecast population growth will increase pressure on the City of Ryde's natural and urban environment. Our growing and changing City requires considered urban renewal that enhances natural assets and encourages sustainable living that reduces water and energy use, and waste.

Our community has told us that the City's natural environment, green open spaces and parks are thing they love the most. People want us to show leadership in environmental and sustainability behaviour and initiatives.

Our priority over the next 10 years will be to protect and increase natural areas and parklands and address climate-related challenges such as extreme weather patterns, bushfires and flooding.

This requires us to work with the community, non-government organisations, State agencies and neighbouring councils to plan for sustainable growth and change.

Better shade cover and green spaces throughout the urban environment and integrating new development with transport so that people have less need to use their cars are also key priorities for our City's future.

## Programs that support this outcome

- Catchment program
- Environmental program
- Foreshore program
- Open Space, Sport and Recreation program
- Regulatory program
- Risk Management program
- Waste and Recycling program

## Committees that support this outcome

- Bushland and Environment Committee
- Renewable Energy Advisory Committee

## How we monitor progress

- Vegetation cover
- Waste diversion and resource recovery
- Energy and water use
- Water quality
- Community sentiment
- Community participation in protecting and managing the natural environment

## We asked you about:

- Meadowbank Park and Memorial Park Masterplan and Plan of Management
- Plans of management for parks and sportsgrounds
- Morrison Bay Park improvements
- Your waste services for input into the Waste Management Strategy
- Natural Areas Generic Plan of Management
- Draft Local Strategic Planning Statement
- Wildlife Protection Areas
- Tree Management Applications
- Parramatta River Parklands Plan of Management



Riverfest

## Services

### HIGHLIGHTS

#### Protecting our natural areas, waterways and local biodiversity

- We completed our Flora and Fauna Studies 2018 report that covered 42 parks and reserves along the Parramatta River, Shrimptons Creek, northern and western reserves. See page 89.
- We launched the 11-council Parramatta River Masterplan which will see parts of the Parramatta River swimmable again by 2025. Towards improving water quality and reuse, we completed projects rectifying stormwater harvesting systems at Meadowbank Park and started works at Ryde Park to improve capture and use.
- We undertook bush regeneration works in 47 parks and reserves across Ryde, totaling over 92 hectares.
- Our Bushcare program saw over 4,300 volunteer hours contributing to increasing biodiversity through planting partnerships with Tzu Chi, Enviropacific, CA Technologies, SAP Concur and Morling Theological College, across 23 sites, and helped to restore and manage 11 hectares of bushland.
- 195 volunteers helped plant 900 native plants to create a wildlife corridor along Buffalo Creek during National Tree Day activities at Laurel Park, with additional corridor plantings across the City. See page 89.

#### Keeping our energy use in check

- We lowered our City's greenhouse gas emissions by 6.8 percent through efficiency programs reducing our energy consumption and renewable energy including our continuing solar photovoltaic (PV) installation program. In 2018/19, we used 54,058GJ of energy during 2018/19, which is only marginally higher than our baseline usage in 2003/04.
- Overall, Council used 15.9 percent less electricity used this year compared with estimated usage in baseline year 2003/04, despite organisation growth.
- We now have 376kW of solar PV system capacity across four City of Ryde facilities, generating a total of 270,500kWh of renewable energy this year.

#### Reducing our water consumption

- During the year, 132,616KL water was consumed by Council, a substantial 16.6 percent decrease on 2017/18 levels and a small increase (3.8 percent) over the estimated 2003/04 baseline usage of 127,796KL. This was a significant achievement during prolonged drought conditions and helped by remote monitoring of water meters and responsive leak detection.

#### Cutting waste, recycling more

- We updated our Waste Management Strategy, with an ambitious target for reduction in waste sent to landfill from our City, to be adopted in 2019/20.
- We introduced a Council policy to reduce single-use plastics.
- We collected more than 34 tonnes of hazardous materials at the annual Household Chemical CleanOut, held in conjunction with the EPA. In addition, residents dropped off a further 42.4 tonnes of problem wastes to the CRC in Artarmon. Both these facilities contributed to reducing hazardous waste from landfill.
- The ninth year of the Sustainable Waste to Art Prize (SWAP) attracted around 160 entries, with over 400 visitors attending the awards night and exhibition.



Parramatta River Masterplan



Household Chemical CleanOut



Solar My School Program

KEY: ● Complete ✓ On track ⚠ Delayed / Did not achieve target ✗ Cancelled





## ENVIRONMENTAL PLANNING AND MANAGEMENT

Policy development, planning, management and reporting of the City of Ryde's natural and urban environment to protect and enhance the City's natural areas, including our bushlands, waterways and ecosystems, and to improve the overall environmental performance of our built environment. Our work includes improving our corporate and community-based environmental reporting practices and ensuring that we remain a responsible corporate leader in ecologically sustainable development and managing climate change risk, adaptation and resilience measures in partnership with the corporate and community sectors.

### PERFORMANCE

	2018/19	2017/18
✓ % increase in organisation energy usage each year since 2003/04 (Target <= 5% increase)	0%	+2.6%
⌚ % increase in organisation potable water usage on 2003/04 usage (target <= 2% increase)	+3.8%	+27%

Achieving potable water reductions continues to be difficult given hot and dry conditions and the need for additional irrigation with a number of subsurface water leaks.

### PROJECTS

- West Ryde Community Centre solar project**  
 Installation of a 26kw solar system on the West Ryde Community Centre to reduce running costs and reduce GHG emissions.
- Sustainable Waste-to-Art Prize**  
 This award targets youth (aged 12-25) with participants expressing ideas and opinions on waste and the environment. Now in its ninth year, community interest in this award remains high with 160 entries received.
- RALC Multi-Purpose Centre – solar**  
 846 panels were installed to create a 300kW solar generation plant. 12 percent of total RALC site electricity is now generated by solar.
- Ryde Biodiversity Plan – implementation**  
 Annual program of work focusing on high priority actions identified in the Ryde Biodiversity Plan.



Sustainable Waste-to-Art Prize and exhibition



Solar panel installation at Ryde Aquatic Leisure Centre



## NATURAL AREA MANAGEMENT

Protecting and enhancing the City of Ryde's natural areas including bushland, waterways, catchments and ecosystems. Includes protection and conservation of natural areas and biodiversity, weed control and pest management, as well as environmental monitoring and reporting, collaborating with volunteers, businesses and the community to care for and enhance the City's natural areas. We also maintain asset protection zones and manage extreme fire risk in bushland across the City of Ryde.

During the year, we undertook work in 47 of our parks and reserves across Ryde, totalling over 92 hectares. We maintained more than four kilometres of asset protection zones (firebreaks) across our City to minimise risk to private properties and major assets in fire conditions.

### PROJECTS

#### ● Terrys Creek walking trail

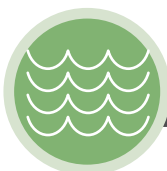
We upgraded parts of the existing Terry's Creek walking trail connection delivering the second stage of the 2km stretch of project between Parramatta Council and Ryde natural areas and Browns Waterhole to address significant erosion issues along the existing bushland walk. Year 3 of the 4 year project is now completed, second year of boardwalk installation completed of the trail from Wood Street to Epping Road now complete.

#### ● Parks and open space tree planting program

Planting additional trees in parks, usually around playgrounds to provide additional shade and amenity for park users.



Terrys Creek walking trail



## CATCHMENTS & STORMWATER

Managing, upgrading and maintaining water catchments, stormwater drainage networks and foreshore infrastructure and assets, including local creeks and works, through the development process. This also includes floodplain management, reducing risks to the environment and community from flooding, working to improve water quality in local waterways, and reducing the use of water and energy through stormwater harvesting and reuse.

**2,032**  
metres

of stormwater pipelines laid

**146**

stormwater pits

Water quality monitored across

**5**


major waterways



Terrys Creek walking trail



## PERFORMANCE

	2018/19	2017/18
 % of stormwater assets that are condition level 4 or better (Target >= 95%)	98.2%	99%

## PROJECTS

### 146 Bowden Street trunk drainage

Works related to the developer contribution towards stormwater works at 146 Bowden Street. Negotiations on the Deed of Agreement are ongoing.

### Shepherds Bay outlet

Increasing the functional capacity of the stormwater outlet, installing new infrastructure and water quality devices, and outlet protection works at the Parramatta River seawall. Design to be finalised. Construction works have been delayed, to be completed in concurrence with the 146 Bowden Street trunk drainage works.

### Smalls Road and Lavarack Street drainage expansion

Construction of a new stormwater pipeline within the Smalls Road school site. Negotiations ongoing.

### Ann Thorn Park catchment works

Management of high flood risks around Ann Thorn Park and Richard Johnson Crescent as part of proposed development works taking place in and around the Meadowbank employment area.

### Stormwater asset replacement renewal

Ongoing program to restore and improve stormwater drainage infrastructure, including construction of missing links in locations where road drainage is inadequate, creek rehabilitation and renewal of water quality devices.

### Eastwood town centre flood study

Investigating options to reduce inundation of Eastwood town centre following heavy rainfall events and identifying a preferred option for managing flooding risk.

### Stormwater improvement works – renewal

Ongoing program of stormwater improvement projects to alleviate flooding risk and impacts and improve water quality.

### Field of Mars Visitor Centre road and stormwater disposal works

A group of projects to improve road access and stormwater disposal at the visitor centre.



Stormwater works





## WASTE SERVICES

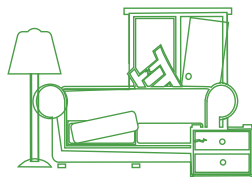
Delivering the full range of domestic and commercial waste services for the City of Ryde, including facilitating recycling and disposal services and education services to target the responsible disposal of waste.

The City of Ryde's waste services include: a three-bin collection system for general waste, recyclables and garden organics; pre-booked collection services, chipping and mulching collections, and TV and computer collections; street litter stations and recycling systems in parks; problem waste recycling drop-off stations for batteries, light bulbs, mobile phones and cartridges and medical sharps; and commercial waste and recycling collection services for approximately 800 businesses.

**43.5% of material was diverted from landfill, equating to 186 kg of waste and 130 kg of recyclables per person.**



Over **67,100**  
bin collections each week



**27,721**  
pre-booked household cleanup collections

### PERFORMANCE

① % tonnes of recycling from all domestic waste services (Target > 48%)

2018/19 2017/18

43.5% 44%



**23,523 tonnes**

of waste sent to landfill – including commercial waste

**8,215 tonnes**

of recyclables collected

**1,889 tonnes**

of waste diverted from landfill extracted from general household and commercial waste sources

**4,176 tonnes**

of household cleanup collected

**8,962 tonnes**

of garden organics collected

**102,474 tonnes**

of construction materials (asphalt, concrete, soil, mulch) recycled

**29,544 tonnes**

of council construction and demolition waste re-used

More than **34 tonnes** of hazardous materials collected in the annual household chemical cleanup

**42.4 tonnes**

of problem waste was dropped off by residents to Community Recycling Centre in Artarmon

Over **600 people**

were involved in more than 60 waste education workshops and more than

**3,000 people**

attended waste education stands at our community events with 100% customer satisfaction

**97%**

customer satisfaction with waste services provided by Council

### PROJECTS

- **Community problem waste recycling centre**  
A joint initiative by the Northern Sydney Regional Organisation of Councils to operate a Northern Sydney Community Recycling Centre (CRC).
- ✓ **Porters Creek CRC feasibility study**  
A feasibility study to determine a location and costs for building a CRC at Porters Creek.
- **Porters Creek precinct**  
Preservation of underground creek culverts, maintenance of environmental controls and reconfiguration of the Porters Creek site for optimal use.
- ✓ **Single use plastic reduction**  
Implementing the City of Ryde's commitment to phase out single-use plastics in all council operations and events.
- ✓ **Recycle Right and Reduce Waste**  
An education campaign to reduce the level of cross-contamination in recycling waste.
- **Old landfill sites subsidence program renewal**  
Remediating subsidence issues on sportsgrounds that are located on old tip sites and are experiencing considerable ground movement.
- **Laurel Park litter prevention**  
A grant-funded litter education and park improvement project at Laurel Park, Buffalo Road, Ryde.
- ✓ **Eastwood litter prevention campaign**  
Active education measures to reduce litter and illegal dumping in the Eastwood shopping precinct and canal area.
- **Managing waste reduction in multi-unit dwellings**  
Improving recycling rates and reducing illegal dumping and waste generation from residents in multi-unit dwellings (EPA funded).

## The year in review

### MANAGING OUR NATURAL AREAS

#### Restoring and regenerating our bushland and creeks

As part of our ongoing commitment to the management of our natural areas, bush regeneration works were undertaken in 47 of our parks and reserves across Ryde, totaling over 92 hectares.

Our Bushcare program saw over 4,300 volunteer hours contributing to the City of Ryde program across 23 sites, and helped to restore and manage 11 hectares of bushland. National Tree Day at Laurel Park attracted over 195 volunteers who helped plant 900 native plants to create a wildlife corridor along Buffalo Creek. Additional corridor plantings at ELS Hall Park, Pembroke Park and Meadowbank Park were also completed during the year, while Schools Tree Day was held at Tuckwell Park.

We increased community awareness of our natural areas through planting days, new educational material about planting and updated species information on our website, including new information about native vegetation communities. This highlighted different vegetation communities' locations, diversity of species and importance to their local ecosystems. Students visiting the Field of Mars Environmental Education Centre have been using the website during their field studies.

We developed a citywide planting guide to help both bushcare volunteers and community members to provide habitat and wildlife corridors by selecting the right species for each vegetation community and choosing the right planting methodology.

Our restoration of Shrimptons Creek continued, with 750 square metres of newly revegetated corridor space. Restoration works included riparian planting to enhance native animal corridors and in-stream water quality improvement works. Together, these initiatives will improve habitat for small native birds and other fauna, help connect canopies and improve biodiversity through Macquarie Park.

The third year of our Terrys Creek Walking Trail project saw the renewal of degraded bushland tracks along the creek between Wood Street and Epping Road, with stretches of boardwalk decking installed at Pembroke Park, steps, bridges and a viewing platform installed. Increased usage of the walking trail is evident and positive feedback has been received from the local community.

As part of our efforts to protect endangered vegetation communities and sensitive areas, delineation works were carried out at Marsfield Park to protect endangered Sydney Turpentine Ironbark Forest, and at Koonadan Reserve and Melrose Park to protect endangered saltmarsh.

Fifteen educational timber signs were installed in bushland at Blue Gum High Forest reserves and Terrys Creek reserves. The signage highlights significant features about the parks and endangered ecological communities, walking trails and vegetation communities.



National Tree Day

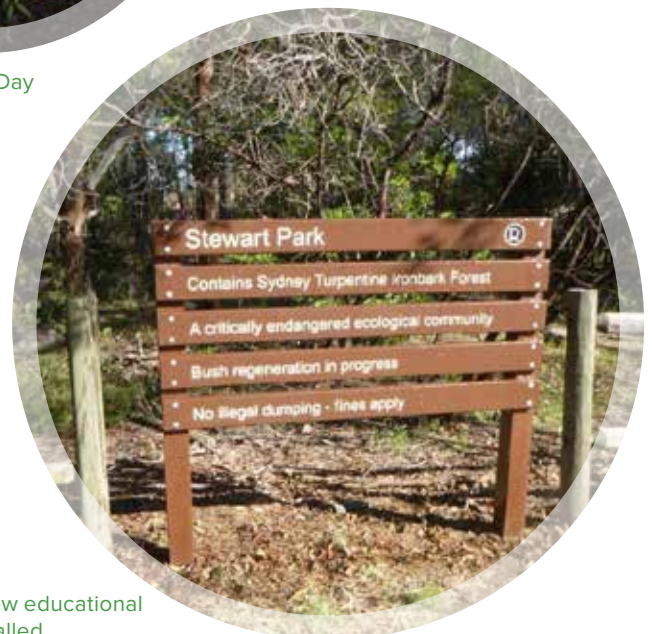
#### Protecting our biodiversity

Our biodiversity plan provides a comprehensive framework to assist in the management, enhancement and protection of natural areas and biodiversity across Ryde.

We are three years into the plan's implementation, with projects this year ranging from installing educational signage in bushland areas to a feral animal control program and the commencement of a wildlife protection project.

To better understand our local biodiversity, we completed the final Flora and Fauna Studies 2018 report that covered 42 parks and reserves along the Parramatta River, Shrimptons Creek, northern and western reserves. Notable fauna sightings included swamp wallabies, short-beaked echidnas and longneck turtles. A total of 74 bird species, 25 mammals, four amphibians, eight reptiles and two fish were recorded during the study, with six threatened species identified. There were 403 native flora species recorded.

We also consulted with the community about wildlife protection areas across the City of Ryde. These areas were identified within three high conservation bushland corridors: the Terrys Creek corridor, Kittys Creek corridor and Field of Mars Reserve. Wildlife protection areas are intended to better protect our unique native wildlife and to provide a platform for community education in relation to responsible pet ownership.



Fifteen new educational signs installed



Our feral animal control program continues to be rolled out across the city, targeting rabbit and fox populations within bushland and community lands. Actions taken at Brush Farm Park, Denistone Park, Field of Mars Reserve, Glades Bay Park, Kittys Creek Reserve, Lambert Park, Portius Park and Tasman Park resulted in 16 foxes and eight rabbits controlled over a four-month period. With the success of this program we are looking to expand into other high priority parks and corridors in the coming year.

We undertook a companion animal education program to educate residents about the importance of responsible pet ownership and the serious impacts companion animals can have on native fauna. The project worked with the City of Ryde's rangers and parks teams installing signage and providing flyers to community members at a number of events across our City and in the local area around the Field of Mars.

With weeds an increasing threat to our natural bushland areas, we were happy to win a Weed Action Program Grant to fund a full-time biosecurity officer to manage our weed populations and ensure we are complying with legislative obligations relating to environmental weeds.

### Reducing our bushfire risk

Following several years of lower than average rainfall, property adjacent to our bushland areas is at risk from bushfires. During the year, we actively maintained more than four kilometres of asset protection zones (firebreaks) across our City to minimise risk to private properties and major assets in fire conditions.

## OUR WATERWAYS AND FORESHORES

### Cleaning our waterways

As part of the 11-council Parramatta River Catchment Group, we launched the Parramatta River Masterplan which will see parts of the Parramatta River swimmable again by 2025.

During the year, we investigated potential future swimming sites on the Parramatta River and identified Putney Park as the most viable to continue activation and swimmability outcomes for our community. Concept design works commenced in 2018 and site investigations are underway to confirm options for the design. The City of Ryde has also partnered with Sydney Water to commence water sampling in 2019.

A range of projects were completed as part of the City of Ryde's commitment to the Masterplan, including rectifying Meadowbank Park's stormwater harvesting system and rainwater capture upgrade at Ryde Park. We enhanced Shrimptons Creek with riparian planting and in-stream water quality improvement works, and completed stormwater disposal works at the Field of Mars Visitor Centre to reduce erosion into the creek and mitigate flooding. We also continued to monitor our five major creeks for water quality and biological health bi-annually.

Our erosion and sediment control on building sites project continued and in May 2019 the City of Ryde joined the NSW Environment Protection Authority (EPA), the Department of Planning and Environment (DPE) and 17 councils across four catchment groups in a month-long compliance blitz on soil erosion and sediment control at construction sites around the Parramatta River. The blitz was part of the Parramatta River Catchment Group's 'Get the Site Right' initiative, which highlights the role that developers and builders play an important role in keeping the river clean and helping to make it swimmable again by 2025.



'Get the Site Right' initiative for erosion and sediment control on building sites

## Monitoring our creeks for water quality and biological health

We continued to monitor our five major creeks for water quality and biological health bi-annually. This year, sampling at these creeks – Shrimptons, Buffalo, Terrys, Archers and Porters – included a wet weather sampling trial. We uploaded the data collected from the monitoring program to our web-based WaterInfo site to keep our community informed about the health of their local waterways.

## KEEPING OUR CARBON EMISSIONS IN CHECK

We are now in our second year of membership with the Cities Power Partnership, Australia's largest network of local councils tackling climate action. As part of its partnership pledge, the City of Ryde has committed to educating our community on renewable energy uptake, continuing to install solar photovoltaic (PV) systems on our assets wherever feasible, rolling out energy efficient streetlighting, encouraging sustainable transport uptake and implementing behavioural change programs.

We have made major inroads into reducing our energy consumption. We have continued to identify strategic energy saving opportunities and significantly improved the accuracy of our consumption footprint reporting methodologies. This has further refined how we monitor and implement new actions that continually improve and reduce our consumption of water, energy and gas.

Across all Council facilities our total energy use for 2018/19 was 54,058GJ, substantially down on last year's usage and a very small decrease on the estimated 2003/04 baseline of 54,219 GJ. We lowered our GHG emissions by 6.8 percent since last year through efficiency programs and renewable energy uptake.

Energy consumption reductions were achieved thanks to a number of initiatives, including our continuing solar PV installation program. This delivered an additional two solar projects at Ryde Aquatic Leisure Centre, which, at 846 solar panels, is the largest solar installation in north western Sydney, and complements an already-installed cogeneration plant to reduce the centre's energy costs and greenhouse gas emissions. A 7.48kW solar PV system was installed at Eastwood Hall and solar PV panels were also installed at West Ryde Community Centre in June 2019.

In addition, multifunction LED light poles were installed near Bowden Street, Meadowbank to reduce energy consumption.



Monitoring creek water quality

The following tables compare our annual organisation wide energy consumed (GJ) with our 2003/04 baseline.

### Organisation-wide energy consumed (GJ)

03/04	54,219
15/16	57,448
16/17	55,706
17/18	56,139
18/19	54,058

This consumption includes electricity and mains gas.

### Organisation-wide greenhouse gas emissions (CO<sub>2</sub>)

03/04	13,744
15/16	14,148
16/17	14,043
17/18	12,456
18/19	11,610



### Minimising water consumption

Our organisation water consumption this was 132,616KL, which was a 16.6 percent decrease on 2017/18 consumption levels – a significant achievement during a drought, although it is 3.8 percent higher than estimated for 2003/04.

To reduce waste, we added remote water meter monitoring and responded quickly to any leaks detected.

The following table compares our annual organisation wide water consumption (kL) with our 2003/04 baseline.

#### Organisation-wide water consumption (kL)

03/04	127,796
15/16	115,307
16/17	122,133
17/18	159,056
18/19	132,616

### Increasing our resilience

We started work on the first-ever *Ryde Resilience 2030 Plan* to respond to the Resilient Sydney Strategy and complement work under the Greater Sydney Commission's North District Plan. We also continued resilience partnerships with 33 councils across Sydney to work on carbon management and on managing and mitigating urban heat islands.

### Embracing sustainable transport

We began to transition our City into low carbon transportation alternatives with a successful electric vehicle bid.

We completed a number of projects contributing to sustainable transport improvements – including reviewing our car share guidelines, reviewing travel plans for major developments and undertaking electric vehicle investigations.

Our Shop Ryder bus service saw 53,635 passenger trips taken, keeping thousands of single person car trips off our local roads.

### WASTE, RECYCLING AND LITTER

#### Updating our waste strategy

We completed our Waste Management Strategy update, which proposes an ambitious target for reducing waste sent to landfill from our City. The strategy will help guide both Council and our community to address challenges in the waste industry and improve waste diversion. It will also help us to improve our services, prioritise resource recovery and collaborate regionally. The new strategy will be adopted in 2019/20.

### Helping our community live sustainably and make a difference

Our community has told us they are eager to make more sustainable choices. To help inform their decision-making processes, we hosted a range of events throughout the year. We are empowering our community to act on local environmental and sustainability initiatives. We offer a range of programs that help protect and enhance the natural environment, reduce collective resource consumption, encourage community spirit, resilience, connectedness and wellbeing and promote community responsibility and engagement for sustainable outcomes.

Now in its ninth year, the Sustainable Waste to Art Prize (SWAP) invited members of the community to enter upcycled functional art made from recycled material or works with a sustainable living theme. The competition attracted approximately 160 submissions, including recycled plastics, sculptures, handwoven creations, colourful collages and wearable art, of which 80 were selected for the awards night and exhibition. Over 400 visitors attended the exhibition.

We hosted a presentation on the importance of local resilience in partnership with Macquarie University and Radio Station 2SER. This presentation was attended by more than 100 people and featured a panel of experts, including Ed Blakely – Director of Recovery in New Orleans after the Hurricane Katrina Disaster (2007–2009) in the United States of America.



State Emergency Services at our Granny Smith Festival

Through the Ryde Environmental Educators Network (REEN), we conducted a series of waste and recycling workshops at local preschools, schools and Meadowbank TAFE. In 2018/19, more than 20 schools actively participated in the Ryde Environmental Education Network (REEN) program with presenters from the NSW EPA Love Food Hate Waste project, Parramatta River Project, National Tree Day, Bee and Bee Highway and Take 3 for the Sea, in addition to presentations by Council officers.

During National Recycling Week, we engaged 752 students with modules on recycling, littering and unwrapped lunches. We also continued our partnership with Keep Australia Beautiful and funded the EnviroMentors program, which delivers fun, engaging and syllabus-linked educational workshops on litter reduction and care for the environment in primary schools.

We celebrated World Water Day with a 'Paddle on Parramatta River' event, kayaking from Kissing Point Park to Putney Park to educate our residents on our work with the Parramatta Catchment Group, the importance of waterway health and our plans to make the river swimmable again by 2025.

We inspired our residents to wrap their Christmas presents and gifts in fabric using more sustainable options such as the Japanese *furoshiki* technique. This workshop was so popular with residents that we held a second workshop.

We held multiple workshops promoting our latest solar assistance tool, Sunspot. The largest of these workshops was held at the Science Week Expo held at Ryde Library in August and attracted approximately 2,000 people. Interest in this program continues and complements the City of Ryde's in-home Home Waste and Sustainability Advisory Service.

We celebrated World Environment Day with the community by hosting a Sustainability Festival by the water at Putney Park. The hugely successful festival featured free workshops, food stalls, a coffee cart, waterside deck chairs and picnic blankets, animal shows, face painting and stalls with plants as well as education stalls on waste and sustainability programs.



Paddle on Parramatta River



Sustainability Festival



The success of our sustainability e-newsletter '*Smarter, Cleaner, Greener*' grew, delivering news and updates to over 3,000 residents each month. The newsletter features the latest sustainability, waste and environmental news, green living tips and relevant upcoming Council events.

#### Improving our residential sustainability outreach

Throughout the year, we also continued to promote the new Community Recycling Centre in Artarmon, which enables residents from Ryde, Hunters Hill, Lane Cove, Willoughby and North Sydney Council to dispose of problem waste. We also serviced six problem waste stations conveniently located throughout the LGA.

Four *Your waste adventure* tours allowed participants to see first-hand how a recycling facility operates and how recyclables from Ryde are sorted and processed.

Four compost and worm farming demonstrations were conducted and two kitchen garden workshops were held at The Habitat, our local community garden nursery.

At this year's Granny Smith Festival we promoted our pre-booked household clean-up service and drew visitors' attention to the issue of contamination in yellow recycling bins. Representatives from Know Waste also audited stalls to ensure they were not using or selling single-use plastic items, in line with the City of Ryde's Single-Use Plastic Policy.



Community Recycling Centre, Artarmon

We continued our Future Focus – Home Waste and Sustainability Advisory (HWA) service, and in 2018/19 helped over 3,450 residents to reduce residential waste, energy and water consumption. The program delivered 51 individual tailored assessments, with most participants implementing at least two of the recommendations made during the home assessment.

We conducted the 'Ryde Home Challenge' – a survey-based competition that provided three winning households up to \$1,500 towards environmental home improvements that improve efficiency, save households money on their bills and reduce GHG emissions in our City.



Worm farming

### Cleaning up litter

We encouraged community participation in CleanUp Australia Day with three businesses, nine schools, two youth groups and eight community collecting approximately 820 kilograms of rubbish.

A litter reduction project was undertaken in Laurel Park and the Buffalo Road industrial area. With the help of Ryde Secondary College, Holy Cross College and Ryde Primary School, we carried out a cleanup in Laurel Park, followed by a community tree planting event and the installation of 'Litter. You know it's wrong' murals and banners.

In Eastwood, we installed a 'Litter. You know it's wrong' mural along the canal. We also installed two water fountains, upgraded a bin storage pad, provided pavement decals and butt bins and held community workshops to educate residents and visitors to Eastwood about the importance of litter disposal.

### Improving recycling in multi-unit dwellings

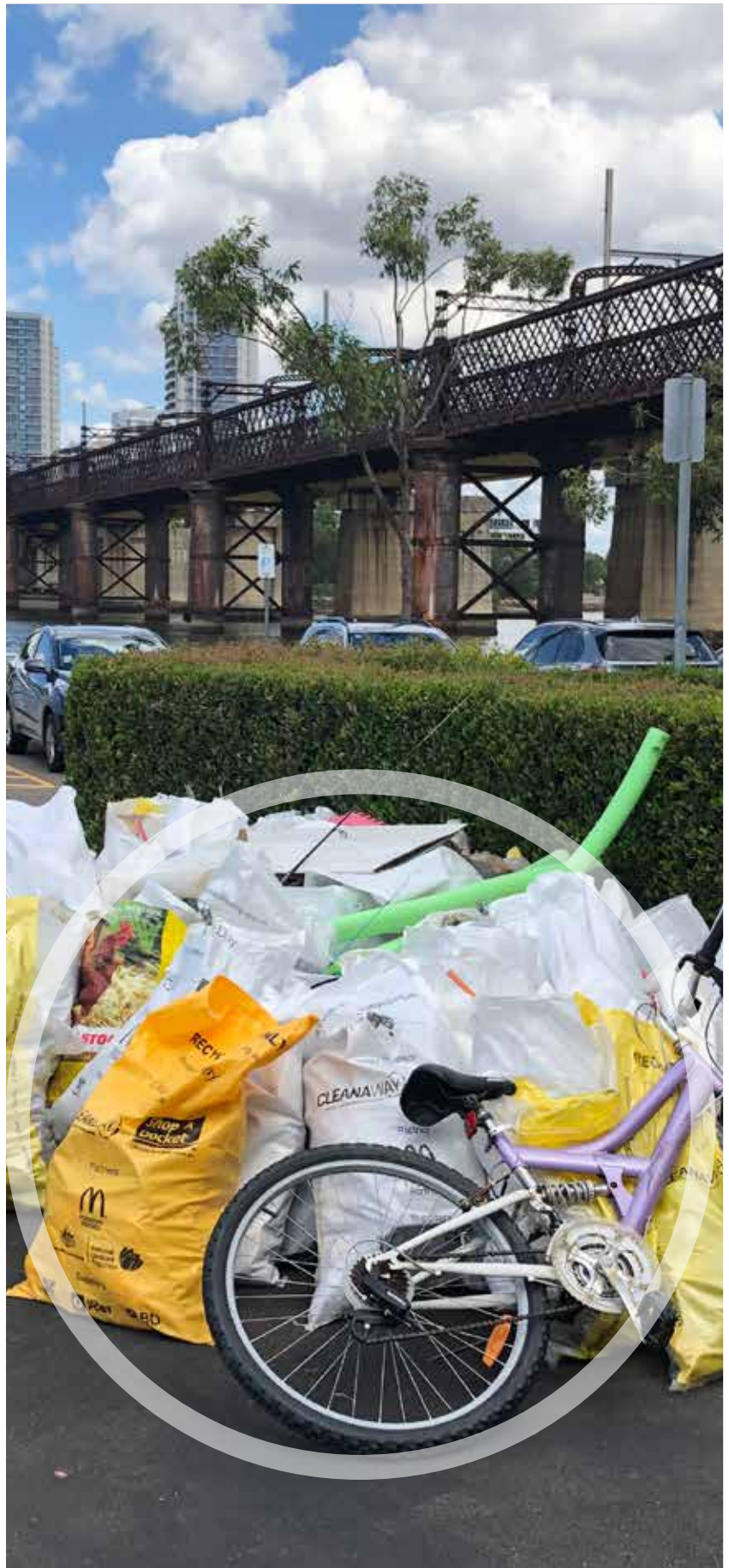
Apartment Living is an ongoing project that focuses on maximising recycling in multi-unit dwellings and minimising illegal dumping and contamination in recycling and garden organics bins.

During 2018/19, more than 25 new unit complexes came online, with 2,400 residents. We conducted a pilot project involving the provision of tubs and bags to residents to prevent materials being placed in plastic bags and therefore reducing contamination.

New signs for bin bays and chute rooms were also developed and distributed to strata managers across the City. We engaged with champions within some of the unit blocks, to assist with managing on-site bins. A workshop was also conducted with a number of the managing bodies to gain their feedback on how we can help to spread the waste reduction message.

### Looking ahead to better waste management

In response to community demand for better and more accessible ways to deal with problem waste, we are exploring the possibility of building an additional Community Recycling Centre at the Porters Creek construction waste recycling facility. We have conducted a feasibility study and applied for EPA grant funding, and, with the support of other NSROC councils, hope to provide a facility that will not only take problem waste, but also include a room for a reuse and repair workshop and possibly a community garden.



Clean Up Australia Day, Meadowbank



We also engaged with the Director of UNSW Centre for Sustainable Materials Research and Technology, Professor Veena Sahajwalla, to learn more about the work she is doing on smart microfactories, and to develop a better understanding of how this could help the City of Ryde reduce waste.

#### Taking steps to phase out plastic waste

Single-use plastics have become one of the biggest environmental challenges facing Australia, polluting waterways and threatening the health and safety of native flora and fauna. In a bid to protect the health of local waterways, we committed to a complete ban on single-use plastic drinking straws as well as a phase out of other single-use plastics. Councillors unanimously resolved to ban single-use plastic drinking straws and phase out balloons, plastic water bottles, plastic cups and plastic bags in all Council operations and at Council-sponsored events. In addition to the Council phase-out, the City of Ryde is also implementing a waste education program to reduce the use of single-use plastics in our community, with a particular focus on local businesses.

### WORKING TOWARDS A SUSTAINABLE FUTURE

#### Leading innovation and transformation

At the City of Ryde we recognise that achieving sustainability goals takes both local actions and wider collaboration so we continued to develop and engage with our network of sustainability partners. We are actively seeking to be a good corporate citizen, and to model good behavior in our management of the City's assets and resources. To do this we are working to reduce resource consumption, minimise greenhouse gas emissions, and to lead by example as we help our community adopt more sustainable practices.

We are working collaboratively with the Greater Sydney Commission on the North District Plan to plan the growth and development of our cities for the next 10 years.

During the year, we collaborated with Northern Sydney Region of Councils (NSROC) on key areas including the impacts of urban heat islands, increasing renewable energy uptake across northern Sydney and transitioning to electric vehicles and low emissions transportation technologies.



World Environment Day



Sustainability Festival

We are participating in the *Monitoring Urban Heat Island Impacts* university collaboration as part of an Australia-wide urban heat island microclimate study. We are also working separately with Macquarie University on the 'Which Plant Where?' research program.

In addition to our membership of the Ryde Environmental Education Network we are part of a citizen science urban microclimate project, involving students and teachers from two local high schools (Epping Boys High School and Ryde Secondary College). Approximately 15-20 monitoring stations have been set up across Ryde.

Our membership as an Ambassador Council to the Rockefeller Foundation's 100 Resilient Cities' Sydney program continued.

## Challenges

### Recyclable volumes and market uncertainty

This year our recycling tonnages are lower than past years due to a combination of reduced garden organics resulting from dry weather conditions and the introduction of the NSW Government's Container Deposit Scheme, which has had an impact on existing recycling contracts and diverted recyclables from recycling bins to Return and Earn facilities.

In addition, the China National Sword Policy initiated a widespread ban on the importation of recyclable materials from Australia into other countries. This, along with the lack of end markets for these materials created uncertainty in the waste industry. Our existing regional waste disposal contract was also detrimentally affected by the revoking of licenses for mixed waste organic material application on agricultural, forestry and mining land.

Contents of the Councils yellow bin is recycled and although we are not processing our waste to be used for mine remediation, the waste is being disposed of in an environmental and legal manner.

We are continuing to explore options to minimise the impact of this change on domestic recycling in the City of Ryde. Our current recycling processing contract is with Visy, the only vertically integrated processor in Australia.

We are also continuing to identify opportunities to 'close the loop' in the industry, by exploring opportunities to buy back recycled products, including glass fines for road base, compost for field remediation and paper with recycled content.

Additionally, we actively continue to promote the value of recycling in our local community and enhance our education programs to reduce contamination levels and improve the overall quality of the recyclable material stock.

## The year ahead

Our long-term priority is to protect and increase natural areas and parklands and be a leader in environmental and sustainability behaviour and initiatives. Over the coming year we will continue to work with the community, non-government organisations, state agencies and neighbouring councils to use all the tools available to us to reduce our environmental footprint, protect and reduce our impact on our natural systems, strengthen the health of our natural areas, and manage risks and natural hazards for the community.

Our key areas of focus will be:

- Implementing wildlife protection areas
- Updating key plans including our *Generic Plan of Management for Natural Areas*, *Bushfire Risk Management Plan*, and *Local Weed Management Plan*.
- Adopting the *Ryde Resilience Plan 2030* and rolling out initiatives to improve local community resilience
- Increasing uptake of solar harvesting across the Ryde community
- Adopting resource efficiency targets for the City of Ryde
- Commencing our transition to electric vehicle technology
- Advocating for a community problem waste recycling centre (CRC) and commencing a feasibility study on locating the CRC at Porters Creek
- Improving recycling rates and targeting litter and illegal dumping
- Change the behaviour of the community so that avoiding and reducing and reusing becomes a high priority.

In 2019/20 we have the following projects planned:

### Catchment program

- Harmonising flood studies
- Purchase WaterRIDE flood management software
- Stormwater asset replacement renewal
- Stormwater improvement works renewal

### Environmental program

- Biosecurity weeds officer
- RALC energy feasibility study and optimisation
- SWAP Waste-to-Art

### Foreshore program

- Kissing Point Park recreational boating improvements

### Open Space, Sport and Recreation program

- Park and Open Space Tree Planting program
- Putney Beach activation
- Ryde Biodiversity Plan – implementation
- Terrys Creek walking trail

### Waste and Recycling program

- Community Recycling Centre for problem waste
- Managing Waste Reduction in Multi Unit Dwellings
- Old landfill sites subsidence program
- Porters Creek precinct
- Porters Park Community Recycling Centre development

**\$135.5 million**  
**investment is**  
**planned for this**  
**outcome over the**  
**next four years.**