



CITY OF  
PARRAMATTA

# City of Parramatta Environmental Sustainability Strategy

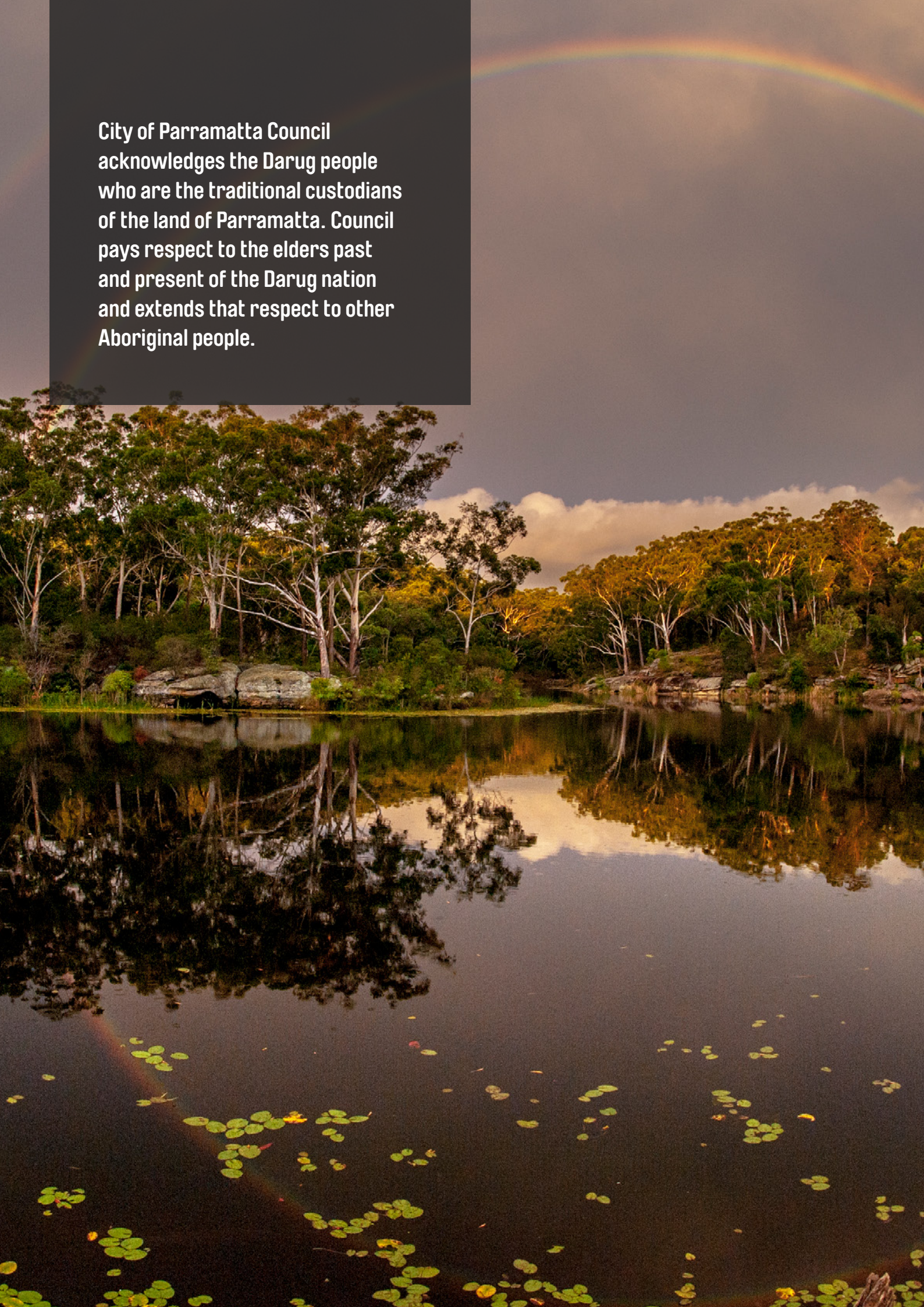
## 2017/18 Progress Report

Our plan to create a nature inspired,  
efficient and resilient city





City of Parramatta Council acknowledges the Darug people who are the traditional custodians of the land of Parramatta. Council pays respect to the elders past and present of the Darug nation and extends that respect to other Aboriginal people.



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# WHERE WE ARE

## One year on

In 2017, the City of Parramatta created its Environmental Sustainability Strategy. Its goal is to ensure that as the city grows, our natural environment improves with it, and that we all enjoy the benefits of our surroundings.

To develop the strategy we asked our community what mattered to them. Their most important issues included preserving green and blue spaces, preventing loss of natural environment, building a more eco-efficient city, and improving transport options that will carry us into the future in a sustainable way.

We're committed to our community and we're pleased to be sharing what we've delivered to date to meet their wants and needs.

This document highlights the progress that has been made including the positive impacts for City of Parramatta community and their surrounding environment. We are also reporting progress against actions delivered in each of the key environmental themes to help meet our targets.

The City of Parramatta faces social and environmental challenges, such as rapid population growth and urbanisation, and our unique location on the banks of the Parramatta River. Despite this, we are leading on issues such as urban heat, flooding, waste and litter, and making the river swimmable again. We're educating our community along the way, and in doing so, we're helping create a more resilient city that's fit for the future.

One year on, we've made good progress. By building on these early accomplishments, we'll continue to ensure that our great city continues to grow better everyday.



# SUMMARY OF GOALS

## GOALS:

### SUSTAINABLE TRANSPORT

10% of trips made by walking and cycling by 2038

### URBAN HEAT

Improve liveability by cooling the city and protecting people and communities from heat stress

### FLOODING

Minimise the impact of flooding on the community

## GOALS:

### ENERGY & CARBON

60% emissions reduction by 2038 (based on 2015 levels)

50% of electricity demand to be met by renewable energy by 2038

### WATER USE

No net increase in potable water consumption by 2038 (based on 2015 levels)

### WASTE & LITTER

Reduce resource consumption from 8.2kg to 6.1kg per person by 2038 (based on 2015 levels)

Increase diversion from landfill to 85% by 2038

Reduce the volume of litter by 40% by 2020

## GOALS:

### PARKS & GREEN SPACE

Protect, enhance and increase our parks and green spaces to make them a community feature

### BUSHLAND & BIODIVERSITY

Protect and enhance the health of our unique natural ecosystem of plants and animals

### THE URBAN FOREST

Increase canopy cover to 40% by 2050 (based on 2016 levels)

### RIVER & WATERWAYS

Make the Parramatta River swimmable again by 2025



## GOALS:

### COUNCIL ENERGY, WATER & WASTE

Carbon neutral by 2022

60% emissions reduction by 2038 (based on 2015 levels)

No net increase in potable water consumption by 2038 (based on 2015 levels)

90% diversion rate for Council waste by 2038

### FLEET & STAFF TRAVEL

Reduce Council fleet emissions by 20% by 2038 (based on 2015 levels)

Reduce single-occupancy car commutes to and from work by Council staff to 35% by 2023 (based on 2016 levels)

### RESPONSIBLE INVESTMENT & PROCUREMENT

Sustainability criteria are considered in all of Council's procurement activities



# 2017/18 HIGHLIGHTS



## GROWING OUR BUSHCARE

Our bushcare volunteers have increased by **11%** leading to a **49%** increase in volunteer hours during the year



## PRESERVING PARKS, BUSHLAND AND SPORTS FIELDS

We have **21** parks in the process of being upgraded and enhanced. Thousands of people have attended over **20** events and festivals held in our parks and green spaces



## GOING GREENER

We're planting more trees and removing fewer

Tree plantings UP to **11,087**  
Removals DOWN by **18%**



## MAKING A SPLASH

Close to **70,000** swimmers at Lake Parramatta



## ON TARGET AHEAD OF TIME

Community waste diversion from landfill increased to **72%** exceeding the State Government target of **70%**



## FLOODSMART FOR ALL

Residents and businesses get flood ready with our new innovative Floodsmart Parramatta service



## VOTING WITH THEIR FEET

Half a million people recorded either walking or cycling along the Parramatta River Foreshore Path with a daily average of **650** cyclists and **326** walkers



## BUILDING BETTER

Our commercial buildings are becoming more energy efficient with **78%** of buildings with a NABERS rating being **4.5** stars or higher



## HELLO, SOLAR

Council facilities now home to **229** kilowatts worth of solar capacity



## DRIVING DOWN FLEET EMISSIONS

Council continues its switch to more efficient vehicles saving **18 tonnes** of CO<sub>2</sub> in 2017/18







National Tree Day 2018—Third Settlement Reserve, Winston Hills

## **A CITY IN NATURE**

**Our community cherishes nature. They've told us that their main concern is 'protecting and enhancing green and blue spaces and the environment'. Creating a city where nature abounds includes preserving our parks and green spaces, protecting the health of bushland and waterways, growing the canopy cover above our streets, and ensuring our river is clean, vibrant and swimmable again.**





# PARKS & GREEN SPACE

## Why it's important

Our community wants more green spaces to enjoy and recreate. But as our population grows, we face a future gap in facilities such as sports fields, and green spaces for people to keep cool on hot days.

With housing densities on the up and up, parks and reserves are set to become the new back garden—important places for our community to come together. We need to make sure they're the best they can be, that they draw people in, and get them involved.

## 2017/18 Achievements

### Our community loves our green spaces

Our parks and green spaces are for our people, and at City of Parramatta, we're working to get our community enjoying them at every opportunity. We currently run over 20 events and festivals across our parks and green space during the year, including markets and cultural celebrations. And every year, thousands of residents, workers and visitors come out to get involved.

Annual events and festivals that bring our communities together include: Loy Krathong, Ganesh, Figi Day, Carols, Australia Day and Parramasala, Sydney Festival, Tropfest, Winterlights, Octoberfest and the Festival of Colour.



Canoe water polo, Parramatta River CBD—Courtesy George Gittany



Winterfest 2018—Courtesy George Gittany



Parramatta Lanes—Courtesy George Gittany





# PARKS & GREEN SPACE

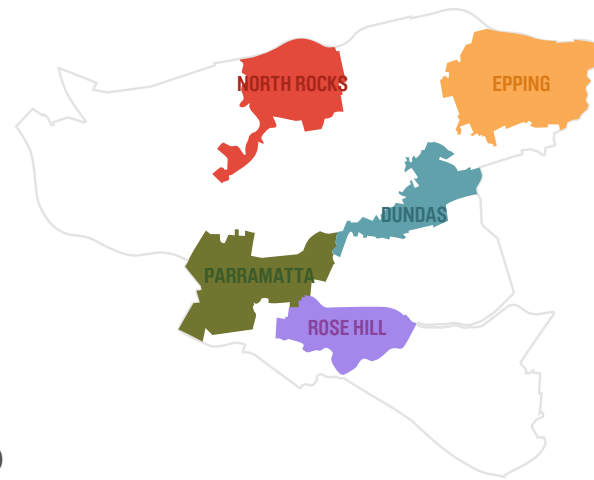
Upgrading our parks and green spaces today. Planning for tomorrow.

## Completed—2 park upgrades

- West Epping Park
  - a new synthetic sports oval for soccer and cricket
  - improved parking
  - two new playgrounds
  - a public plaza space
  - new amenities building
- Peggy Womersley Reserve, Carlingford
  - athletics infrastructure

## Underway—3 park upgrades:

- Jones Park
  - new cricket nets
  - floodlight improvements
- Murray Farm Reserve
  - car park improvement works
- Dundas Park
  - new amenities building



## Planned—16 park upgrades from 2018/19

### SPORTSGROUND PROGRAM

Max Ruddock Reserve upper field drainage improvements

### PAVILION IMPROVEMENT PROGRAM

Design for Peggy Womersley Reserve amenities building

### NORTH ROCKS PARK FLOODLIGHT UPGRADE

Replacement of the North Rocks Park Floodlights as part of the Stronger Communities Fund

### WATER PLAYGROUND—NORTH PARRAMATTA

Installation of a new water playground

### SPORTSGROUND PROGRAM

Re-lamping of all sports fields floodlighting

### PLAYGROUND IMPROVEMENT PROGRAM

Playground replacement Homelands Reserve

### PLAYGROUND IMPROVEMENT PROGRAM

Playground replacement—Jones Park

George Kendall Reserve shade sail

### SPORTSGROUND PROGRAM

Summerville Park floodlighting upgrade

Peggy Womersley Reserve Carlingford athletics infrastructure

### PLAYGROUND IMPROVEMENT PROGRAM

Playground replacement James Hoskin Reserve

West Epping Park shade sail

Henry Brigg Reserve Shade Sail

### PAVILION IMPROVEMENT PROGRAM

Design and construction of Dundas Park amenities building

### PLAYGROUND IMPROVEMENT PROGRAM

Playground replacement Homelands Reserve

Acacia and Sturt Park landscape improvement works

New landscape design plans for the major upgrade of Acacia and Sturt Park



West Epping Park





# BUSHLAND & BIODIVERSITY

## Why it's important

Healthy bushland makes our city a healthy place to live. Its biodiversity and ecosystems are vital to our quality of life. It gives children places to learn and experience nature—essential for their development.

Our city's population growth and growing urbanisation put pressure on our bushland and its variety of natural species. By actively protecting biodiversity, we can help our native animals and plants thrive, and improve the quality of life for people in our city.

## 2017/18 Achievements



### Getting our community into nature and conservation

Our community cherishes nature, and we're helping them get actively involved in protecting bushland and biodiversity through our Get into Nature and Parramatta Bushcare programs.

During the year, Get into Nature held:

- 25 events, with 518 people involved. Events included guided walks, presentations, games and workshops

During the year, Our bushcare volunteer program achieved:

- An increase in volunteers—up from 220 to 247 volunteers for the year
- An increase in bush regeneration volunteer hours from 3,066 to 5,979 for the year
- The delivery of 12 training workshops

### Creating a bird's-eye view of our bushland

The City of Parramatta is currently working on the following key documents that will direct our future bushland priorities and resources:

- A Bushland Fire-Prone Lands map
- Biodiversity Mapping Report, which will provide data on vegetation conditions throughout our bushland reserves
- A Bushland Management Strategy will follow the mapping report
- Bushland Management Plans will then be reviewed and developed for prioritised reserves

### Regenerating a vital natural resource

We're continuing to manage 187 hectares of bushland under the bush regeneration program and expect this to increase once the bushland management plans have been completed.

### Protecting our threatened species

The City continues to manage threatened species through the two threatened species and recovery plans:

- Cumberland Plain Recovery Plan
- Recovery Plan for Large Forest Owls

During the year we also:

- Constructed and installed 100 nest boxes with 12 varying designs targeting species including (but not limited to): the Powerful Owl, Sacred Kingfisher, White Throated Treecreeper and Southern Boobook Owl
- Developed Dural Land Snail Management Plan to ensure continued protection of the endangered snail
- Fox and rabbit control in bushland reserves



Bushcare's Major Day Out—Impeesa Reserve, Winston Hills





# THE URBAN FOREST

## Why it's important

85% of our community says they'd like more shade in their local area. Tree-lined streets draw us outside, where we interact with people, connect with nature and get active rather than sitting in our cars. They provide greater spaces for children to play, and even improve property values.

But as the City becomes more densely populated, trees are being removed from private properties and public areas.

## 2017/18 Achievements

### Hugs for trees: embracing National Tree Day

In the City of Parramatta, we're proud to boast some of the highest participation rates for National Tree Day of all Australian Councils.

This year:

- 1,000 people attended National Tree Day 2018 at Third Settlement Reserve, Winston Hills
- They planted 10,000 plants, including 2,000 trees
- Participants also enjoyed wildlife displays, face painting, bushland games, craft, guided bushwalks and a pop-up library

## Other plans and projects

### Creating a city of trees

- Council planted 11,087 trees through its Public Trees program in the following areas:
  - 800 street trees
  - 287 playground trees
  - 10,000 bushland (tube stock) trees
- Council also maintained 26,000 street trees during 2017/18
- Tree removal requests were also down by 18% during the year

### Maintaining our trees

Council manages and maintains thousands of street trees across the local area to create green corridors and increase the tree canopy cover across the City. This includes our ongoing work with local utility companies to improve tree pruning and removals.

### More Trees coming with the Parramatta Light Rail

City of Parramatta expects to plant a significant number of trees as part of the Parramatta Light Rail project. We're working with Transport for New South Wales to identify the best planting locations.



IN 2017/8:

.....  
**11,087 TREES**

Planted by the City of Trees program

800 street trees

287 playground trees

10,000 bushland (tube stock) trees  
.....

TREE REMOVAL REQUESTS

**DOWN BY 18%**





# RIVER & WATERWAYS

## Why it's important

The Parramatta River is one of Australia's most iconic waterways, with tremendous cultural and historical significance. It's our heritage, and it's our backyard. By cleaning it up we can all enjoy a wonderful, natural swimming pool and safeguard the future of the natural species that rely on it for survival.

## 2017/18 Achievements

### Getting closer to a swimmable river

We're working with the Parramatta River Catchment Group (PRCG) to restore the river to a vibrant, swimmable waterway.

PRCG recently completed their draft Parramatta River Master Plan, which sets out Ten Steps to a Living River (see next page).

The ultimate measure of success is people voting with their feet, and in the case of Lake Parramatta, our people are voting by swimming.

In 2017/18, close to 70,000 people visited during summer. The graph below shows the increasing popularity of the Lake as a swimming destination.

Visitors show a high level confidence in the water quality at Lake Parramatta, indicating it's suitable for swimming and other water-based activities, such as boating, kayaking and water polo.

We continue to improve amenity for visitors to Lake Parramatta. Together with the Metropolitan Greenspace Program, Council has co-funded a series of upgrades to the Lake throughout the year. These include new pathways, picnic tables, viewing deck, steps down to the water and new seating areas.

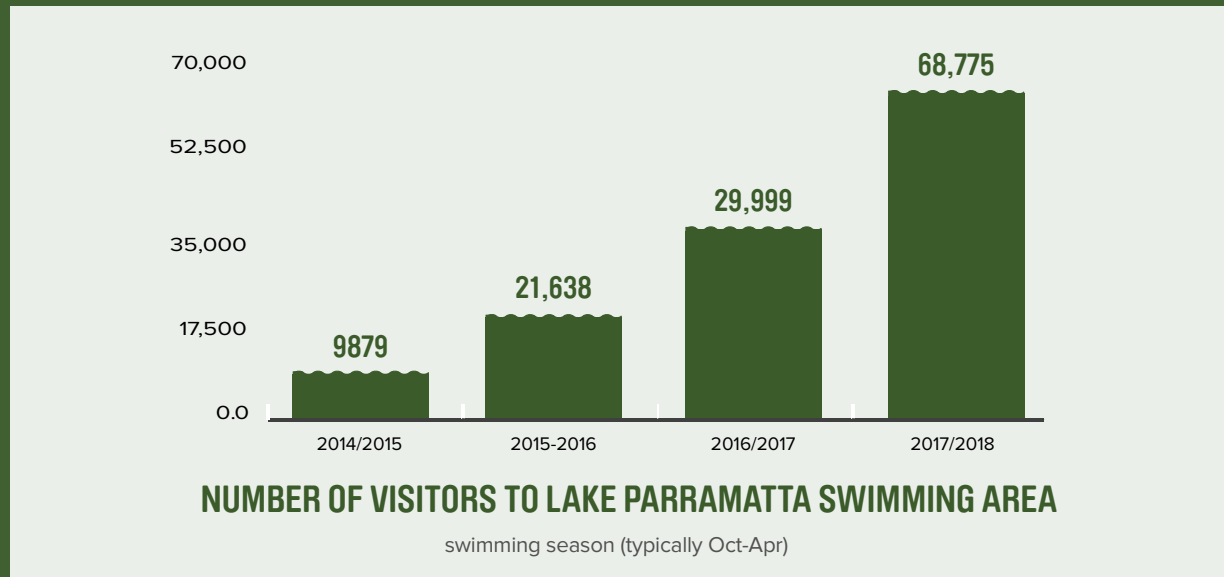


Figure 1: Number of visitors to Lake Parramatta swimming area

**LAKE PARRAMATTA EVEN HAS A 4.5 STAR RATING ON TRIPADVISOR, WITH 91% OF VISITORS RATING THE LAKE AS VERY GOOD TO EXCELLENT, AND OVER 182 PEOPLE LEAVING REVIEWS**



Bushcare kayaking—Lake Parramatta



# PARRAMATTA RIVER MASTERPLAN

## 1. GET SWIMMING

Right now there are four places you can swim in the river. The more we swim in them, the more others will join us and community support will grow. And the more we can learn what makes a swimming place great, and what people want out of future swimming spots.

## 2. KEEP WATCH

A Riverwatch water monitoring program will help us measure change over time, protect existing swimming spots, open new swimming sites and understand what makes water quality change over time.

## 3. CREATE NEW SWIMMING SPOTS

Our goal is to create three new swimming spots by 2025. Doing this means working out all potential options, then choosing the best three based on feasibility, vulnerability and desirability. We've already looked at 12 potential new spots and proposed different ways of using each, based on scientific assessment and community input.

## 4. STANDARDISE THE STANDARDS

The Parramatta River's catchment spans 11 local council areas. To create a swimmable river, we need to work together to standardise policies and practices that impact water quality, such as approaches to baseline measurements, installation of rainwater tanks, creation of rain gardens and so on.

## 5. REDUCE STORMWATER RUNOFF

Stormwater runoff – and all the rubbish and other pollution it brings with it – is one of the number one ways our river gets dirty. A catchment-wide approach to reducing this stormwater through water sensitive design, which absorbs rain where it lands, will improve water quality.



## TEN STEPS TO A LIVING RIVER

Our plan to make the Parramatta River swimmable again by 2025.

## 6. IMPROVE OVERFLOWS

Sydney's sewer system is over 100 years old, and was built for a smaller city. So, when it rains, stormwater can flow into and overload the wastewater system, causing it to overflow into our creeks and rivers. Understanding where, when and how this happens and putting measures in place to stop it, is an essential part of making our river swimmable again.

## 7. INVOLVE THE COMMUNITY

In the most part, stormwater pollution comes from street runoff. And that is determined by the actions of the community living in the catchment area. Good management of building sites, picking up your dog's droppings and not littering are just three ways community can help create a swimmable river. Helping people understand this link is a key to success.

## 8. BRING IN NATURE

A living river needs people, fish, birds, bats, frogs, turtles, grasses, trees and many more to be a complete ecosystem. By maintaining and improving habitats for our iconic species – especially our five mascots – we can bring nature back to the river. Doing so means understanding current habitat health, establishing foreshore improvement programs and calling on citizen scientists to help track progress.

## 9. REPORT BACK REGULARLY

Regular monitoring and reporting not only shows us if we're winning, it helps keep our river in the mind of everyone involved and reminds them that this is a long-term project that is worth investing in.

## 10. CREATE CLEAR LEADERSHIP

A big project needs clear leadership. The plan to make the river swimmable again is sponsored by 11 councils and three state government agencies and supported by many more. It also draws on community collaboration and Aboriginal wisdom to bring a big mix of experience and opinions to the table. Sydney Water has been identified as the best organisation to lead this alliance, via a defined governance structure that sets and delivers on clear targets.

“IF IT’S A HOT SUMMER’S DAY AND YOU NEED TO COOL DOWN, I RECOMMEND LAKE PARRAMATTA. GREAT FOR THE WHOLE FAMILY WITH LIFEGUARDS ON DUTY IN SUMMER.”

– TRIPADVISOR REVIEW 2018

“PARRAMATTA LAKE IS A GREAT WAY TO SPEND TIME WITH THE FAMILY AS YOU CAN SWIM, HAVE A BBQ AND GO FOR A HIKE, ALL IN THE ONE PLACE.”

– TRIPADVISOR REVIEW 2018





# RIVER & WATERWAYS

## Other plans and projects

### Working towards our water goals

City of Parramatta is developing a new Integrated Water Strategy. It will identify specific actions that Council will take over the next ten years to meet our goals around water quality and quantity, and community and Council water use.

To support the strategy, we've initiated three sub-projects, to be completed later this year:

- Detailed review of all options to reduce community water use in the Council area
- Investigation into infrastructure solutions to reduce flooding in the Parramatta CBD
- Detailed water quality modelling to identify opportunities to reduce stormwater pollution entering the River

### Catching pollution before it comes in

Council currently has 165 stormwater pollution devices throughout the City of Parramatta, including gross pollutant traps, floating booms and litter baskets.

During the year, Council collected 124 tonnes of litter from these pollution catchers.



### Supporting PRCG in their programs

We're working with PRCG to deliver the following programs to create a living river:

### Junior Riverkeepers

In March 2018, our Riverkeeper Jacinta invited students in Years 5 and 6 at St Oliver's Primary School in Harris Park to become Riverkeepers. The students took part in a guided cycling tour of the Parramatta River by one of our Riverkeeper Ambassadors, Charlene Bordley from Addventageous.

They then researched and developed their plans on ways to make the Parramatta River swimmable again by 2025, which they presented to the school community and members of the Our Living River team.

The project is a wonderful example of how students can engage with their local waterways and surrounding environment and consider ideas for future sustainability.

### Building better

PRCG have led a catchment-wide campaign that works with builders to ensure sediment pollution doesn't leave construction sites.



During the past two years, City of Parramatta partnered with over 20 organisations across Sydney, including councils and government agencies, to deliver the Get the Site Right campaign with the following results and outcomes:

- Four blitzes held as part of this campaign
- A total of 2,278 site visits were conducted including 341 sites in the City of Parramatta
- On average, 46% of construction sites were found to be non-compliant
- 60 penalty infringement notices being issued on sites within the City of Parramatta
- Compliance rates slowly increased as a result of the campaigns, with no repeat offenders reported



One of our many Gross Pollutant traps in our local waterways





Parramatta CBD—westerly aspect

## **BUILT FOR THE FUTURE**

People want a smarter city where our buildings use less—water, energy and materials—to do more. Built for the future is about using renewable energy, recycling our water, and seeing waste as a resource rather than a challenge. It's about ensuring our lives become more liveable, while reducing our impact on the environment. And it's about creating a city that can adapt to the impacts of climate—come what may.





# ENERGY & CARBON

## Why it's important

With our growing population, and increases in jobs and housing, we're set to see a 42% rise in energy emissions across our Local Government Area by 2038.

Our buildings create 72% of our city's greenhouse gas emissions. To reduce peak demand, cut emissions and manage affordability we must do more with less and improve the efficiency of our buildings—both new and existing ones.



## 2017/18 Achievements

### City lights the way

The City continues to lead the implementation of the energy-efficiency street lighting replacement program, Light Years Ahead.

#### In Phase 1, the former Parramatta City Council:

- Replaced over 1,000 inefficient street lights with efficient LED lights in the Local Government Area
- Saved \$1.7 Million in energy costs over the life of the assets (20 years)

#### • Now halfway through Phase 2 of the program, Council:

- Replaced over 3,400 inefficient street lights with efficient LEDs
- Will install a further 2,570 LED lights by the end of 2018
- Cut energy consumption by 36,000 megawatt hours
- Save a further \$5.4 million in energy costs over the life of the lights (20 years)

Coordinated by the Western Sydney Regional Organisation of Councils (WSROC), the project recently earned a 2017 Green Globe Award for environmental sustainability.

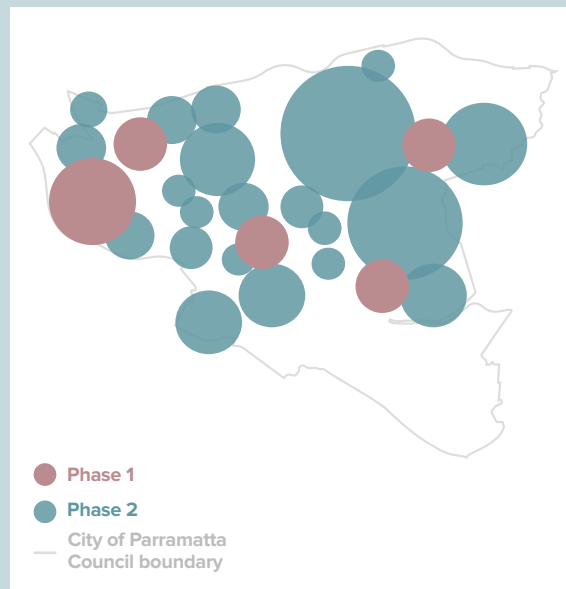


Figure 2: Planned and delivered lighting replacements for Light Years Ahead

More detail available at <https://www.cityofparramatta.nsw.gov.au/street-light-upgrades/frequently-asked-questions>



LED street light installation—Courtesy of Endeavour Energy





# ENERGY & CARBON

## Creating plans with our community

City of Parramatta's Environmental Sustainability Strategy commits to developing an energy implementation plan. We're asking our community about their needs and wants to inform the creation of this plan.

## Working with neighbouring councils

We're collaborating with WSROC to explore energy efficiency and renewables programs that can be delivered across the region.

## Our Energy Future—for our people

City of Parramatta is part of the Our Energy Future program, which helps residents reduce their energy bills and improve their living standards sustainably. Our Energy Future provides impartial, up-to-date energy efficiency and renewable energy advice and support for households, businesses and City of Parramatta staff.

The experts at Our Energy Future conduct rigorous procurement processes to find recommended suppliers and installers for everything from solar panels to insulation.

## Upgrading for efficiency

Building upgrade finance is a smarter way to pay for upgrades to existing building in the City of Parramatta. The City obtains private finance and is able to pay it back through council rates.

Two agreements, made possible through building upgrade finance, have been signed since Council started offering this service:



20 Macquarie Street, Parramatta CBD

### 10 Valentine Avenue

#### Tenancy lighting upgrade

##### Building Benefits

- Tenant saves \$130,000 in Year 1 (70% energy reduction)
- Tenant contributes \$110,000 per annum to the building upgrade payment
- Tenant better off by \$20,000 in Year 1 increasing to \$80,000 in Year 3
- At the end of the EUA term the tenant will enjoy the full savings of 70% lowered lighting electricity costs without any contributions
- This is projected to save the tenants \$200,000 a year at this point

##### Environmental Benefits

- 550 tonnes CO<sub>2</sub>-e mitigated per annum
- Contributes to lower peak demand

### 20 Macquarie Street

#### Upgrades to air-conditioning, lifts and lighting

##### Building Benefits

- 50% reduction in energy use, saving \$30,000 per annum
- Maintenance cost savings \$147,000 per annum

##### Environmental Benefits

- 50% reduction in water use
- 4 Star NABERS rating expected







# ENERGY & CARBON

## Building high performers—energy

Council is helping ensure new buildings consume less energy. These high performing buildings include a suite of energy saving measures such as LED lights and efficient air-conditioning and ventilation systems.

Council's Draft Local Environmental Plan (LEP) for the Parramatta CBD requires building to meet high performance standards, including:

5 Star NABERS energy for new commercial buildings.

- A 10-point increase in the BASIX energy performance for residential apartment buildings where they are seeking additional floor space
- End-of-trip facilities in commercial buildings

Council will be continuing the review of the LEP and Development Control Plan more broadly outside the CBD to incorporate energy efficiency and renewable energy aligning with the Central City District Plan.

## Planning for performance in key growth precincts

Council has undertaken a high performance study for the Camellia Town Centre to inform high performance sustainability outcomes, including energy, and is looking to expand this to other key growth precincts in the Greater Parramatta and the Olympic Peninsula.

## Tracking carbon emissions

Since our baseline year in 2015/16, community carbon emissions have remained reasonably stable. We will continue to track these into the future to ensure we are meeting our targets.

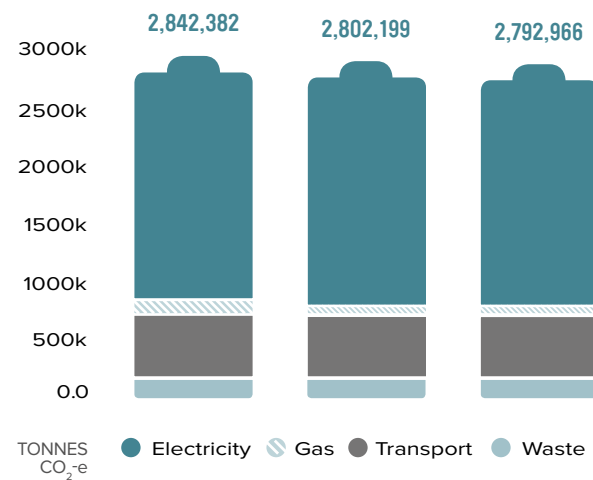


Figure 3: Local Government Area greenhouse gas emissions

In the local government area **AROUND 12% OF DWELLINGS HAVE SOLAR PV** on their roof.

This equates to **6459 SOLAR INSTALLS**, which produce a total of

**22.6 MEGAWATTS** of clean energy each year

IN 2017/18, IN THE CITY OF PARRAMATTA LOCAL GOVERNMENT AREA,

**78%**

OF COMMERCIAL OFFICE BUILDINGS WITH A NABERS RATING WERE

**4.5**

STARS OR HIGHER



Parramatta Square—Courtesy George Gittany





# WATER USE

## Why it's important

By 2038, our city's water use is expected to increase by 50%.

Today, 70% of potable water demand comes from the residential sector, for irrigating our gardens, for household and pool use. Industry and business accounts for the remaining 30%.

As our population grows, we'll need to be smarter with our water, find new ways to be efficient with stormwater and recycled water, and essentially drought proof our City.

## 2017/18 Achievements

### Getting future-ready with recycled water

Recycled water provides an opportunity to future proof the City of Parramatta by ensuring water security during drought, lowering costs of water—with recycled water being up to 10% cheaper—and allowing for increased irrigation during heat waves.

#### The good news—we already have two large recycled water services!

The City of Parramatta Local Government Area is home to two recycled water schemes, which take sewer water and treat it to create recycled water. These schemes are:

#### Sydney Olympic Park Water Reclamation and Management Scheme (WRAMS)

In 2017/18 the scheme produced an estimated 930 megalitres per year of recycled water for 25,000 commercial and residential customers. This water is used for everything from toilet flushing and park irrigation, to water features and cooling towers at major venues, facilities, and residential and commercial buildings.

#### Rosehill Recycled Water Scheme

The Rosehill scheme provides an estimated 1,250 megalitres per year of recycled water to industrial customers in Camellia. That's around 3.4 megalitres per day, and this plant can increase its capacity to over 20 megalitres per day.

To progress recycled water further to help meet our water targets, Council has:

- Regularly met with recycled water providers and Sydney Water to investigate additional recycled water opportunities, and to expand the existing systems
- Mandated dual piping in new buildings in the Draft CBD Local Environment Plan
- Investigating opportunities to extend dual piping requirements into growth areas
- Investigating the contribution recycled water can make toward our water target of no net increase in potable water consumption by 2038 (based on 2015 levels)

Sydney Olympic Park Water Reclamation and Management Scheme (WRAMS) operated by Sydney Olympic Park Authority (SOPA) [www.sopa.nsw.gov.au/Environment/Water-and-Catchments](http://www.sopa.nsw.gov.au/Environment/Water-and-Catchments)

Rosehill Recycled Water Scheme  
Operated by Aquanet [www.jemena.com.au/pipelines/water](http://www.jemena.com.au/pipelines/water)



Water station—Barton Park, North Parramatta—Courtesy George Gittany





# WATER USE

## Preparing our water efficiency direction

To make sure that the City of Parramatta is more efficient with its water use, Council has:

- Undertaken a detailed analysis of water consumption across various sectors
- Forecasted water demand in the future
- Drafted actions Council can take to meet its potable water consumption goal

It is expected this will be reported to Council and the community for consultation in 2019.

## Building high performers—water

Council is helping ensure new buildings consume less water. These high performing buildings include high water efficiency appliances and equipment.

Under Council’s Parramatta CBD Planning Proposal, buildings must meet high performance standards by meeting:

- 4 Star NABERS water ratings for new commercial buildings
- A 10-point increase in the BASIX water performance target for residential apartment buildings where they are seeking additional floor space
- Dual piping for recycled water to future proof the security of water supply in the City

Council will continue reviewing the LEP and Development Control Plans outside of the CBD, to identify water efficiency opportunities.

## Tracking our Potable Water Consumption

Since our baseline year in 2015/16, water consumption has also remained reasonably stable. We will continue to track these into the future to ensure we are meeting our targets.

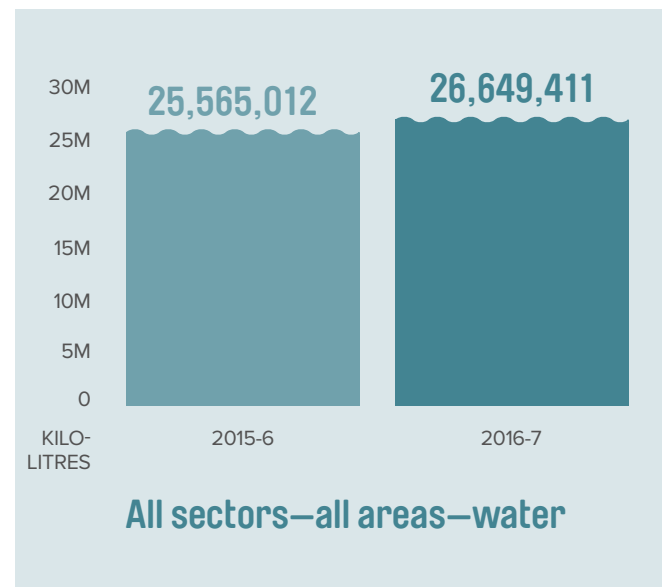


Figure 4: Local Government Area potable water consumption







# WASTE & LITTER

## Why it's important

Australia is a big place, but there's a limit to the amount of landfill space we have. Our predicted growing population points to greater waste production in the future, so we need new and innovative ways to generate less waste, and to keep what we produce out of the ground.

Our community cares, and are highly receptive to reducing waste and litter to keep Parramatta beautiful.

## 2017/18 Achievements

### Exceeding the State Government Waste Diversion target

In 2017/18, Council diverted 72% of residential waste from landfill, meeting the State Government target ahead of time.

We achieved this by:

- Sending waste to facilities that recover as much useful material as possible, including
  - Mixed garbage which goes to the UR3R Alternative Waste Technology facility at Eastern Creek, which has a recovery rate of 61%
  - Garden organics which are processed at SUEZ Eastern Creek, with a recovery rate of 99%
  - Recyclables which are received and processed at VISY Smithfield with a 93% recovery rate
  - Bulky kerbside clean-up material which are sent to Dial A Dump Eastern Creek where 52% is diverted from landfill

Council also provides specialised collection services for household asbestos and problem waste (paint, oils, batteries and e-waste), sending the latter for recycling or reuse.

During the year, the City of Parramatta:

- Promoted and participated in the Garage Sale Trail weekend, and National Recycling Week
- Hosted two e-waste drop-off days, and a chemical clean-out day
- Continued to provide residents with programs such as Compost Revolution for household food organics
- Provided a free collection and rehoming service for kerbside clean-up material such as furniture, clothing, books and toys



**COUNCIL'S SPECIALISED SERVICE COLLECTED THE FOLLOWING VOLUMES IN 2017/18:**

**E-WASTE: 67.8 TONNES**

**HAZARDOUS WASTE: 4.26 TONNES**

**PROBLEM WASTE: 33.92 TONNES**





# WASTE & LITTER

## Planning our direction for waste and litter

To continue to hit our waste targets, the City of Parramatta is developing its Waste and Recourse Recovery Strategy, and associated Action Plan. Due for completion by the end of 2018, this strategy will cover all aspects of waste including:

- Domestic and commercial services
- Public place cleansing services (litter, illegal dumping, street sweeping, public bins and events)
- Council’s own corporate wastes

## Helping businesses improve waste management

Council has begun working with local businesses to reduce single use plastics such as plastic bags and coffee cups.

In 2017/18 Council:

- Supported five local cafes that provided 2,600 free coffees for customers who brought their own reusable cup or mug over the course of three Mondays
- Recruited four of the five local cafés to the Responsible Cafés program which encourages cafés to become more environmentally responsible, any way they can, from offering BYO cup discounts and eliminating plastic straws, to food composting
- Trialled a ‘boomerang bag’ program at the Parramatta Farmers Market, which saw roughly 1,350 bags being used over and over again by market-goers during the nine weeks of the trial

## Waste workshops, garage sales and more

Council has delivered a range of programs to engage and educate the community about reducing waste and litter across the Local Government Area. These include:

Area	Programs and measures
Diverting organic waste from landfill	<p>Held four community worm farming and composting workshops</p> <p>Delivered the Compost Revolution Online program:</p> <ul style="list-style-type: none"> <li>• 1,177 residents completing the online tutorial</li> <li>• 487 households who did the online tutorial went through with the subsidised equipment purchase of either composting bin or worm farm</li> </ul>
Waste avoidance	<p>Held two Love Food Hate Waste workshops</p> <p>Held three Live with Less workshop</p>
Increase reuse	<p>3,844 shoppers attended this year’s Garage Sale Trail with 72 individual sales recorded</p> <p>Bower’s Repair Cafes (a total of 148 attendees) and various upcycling workshops (a total of 197 attendees)</p> <p>19 attendees participated in the second hand bus tour</p>
School waste education	<p>Delivered more than 100 waste education sessions to preschools and schools with Cleanaway/Suez waste program</p>
Recycling Contamination Management Program	<p>Audited and provided feedback to more than 2,500 addresses with the bin tagging program</p>

Table 1: Council waste reduction activities and events



Big Belly solar compacting smart bin—Centenary Square Parramatta CBD—Courtesy George Gittany

## Cleaning up with our community

City of Parramatta residents have told us that litter is a major environmental concern. We’ve been working with them to clean up our Local Government Area across the following initiatives:

- Clean Up Australia Day 2018, which delivered:
  - 85 registered clean-up sites
  - 860kg of rubbish removed by the community
  - Seven individual Clean Up Australia Every Day events
- EPA Cigarette Butt Litter trials over three sites, with reductions of up to 50% in the incidence of litter at the trial sites

- WSROC Cigarette Butt Litter Program, installing two butt bins, signage and interactive engagement activities at a retail site in Northmead
- Council continued to service 65 cigarette butt receptacles (Enviropoles) across town centres yielding over 2,000 kgs of butts
- Council has installed a further 6 Bigbelly solar compacting smart bins bringing the total to 16 across the LGA. Known as the Bigbelly, which compress rubbish to hold more waste and provide real-time information on when they’re full for better collection planning
- Council contractors removed 8.3 tonne of litter from creeks and rivers by manual pick up along high tide marks, flood lines or instream





Burramatta NAIDOC 2018—Parramatta Park

## **CONNECTED & RESILIENT COMMUNITIES**

As our city grows and our environment changes, we face new challenges that require our communities to be more connected and resilient. Some of our greatest challenges include the growing need for transport options, urban heat and its impacts, and the risk that flooding poses to our community. Addressing these will help guarantee the long-term liveability of our city.





# SUSTAINABLE TRANSPORT

## Why it's important

Our Local Government Area is spread out, and our growing population means more cars on the roads. The daily commute—transport, congestion and getting around—is a top concern for our community.

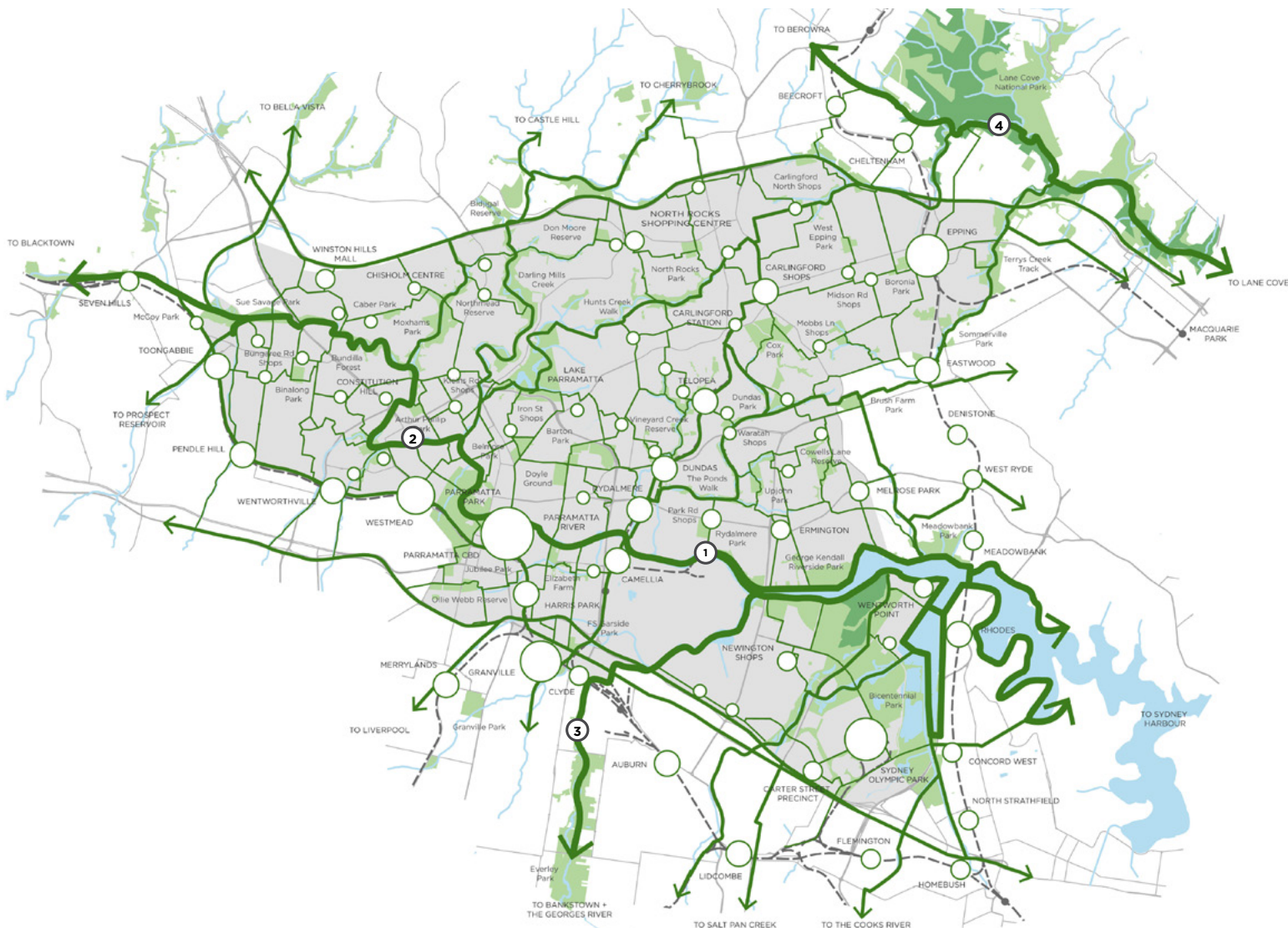
Sustainable transport options such as walking, cycling and public transport will help overcome our geographic dispersion, while improving health and increasing equity through more low-cost travel options. They'll reduce congestion, urban heat and carbon emissions.

## 2017/18 Achievements

### Greening our connections to Light Rail

The City of Parramatta has been working with Transport for NSW to help shape the Parramatta Light Rail tree offset program to maximise the benefits that it can provide to local communities. An initial pilot of the program is being planned for delivery in late 2018.

Figure 5: Parramatta Ways walking network map



## Parramatta Ways

In June 2017, Council adopted a Walking Strategy for the entire Local Government Area (see map on previous page).

The Strategy proposes a 500km walking network which will connect local centres, river and creek corridors, green streets and open spaces, encouraging people to get out more and feel more connected with their community. It's also designed to bring more life to the city by improving the quality of streetscapes, open spaces and river corridors.

The strategy has already won City of Parramatta a commendation from the Greater Sydney Planning Awards.





# SUSTAINABLE TRANSPORT

## Strategic planning underway for walking

There is significant planning underway for walking. Detailed analysis is being undertaken to identify priority corridors, missing links and infrastructure requirements. This analysis is being co-aligned with State and Private infrastructure planning.

## Toongabbie Crossing project

The Toongabbie Crossing project, funded by Metro Greenspace, is currently underway and delivering a variety of recreation and access projects in and adjacent to Sue Savage Park.

Council's new Milson Park Masterplan, supported by Sydney Water, is also set to provide more walking networks, improved open space, a wetland, and additional recreational opportunities for the local community.

## Westmead Innovation District Masterplan

It's part of the City of Parramatta's collaboration with the Westmead Alliance to produce a Masterplan for the Westmead Innovation Precinct. This will identify future works to enhance the river and open-space corridor that runs alongside the Westmead Hospital, Toongabbie Creek and the Parramatta River.



Newington Armory—Sydney Olympic Park—Courtesy of Salty Dingo





# SUSTAINABLE TRANSPORT

## Bike Plan rolls out

Council has also been delivering its Bike Plan, which, once complete, will provide over 200 kilometres of cycleway across the Local Government Area, as shown in Figure 8.

An early success of the plan has been the Subiaco Creek link. Its completion saw the number of cyclists using the link double overnight, as well as a significant increase in pedestrians in the local area.

## Foreshore path aims for 500,000

We are on track to welcome close to half a million people to the foreshore path this calendar year. As well as more commuters during the week, we're also seeing up to 1,000 recreational riders on weekend days.

On average:

- 580 cyclists use the path on weekdays, with that number jumping to 825 on the weekends
- 300 pedestrians on weekdays and 393 on weekends

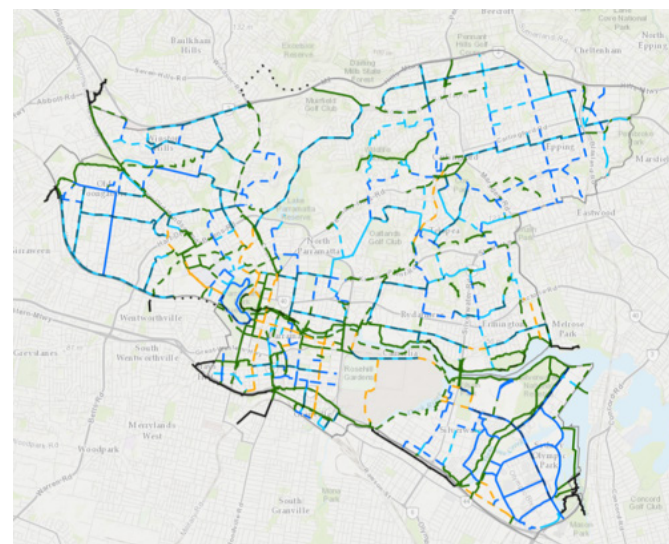


Figure 8: Bike Plan map

## Showing their support

Many of the cycling links have been built in partnership with the State and Federal Governments. The State Government has allocated:

- over \$10M for one of the last links—Escarment Boardwalk—to be built shortly
- over \$1M to create separate walking and cycling paths at Rydalmere Ferry Wharf

Recognising the quality of the River Path, Bicycle NSW established a new River Ride—Parramatta to Olympic Park—for Spring Cycle, which in 2017 attracted 500 attendees. The event will be held again this year on October 14.



Subiaco Creek Boardwalk—Courtesy of Salty Dingo





# URBAN HEAT

## Why it's important

Here in the City of Parramatta and Western Sydney, we're really feeling the heat. Hotter days impact our city's liveability, affect our daily activities and can harm people's health, especially the vulnerable, such as infants and the elderly.

Heat deters us from walking or cycling, and as we take to our cars, we spend more on fuel, creating more congestion and more heat. As we try to cool down with air-conditioning, our electricity costs go up.

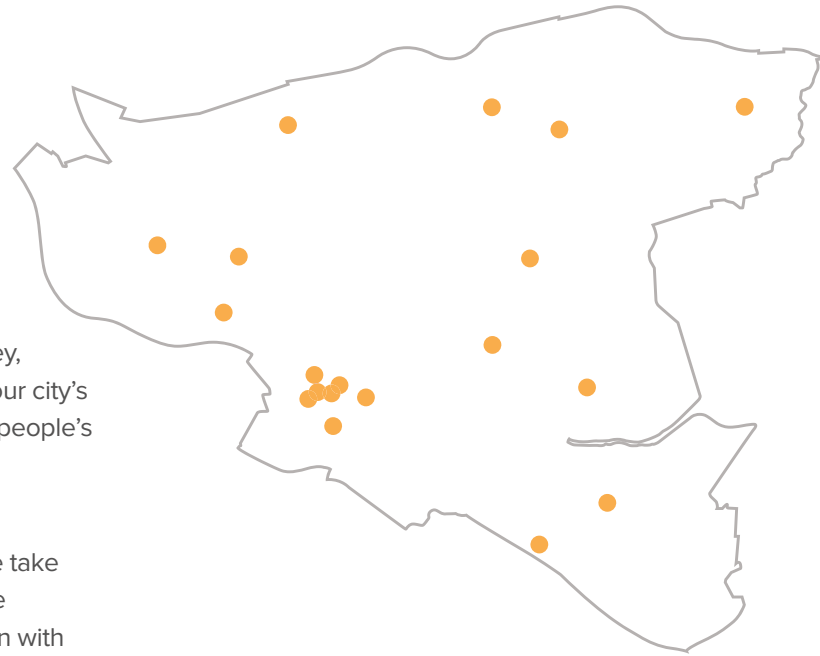


Figure 9: Locations of temperature sensor network in the City of Parramatta, with photographs of temperature sensor boxes (above)

## 2017/18 Achievements

### Taking our city's temperature to mitigate heat

Council has conducted a science project to record ambient air temperature in our Local Government Area.

Conducted in the summer of 2017/18 in collaboration with Western Sydney University, the experiment used 80 temporary data loggers to collect temperature readings every 10 minutes. It was the first experiment of its kind in the Local Government Area to collect temperature readings at such a detailed level.

Findings included:

- Local air temperature varies substantially across the Parramatta Local Government Area
- Ambient air temperature is different under different species of trees
- More testing is required—we learnt a lot about how (and how not to) install sensors and how to best show this information

Following the initial experiment, a more permanent network of sensors was installed in June 2018 across 20 sites over the Local Government Area. These sensors form part of a more detailed study to establish as baseline and better understand the impacts of urban heat through our community.

This work is being undertaken with the University of New South Wales. The results are expected to be released early 2019 and will be used to inform heat mitigation strategies for the future.



Temperature sensors at Robin Thomas Reserve, Parramatta (left), Arthur Phillip Park, Northmead (right)



Prince Alfred Park





# URBAN HEAT

## Three years and counting for Cool Parramatta



Council continues to promote cool initiatives through the Cool Parramatta program. In 2017/18:

- 1,500 USB cool fans were distributed at the Tropfest short film competition held in Parramatta Park
- Updated the Cool Parramatta website which provides:
  - Information on cool places across the Local Government Area including parks, pools, community facilities and green spaces
  - Access to surface temperature maps which provide information to residents and business, highlighting urban heat temperature differences
  - Information on how to be heat ready

For further information visit [www.coolparramatta.com.au](http://www.coolparramatta.com.au)

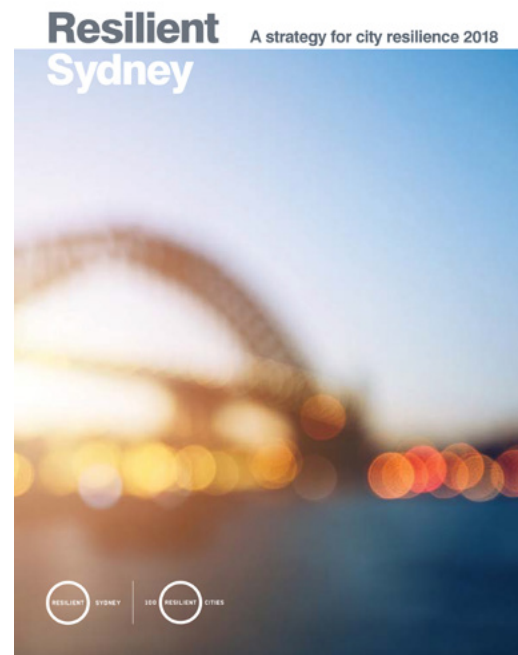
## New buildings keep it cool

Council is working to ensure that new buildings help to cool our streets and public places. We are:

- Working with architecture, façade and technical specialists to make sure the development controls for new buildings are not making our city hotter
- Preparing guidelines that will help developers work with these controls as they plan and build

## Partnering to tackle urban heat across the region

- The City of Parramatta has been collaborating with its regional partners WSROC and neighbouring councils to develop a regional urban heat strategy for Western Sydney. The Strategy 'Turn Down the Heat' is due for release in late 2018.
- Council has also collaborated with metropolitan councils, key agencies and Resilient Sydney to help develop the first resilience strategy for metropolitan Sydney. The Resilient Sydney Strategy sets the direction Sydney must take to strengthen its ability to survive, adapt and thrive in the face of increasing global uncertainty and local shocks and stresses. Urban Heat issues have been recognised within the 'Live with our climate' Direction of the strategy which includes the flagship action—cooling our suburbs, homes and streets.



## Community feedback on Urban Heat

Following the hot summer of 2016/17, Council surveyed over 250 community members on their views and responses to urban heat. We found that:



**During heat waves** most participants were concerned about health and safety and electricity costs



**To keep cool** people generally stayed indoors with air conditioning\* or went swimming^



**The top ten** survey responses to making Sydney more liveable during heat waves:

1. More trees / green space
2. More pools / water parks / places to swim
3. More shade, especially at playgrounds and water parks
4. More cool public places
5. Financial assistance for air-conditioning installation and usage costs
6. Better building design / retrofit / stricter building code
7. Improved / free / air-conditioned transport, especially to swimming spots
8. Access to drinking water in public spaces
9. Less concrete / hard surfaces
10. Free / cheap access to pools and other cool spots

\*Either at their own homes, friends' or relatives' places, or public place such as shopping centres or libraries

^In private or public pools / beaches



Phillip Ruddock water playground—Dundas Park





# FLOODING

## Why it's important

The Parramatta CBD is the most flash flood affected major CBD in Australia, at worst case with only minutes of warning of a forthcoming flood.

Under the worst possible flood event, over 20% of the Local Government Area will be affected.

Floods damage homes, businesses and lives. To help respond to the growing population and the limitations of our city environment, we need to raise awareness around flood planning, preparedness and response.

## 2017/18 Achievements

### City gets FloodSmart

The City of Parramatta has launched a new service to help residents, business owners and the wider community prepare for and reduce the impact of flooding.

FloodSmart provides five easy steps for the community to:

1. Check their level of flood risk with an interactive map
2. Sign up for free flood warnings
3. Find out what to do before, during and after a flood
4. Provide feedback to Council about flooding
5. Monitor live river and rainfall gauge levels

"FloodSmart uses live data and technology to help us better understand and plan for flood events and is part of Council's focus on developing 'Smart City' solutions to address our city's challenges. I encourage everyone to take the five easy steps to becoming FloodSmart," City of Parramatta Lord Mayor Cr Andrew Wilson said.

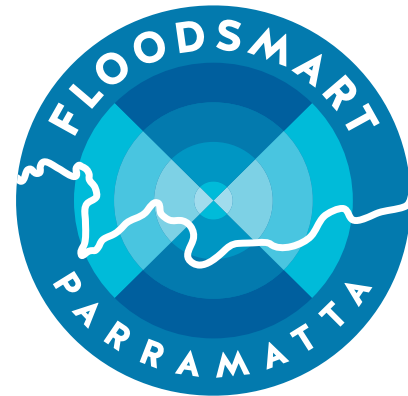
There are more than 25 river and rain gauges in the Upper Parramatta River catchment area that can be monitored at any time through FloodSmart.

Other areas will be included in the service as more data becomes available through further flood plans and surveys.

Council has partnered with NSW State Emergency Service, Bureau of Meteorology, NSW Office of Environment and Heritage and Sydney Water to deliver the project, which uses the latest technology to keep the community informed. Flood warnings are based on real-time river levels and rainfall information using the latest Bureau of Meteorology forecasting data.



Virtual reality demonstration—FloodSmart Launch 2018



### Updating our flood model

The City of Parramatta is updating its existing flood model for large parts of the Local Government Area. This is a comprehensive technical investigation of flood behaviour and defines the nature of flood risk. The major components of the study involve determining discharge and velocities for floods of varying severity.

### Planning for CBD flood evacuations

During the year Council investigated the options regarding how people could be evacuated from the CBD in a flood event. The options considered included:

- vertical evacuation (where people stayed in tall buildings above flood waters) or;
- horizontal evacuation (where people escape the vicinity of the flood).

Further work over the next 12 months will help guide Council in terms of its future policy in this area.

### Delivering drainage improvements

As the City grows, our drainage network needs to grow with it. During the year, the City of Parramatta spent:

- \$625,000 on drainage maintenance works
- \$598,000 on new stormwater pipes
- a further \$4.2 million on upgrading existing drainage infrastructure



Parramatta FloodSmart rain gauge





Phase 2 Light Years Ahead launch—North Parramatta

## **LEADING BY EXAMPLE**

We know what the big issues are that affect our city, from urban heat to the health of our waterways. While we can influence businesses and the wider community, we can also make direct changes through how we conduct our own business—from the energy and water we use and how we minimise our waste, to how we reduce our transport emissions.





# COUNCIL ENERGY & CARBON

## Why it's important

As Sydney's central city, we want to lead the way in sustainability and environmental performance. By showing how it's done, we can inspire best practice among local business, our residents, and councils further afield.

To lead by example in emissions reduction, the City of Parramatta has set a goal to reach carbon neutrality by 2022. To achieve this, we'll need to continue to become more energy efficient, and switch to renewables where we can.

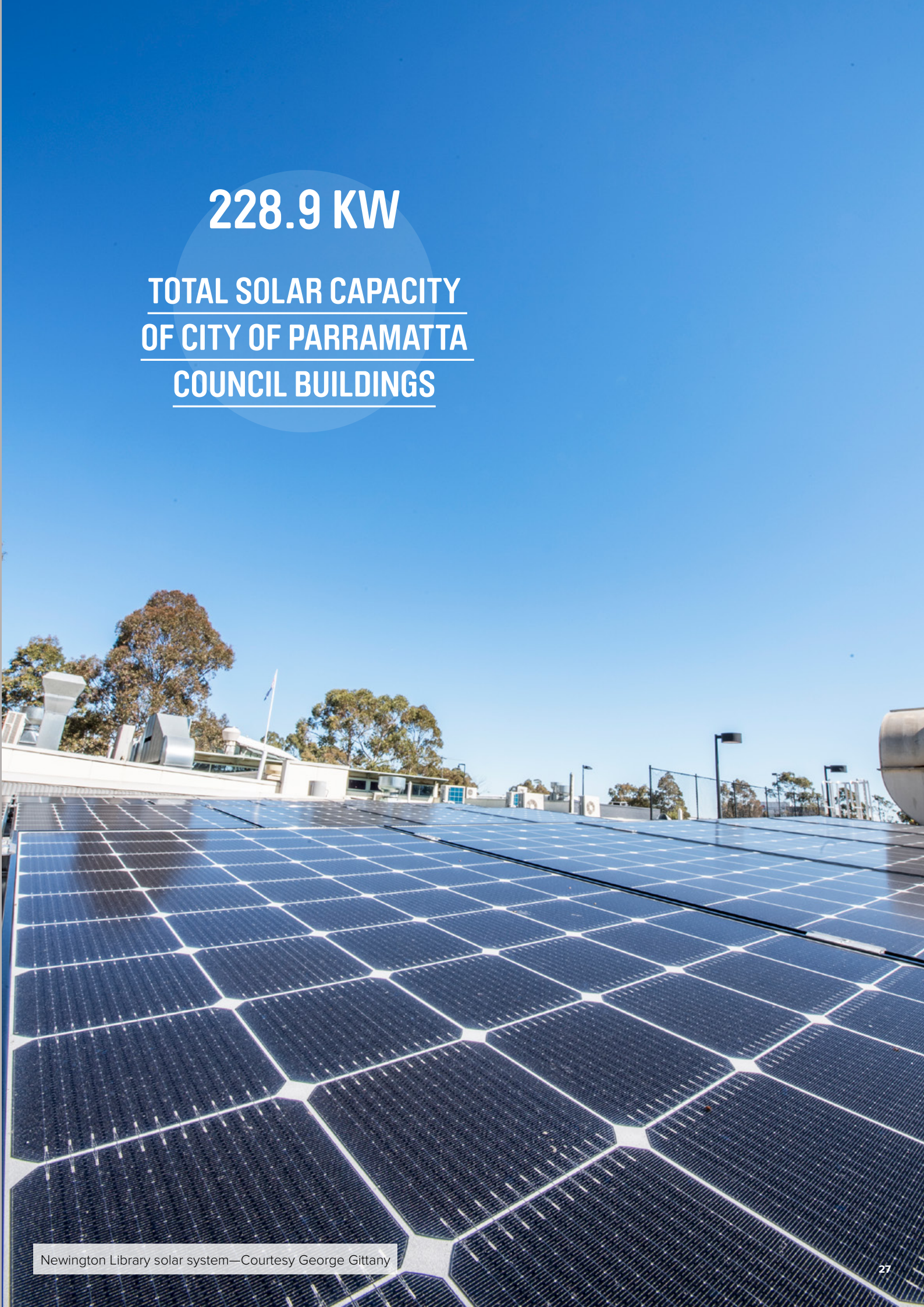
## 2017/18 Achievements

### Powering on with solar

Council continues to install solar PV systems across our buildings. The table below identifies that in 2017/18 we installed 58kW of new solar capacity across four Council sites.

This brings our total installed capacity across our Council buildings to 228.9 kW.

Site name	Installed Capacity (kW)	Annual Electricity generated (kWh)	Estimated annual CO <sub>2</sub> -e reduction (tonnes)	Annual cost savings per year
<b>Solar installations in 2016-17</b>				
Council Rydalmere Operations Centre	100	162,396.8	227	\$30,547
Dundas community centre	5	7,229.9	6	\$1,876
Ermington community centre	10	15,215.8	12	\$2,595
Jubilee Lane childcare centre	10	13,844.5	12	\$2,949
Northmead childcare centre	13	18,798.7	16	\$2,936
Reg Bryne Community Centre	8	11,742.7	9	\$929
<b>Solar installations in 2017-18</b>				
Dundas library	15	21,550 *	18	\$ 3,052 *
Newington community centre	7	9,761 *	8	\$ 1,728 *
Roselea community centre	10	12,947 *	12	\$ 2,134 *
Constitution Hill library	26	31,800 *	30	\$ 6,169 *
* estimated				
<b>Other sites</b>				
Dundas Child Care Centre	2	Data not available due to recent installation		
Carlingford Library	7.7	Data not available due to recent installation		
Somerville Oval	1.5	Data not available due to recent installation		
Somerville Early Childcare Centre	9.5	Data not available due to recent installation		
West Epping Community Centre	4.2	Data not available due to recent installation		
<b>TOTAL</b>	<b>228.9</b>	<b>305,286</b>	<b>350</b>	<b>\$54,915</b>



# 228.9 KW

## TOTAL SOLAR CAPACITY OF CITY OF PARRAMATTA COUNCIL BUILDINGS

Newington Library solar system—Courtesy George Gittany





# COUNCIL ENERGY & CARBON

## Going for gold

Council is aiming to be the first local government to achieve a gold rating in the NSW Government's Sustainability Advantage Program.



The program helps organisations across New South Wales become more competitive and improve their bottom lines through better environmental practices.

To get our Gold certification, we have undertaken the following initiatives during the year:

- Worked with management to consider how sustainability is embedded through our operations
- Worked to understand and reduce sustainability risk for the organisation
- Ensured that a senior member of staff received executive-level sustainability training
- Commenced preparation of an emissions inventory
- Continued to engage staff and community on sustainability matters

## Towards carbon neutrality by 2022

Council is currently working to get an accurate picture of the volume of greenhouse gases emitted each year by and for our operations. To do this we're investigating a wide range of emissions factors, including our use of electricity, gas, water, paper, flights, accommodation, fuel and waste disposal. The upcoming report will provide guidance on what we need to do to reach our goal of carbon neutrality by 2022.

## Efficiency upgrades for 2017/18

Council lighting upgrades expected to save 15,183kWh per year were completed at:

- Reg Byrne Neighbourhood Centre
- Karabi
- Ermington Library
- Dundas Library\*

We also started a lighting upgrade at Barton Park changing to LEDs. Due for completion this year, the project is expected to save 3,136kWh year saving Council \$3,400 per year.

\*Dundas Library upgrades commenced in 2016/17 and carried over into 2017/18. They involved changeovers to LEDs and the installation of sensors in bathrooms.



## Council Electricity consumption

Council reduced its electricity consumption by 16% during the year as per figure 11. This was due to solar installations, energy efficiency upgrades and the change in assets due to Council boundary changes.

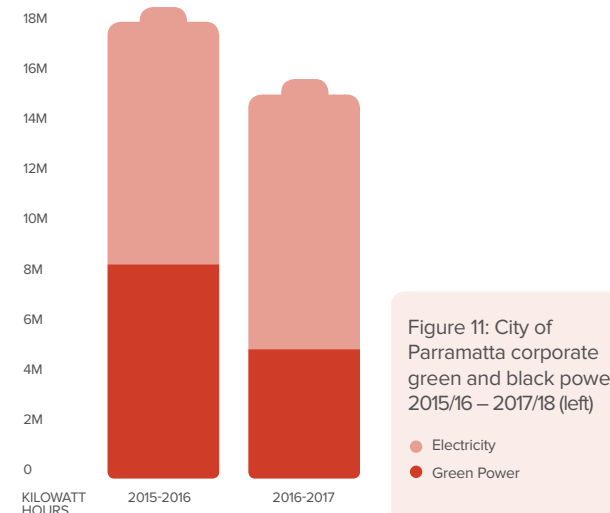


Figure 11: City of Parramatta corporate green and black power 2015/16 – 2017/18 (left)

## Council carbon emissions

Corporate emissions, however, have risen by 5% between 2015/16 and 2016/17 (refer to Figure 12), which is due to a reduction in the amount of green power being used by the City. Council is currently reviewing the quantity of green power sourced across all Council sites including street lighting.

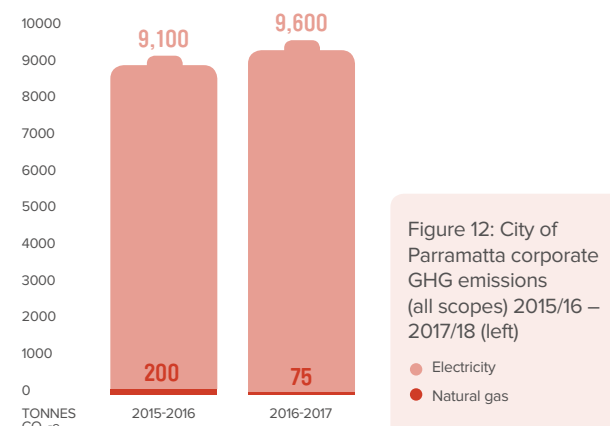


Figure 12: City of Parramatta corporate GHG emissions (all scopes) 2015/16 – 2017/18 (left)

**16%**  
DECREASE IN CORPORATE  
ELECTRICITY CONSUMPTION  
BETWEEN 2015/16 AND 2016/17



Dundas Library Solar System—Courtesy George Gittany





# COUNCIL WATER USE

## Why it's important

A recent study shows that 82% of Council's water use goes to irrigating our parks, green and open spaces, with the remainder used within our buildings and facilities.

Parks and green spaces are crucial to the wellbeing of our communities. We need sustainable sources of water to keep them well watered and lush to ensure the constant enjoyment of, and benefit to, our community and to counteract urban heat today and tomorrow.

## Going one better on stormwater harvesting

Council reuses 200ML of stormwater per annum, actively harvesting it to irrigate parks and green spaces. To better understand how this water source is being used, we're installing improved metering on several locations where stormwater harvesting and reuse is already occurring. As we strive to keep our parks and sports fields green with the water we have available to us, it's more important than ever that we increase the sites with stormwater harvesting. This kind of research helps us make it happen.

Current stormwater harvesting sites include:

- Doyle Ground
- Somerville Oval
- Boronia Park
- North Rocks Park

Current large rainwater harvesting and reuse sites include:

- Council's Plant Nursery
- Arthur Phillip Park

## 2017/18 Achievements

### Council undertook the following water efficiency projects in 2017/18:

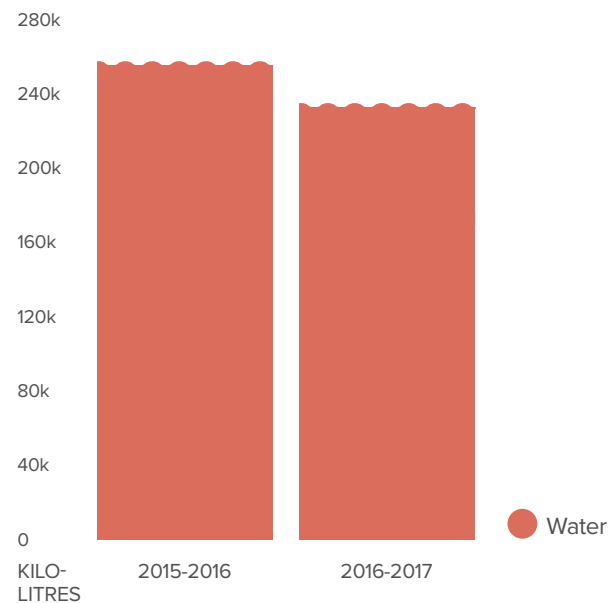
High-efficiency showers and taps were upgraded at the Epping Aquatic Centre.

Irrigation improvements through new sprinkler heads and buffer tanks were completed at Barton Park and Max Ruddock. These projects are expected to reduce demand by 4.6ML per year.

Irrigation controllers were also installed at Kingsdene Oval, North Rocks Park, Murray Farm Reserve, Cox Park, Boronia Park, Harold West Reserve, Barton Park, Eric Primrose Reserve, Ollie Webb Reserve, Robin Thomas Reserve, and Cox Park.

Water efficiency initiatives have helped cut our corporate water consumption, as per Figure 13. The loss of intensive water-using assets through the new Council boundary, including sports fields and pools, has also had an impact.

Figure 13:



City of Parramatta corporate water consumption 2015/16 – 2017/18

**9%**  
 DECREASE IN COUNCIL  
 POTABLE WATER  
 CONSUMPTION



Rainwater tanks—Barton Park, North Parramatta





# COUNCIL WASTE & RESOURCE RECOVERY

## Why it's important

From light bulbs and toner cartridges to construction materials, Council uses a wide range of products in its day-to-day operations. To ensure we lead by example, we want to minimise the waste we send to landfill, and maximise reuse and resource recovery.

## 2017/18 Achievements

### Getting a grip on corporate waste

A council-wide operational waste audit is currently underway to better understand Council waste volumes and streams. Expected in the first quarter of 2018/19, the results will help to inform waste management actions to meet our corporate waste goal going forward.



## Waste reduction takes centre stage

In 2017/18, Council undertook a project to improve waste avoidance, reuse and recycling at Riverside Theatres' front-of-house operations and office areas. The work included elimination of most single-use plastics from the bar, including straws and cups, as well as efficiency improvements to reduce the use of garbage bags and paper hand towels, and improvements to recycling services. Council has also started working on reducing cigarette butt litter and the wider Council use of disposable cups.

The project led to a significant reduction in waste generated and also an increase in waste recycled as per Figure 14.

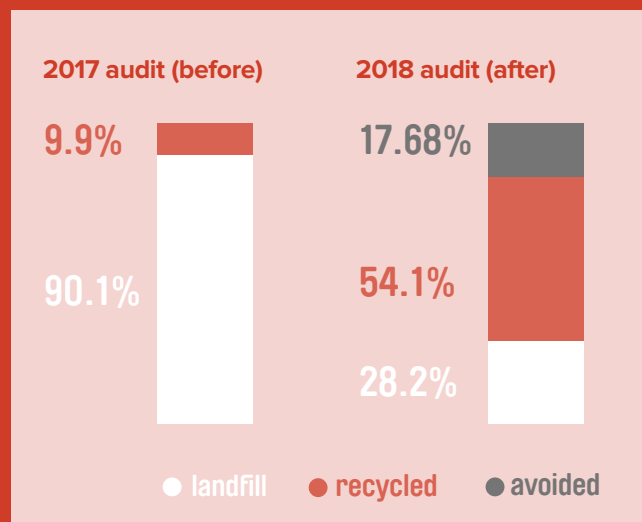


Figure 14: Waste diversion percentages (by volume) at Riverside Theatres



Riverside Theatre waste management project





# FLEET & STAFF TRAVEL

## Why it's important

Reducing carbon emissions from transport takes all of us. Based on results of Council staff travel surveys, over half of us commute to and from work as single occupant car users.

If we want to create change, we need to do more than reduce Council's fleet emissions. We need to help our staff make their journeys greener, and set the example for residents in our communities.

## 2017/18 Achievements

### Making inroads with emission reductions

Council continues to give staff access to Opal cards for public transport as an alternative to using fleet vehicles for business travel. And we've invested in more efficient fleet vehicles, to lower Council's CO<sub>2</sub> emissions.

- 18 tonnes\* of fleet emissions saved during 2017/18 due to more efficient vehicles
- Participated in Ride to Work day 2017

\* 2,175 tonnes CO<sub>2</sub>-e in 2017/18, down from 2,193 tonnes CO<sub>2</sub>-e in 2016/17







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.....

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