

SUSTAINING LIVERPOOL

SUMMER 2020/21



The Australian wood duck forms monogamous breeding pairs that stay together year-round, nesting in tree holes above or near water.



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2020 the year in review

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What's On

Australian wood duck - *Chenonetta jubata*
Image courtesy of Bruce Reardon

LIVERPOOL
CITY
COUNCIL





MESSAGE FROM THE MAYOR

Welcome to the Summer edition of Sustaining Liverpool.

In this issue, we look at the Georges River and the collaborative role Council plays with other councils to protect and manage the health of the river. Find out about the educational programs that the Georges River Environmental Education Centre provide students to learn about the environment and the Georges River catchment.

We reflect on the environmental outcomes that were delivered despite the challenges caused by COVID-19 with cancellations and changes to community tree planting events. Council's Bush Regeneration team continued to plant more than 2700 native shrubs and trees across parks in Liverpool. More highlights are on Page 3.

Staying indoors to beat the heat this summer will lead to a rise in energy use as households keep cooling systems on for longer. Page 8 includes information on rebates you could be eligible for to help reduce your power bill and make your home more sustainable.

With school holidays and the festive season upon us, local parks and open spaces provide great places to meet, eat, and keep fit. Please take pride in keeping Liverpool beautiful and help protect the natural environment by taking your rubbish to dispose of at home or placing it in bins provided.

Another way to keep Liverpool beautiful is by volunteering with one of our environment groups – it's a great way to keep active, enjoy the outdoors and make new friends and you don't even need experience. See how you can get involved on Page 11.

Until the next issue stay COVID safe and have a wonderful Christmas and a happy New Year.

Mayor Wendy Waller
Liverpool City Council

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RECEIVE YOUR NEWSLETTER VIA EMAIL.



Due to the impact of COVID-19 and to reduce our carbon footprint the Sustaining Liverpool newsletter will be delivered in digital format. To receive the latest Sustaining Liverpool e-newsletter send us an [email](#).

THE MACARTHUR AUSTRALASIAN NATIVE ORCHID SOCIETY (MANOS) NEEDS YOUR HELP

MANOS needs your help as they conduct a native orchid survey across the Macarthur area to identify orchid populations and ensure the conservation of some species.

If you come across what you think might be an orchid in the Macarthur area, please take a picture with your phone and email the photo and location of the plant to MacarthurANOS@gmail.com



Customer Service Centre Ground Floor, 33 Moore Street, Liverpool NSW 2170
All correspondence to Locked Bag 7064 Liverpool BC NSW 1871
Call Centre 1300 36 2170 Email lcc@liverpool.nsw.gov.au
Web www.liverpool.nsw.gov.au NRS 13 36 77 ABN 84 181 182 471

2020: THE YEAR IN REVIEW

Despite it being a challenging year, Council and the community have continued to work together to improve the local environment.

- ✓ Delivering nine sustainability workshops.
- ✓ Establishing a new environment volunteer group at Tucker Road Reserve, Casula.
- ✓ Managing invasive weeds and planting native species across Liverpool.
- ✓ Planting **2700** native trees and shrubs in parks.
- ✓ Filtering **456.7 tonnes** of litter from entering waterways through Gross Pollutant Traps (January – June).
- ✓ Diverting **36%** of waste away from landfill (January – June) - this includes garbage, recycling, green waste and metals.
- ✓ Serving more than **12,490** visitors at the Community Recycling Centre (January – June), and safely disposing of:
 - **86.5 tonnes** of cardboard;
 - **95.5 tonnes** of e-waste; and
 - **67.9 tonnes** of paint.

GREENING LIVERPOOL

We asked you what you valued about our green and open spaces and this is what you told us.

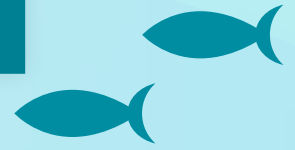


Your Environment Levy working for you.



Council's Bush Regeneration team members planted native trees and shrubs across Liverpool while volunteer activities were on hold due to COVID-19.

WHAT IS GEORGES RIVERKEEPER?



By Kirsten Spry, Communications Officer, Georges Riverkeeper

The Georges River is 100km long, running through a heavily urbanised environment. The Georges Riverkeeper is one of Australia's longest serving catchment management groups, operating since 1979.

The Georges Riverkeeper works with eight councils (including Liverpool) to look after the river by undertaking activities that guide best-practice management to protect natural resources and improve liveability along the Georges River.

Liverpool City Councillor Geoff Shelton, who served on the Georges Riverkeepers Executive Group said: "Litter pollution is constantly washed into our drains, creeks and river. Water quality assessments help to pin-point sources of pollution, how it enters the river system, and ways to combat the problem."

Most river pollution arrives via stormwater. When stormwater flows across roads, gutters and other

hard surfaces, it collects pollution such as litter, heavy metal dust from tyres, oil residue, pesticides and herbicides, and nutrients from grass cuttings and leaf litter, as well as household chemicals and soaps. Stormwater flows into creeks and then to the river and, ultimately, the ocean.

One of Georges Riverkeeper's programs is to remove litter from the land surrounding the river and its tributaries.

More than 72 tonnes of litter was removed from the Georges River last financial year with the help of NSW Department of Justice, Community Services.

"It's best to stop pollution at the source. It's up to everyone to prevent pollution from entering drains and the river so we can all enjoy clean and healthy local waterways," said Councillor Shelton.

HOW CAN YOU HELP?



- Make wise decisions about plastic. The Container Deposit Scheme has led to 30% – 40% drop in the number of plastic bottles collected from the Georges River.
- Find a Return Point and get 10 cents for each beverage container returned.
- Wash your car on the lawn.
- Choose natural ground cover, like grass, gravel or wood chips over concrete.
- Remember drains don't filter!
- Keep the use of pesticides and herbicides to a minimum.
- Clean up animal waste and dispose of it in the bin.
- Dispose of household chemicals safely at Chemical CleanOut events.
- For more information about the Georges Riverkeeper, head to their website.



Dr David Reid, Georges Riverkeeper Aquatic Ecologist, monitoring water quality in the Georges River.



Rubbish along the Georges River.

HOW HEALTHY IS THE GEORGES RIVER?

The Georges Riverkeeper recently released the *State of the Georges River 2020*, giving an overview of the ecological condition of the Georges River and actions that are being taken to improve the 'state' or 'health' of the river.

It also tells the story of events that have impacted the river through history, the challenges of waterway management and projects that the Georges Riverkeeper and Councils are working on to improve river health.

The River Health grades tell us that the overall state of the Georges River is 'Fair' in freshwater tributaries, but 'Good' in the estuary where it is tidal.

In the Liverpool area, the state of the freshwater tributaries in the Cabramatta Creek sub-catchment was either 'Fair' or 'Poor', reflecting the impacts of surrounding urbanisation. Fortunately, the water quality in the upper estuary was 'Good'.

You can see the river health grades in the Georges River catchment [here](#).

WATER... 'WOW'!

'Water... WOW!' is a set of new online education resources, developed by Georges Riverkeeper for Stage 3 primary school teachers and students, with facts and practical teachings about water in the Georges River catchment and in Australia.

'Water...WOW!' modules cover many topics including drinking water, water uses, the water cycle, water pollution, water conservation, rainfall, drought, floods, aquatic food webs, and how to measure water conditions using waterbugs.

Materials are linked to the NSW primary school syllabus and were developed in collaboration with Georges River Environmental Education Centre (GREEC) based at Chipping Norton - offering incursions and excursions related to the modules.

'Topic Starters' included with each module are a great way to begin exploring themes and help with lesson planning.



[Download Water...WOW!](#)

Find out more about the GREEC on page 7 or visit the [site](#).



1
Grass clippings, flowers and pruning, twigs and small branches, and leaves are placed into kerbside green waste bins.



2
Green waste bins are emptied and transported to the Organics Processing Facility at Kemps Creek.



3
Contaminants are manually removed.

LIFE CYCLE OF THE Green Waste Bin



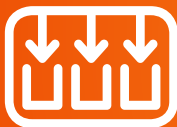
6
The organic and compost products are ready to be used in landscaping, returning nutrients and essential minerals to the soil and improving plant growth.



5
Micro-organisms break down the material and the heat generated destroys weeds and pathogens.



4
Green waste is shredded into smaller pieces and stacked together. These are kept moist and turned regularly over 16-20 weeks.



Community Recycling Centres

FREE SERVICE

Household Clean-up and CRC Opening Hours

Are you planning to declutter? Why not book in a Council Household Clean up.

Bookings are essential, phone Council's Customer Service Centre on **1300 36 2170** or head to our [website](#) for more information.

You can safely dispose of items at the Community Recycling Centre located at 99 Rose Street, Liverpool. See holiday opening hours below.

Thursday 24 December	7am – 1pm
Friday 25 December	CLOSED
Saturday 26 December	CLOSED
Sunday 27 December	CLOSED
Monday 28 December	CLOSED
Tuesday 29 December	7am – 3pm
Wednesday 30 December	7am – 3pm
Thursday 31 December	7am – 3pm
Friday 1 January	CLOSED
Saturday 2 January	7am – 3pm



CARDBOARD	E-WASTE*	FLUORO GLOBES & TUBES
MOBILE PHONES	HOUSEHOLD & CAR BATTERIES	INK CARTRIDGES
POLYSTYRENE	MOTOR AND OTHER OILS	PAINT
SMOKE DETECTORS	X-RAYS	GAS BOTTLES & FIRE EXTINGUISHERS

GEORGES RIVER ENVIRONMENTAL EDUCATION CENTRE

By Nic Hall – Principal, Georges River Environmental Education Centre

In 1993, the Georges River Environmental Education Centre (GREEC) opened its doors in the back of Chipping Norton Community Centre (next to Chipping Norton Public School).

The GREEC is one of three Environmental Education Centres in South Western Sydney, and one of a network of 25 Environmental and Zoo Education Centres across the state.

The centre was established to assist schools in teaching about the environment and the Georges River catchment.

For more than 25 years GREEC has taught students about the importance of developing sustainable behaviours, understanding their environment and the importance of protecting the natural environment.

GREEC offers a variety of high-quality field work and environmental and sustainability education programs for students from Kindergarten to Year 12.



The program covers more than just the environment, and is helping schools to explore and deliver Geography, Science, Visual Arts, English and History.

In 2021 GREEC will be launching self-guided garden tours – a project under construction that was funded by the Department of Industry, Science, Energy and Resources.

To find out more visit our [website](#) or phone **9755 3189**, or follow us on Facebook and Twitter @GeorgesRiverEEC.



SPEAKING 4 THE PLANET RESULTS

Speaking 4 the Planet (S4P) is a public speaking, drama and art competition for high school students inspired by the United Nations' annual World Environment Day (WED).

The competition aims to encourage young people to think creatively about ways to be sustainable and share them in a public forum.

Students are inspired to write, speak, paint or perform the social aspects of sustainability. S4P also helps students see that they are not alone in their concern for the planet and for the future.

In 2020, due to COVID restrictions the competition open to all high schools evolved into an online statewide event.

Liverpool City Council was proud to support this event, with students from local schools participating.

Congratulations to Shaeda Hadi from Miller Technology High School who was a runner up in the speaking category.

[Find out more about S4P.](#)



PLANTS TO IMPROVE YOUR HOME'S INDOOR AIR QUALITY

Research by the US space agency, NASA, discovered that certain indoor plants can effectively improve the air quality in a home by absorbing chemicals from the air by acting as natural air filters.

Just by having three indoor plants in a 10m² vicinity can lead to improved indoor air quality in your home.

Some of the most effective plants for improving your indoor air quality include:

- Areca Palm
- Aloe Vera
- Chrysanthemum
- Chinese evergreen
- Gerbera Daisy
- Peace Lily
- Rhaps Palm
- Rubber Plant
- Snake Plant (mother-in-law's tongue)
- Spider Plant
- Weeping Fig



ENERGY REBATES FOR YOUR HOUSEHOLD

The NSW Government offers several rebates to households to help reduce your energy bills. Note: To receive an energy rebate you need to be eligible.

Low Income Household Rebate

This helps low-income households cover the costs of their energy bills. It is paid once each financial year. You can receive a rebate on each quarterly energy bill, up to a total of approximately \$285 a year.

Click [here](#) for more information.

Family Energy Rebate

To help households with dependent children, the Family Energy Rebate covers the costs of their energy bills. Eligible energy account holders can receive a credit on an energy bill of up to approximately \$180.

For more information click [here](#).

Medical Energy Rebate

This rebate helps eligible households cover the costs of their energy bills. To be eligible, you'll need to meet medical criteria. You'll receive up to a total of approximately \$285 per year.

For more information click [here](#).

Life Support Energy Rebate

This is for NSW customers who need or have someone living with them who needs to use approved energy-intensive medical equipment at home.

Click [here](#) for more information.

Energy Relief: Vouchers to help with your Energy Bills during COVID-19

If you're having difficulty paying an energy bill because of a short-term financial crisis or emergency, such as reduced income due to COVID-19, then you could be eligible for Energy Accounts Payment Assistance (EAPA) vouchers and rebates.

Click [here](#) to apply for Energy vouchers in reducing your bills.

FEEDING DUCKS – IS IT DOING MORE HARM THAN GOOD?



Feeding ducks is a great family activity. Unfortunately, it can also be problematic as it leads to nutritional imbalances, increased risk of disease and alters animal behaviour.

Although bread is a common choice for feeding ducks, it has very little nutritional value and can make ducks very sick.

Even the smallest portions of human food can be very unhealthy. A large proportion of bread goes uneaten and spoils, resulting in an increase in bacteria that causes avian botulism, which can be fatal.

Feeding ducks can also lead to altered animal behaviour, as the animals become dependent on humans for their food, and can become aggressive when it is not readily provided.

The typical diet of wild ducks consists of algae, invertebrates, fish, seeds of aquatic plants, molluscs and aquatic insects.

Ducks can be fed: peas, chopped lettuce, tomatoes, and grated carrot, most fruits (cut up with seeds removed) but no tinned fruits.

Ducks should never be fed: bread, onions, avocado, spinach, fruit seeds, nuts or popcorn.



WORLD WETLANDS DAY

2 February 2021



Healthy wetlands protect coastlines from the effects of storms and flooding, as well as filtering pollutants and providing habitat for many plants and animals. They are especially important for breeding and raising offspring as they can offer young animals protection against predators. Learn more [here](#).

WORLD SPAY DAY

23 February 2021

Desexing pets is one of the best ways of controlling populations of roaming animals, a major threat to our biodiversity. It is also an effective strategy for animal welfare, minimising the number of animals in shelters or on the street. The National Desexing Network has a list of vets in the area who offer low cost desexing. Check it out [here](#).

Find out more about responsible pet ownership [here](#).

SUSTAINABLE ENVIRONMENT GRANTS ROUND 2

The Sustainable Environment Grants program helps schools and community groups to reduce their impact on the environment and implement environmentally sustainable actions.

Key funding priorities fall under the categories of natural environment, sustainable gardening, sustainable water use and waste minimisation or recycling.

Up to \$5000 in grants is available. Applicants who demonstrate a commitment to the project through either financial or volunteer support are considered favourably.

Applications open 22 February to 2 April 2021.

Click [here](#) to apply or for more information.

SEEDLING BANK GRANTS

Planet Ark's Seedling Bank program aims to supply native seedlings to schools and community groups around Australia.

Applications for round 3 will open from 1 December 2020 to 19 February 2021.

See [here](#) for more details.

ACTIVITY SHEETS FOR THE SCHOOL HOLIDAYS

Looking for ways to entertain the little ones and connect with nature? Planet Ark have an updated Activity Guide you can [download for free!](#) There's also treasure hunt templates, explorer logbooks, guides on how to make a mini herb garden and much more!

CITIZEN SCIENCE PROJECTS



Australasian Fishes Project

The Australian Museum is building up an extensive 'image library' that can be used to identify fishes in Australia and New Zealand, to map their distributions, investigate changes in growth, pattern and shape with growth and other issues.

SEED Hub

SEED is the NSW Government's new database of citizen science projects. The hub provides many benefits for project organisers and volunteers alike, including data visualisation, project promotion and networking with other like-minded individuals.

Citizen Science Bushfire Project Finder

The CSIRO is supporting research in bushfire affected areas. People-powered science will play a role in Australia's bushfire recovery, with projects underway ranging from air quality to identifying and confirming animal and plant sightings.



WHAT'S ON

Join our enthusiastic volunteers who beautify our local parks and bushland by removing weeds and litter and planting native plants. Meet like-minded people, increase your knowledge of the environment and create habitat for local wildlife.

Don't have any experience? Don't worry – our qualified staff are happy to provide training. All equipment is supplied.

Collimore Park Environment Group

Meet in the Collimore Park car park on Collimore Avenue, Liverpool

**Saturday 6 February
8am – 11am**

Amalfi Park Environment Group

Meet inside the park near the footpath on Reilly Street, Lurnea

**Sunday 7 February,
9am – 11am**

Clinches Pond Environment Group

Meet inside the park at the Gloria Taylor Reserve sign on Swain Street, Moorebank

**Saturday 13 February,
9am – 11am**

Weaving Garden Environment Group

Meet at the seats inside the reserve at the end of Casula Road, Casula

**Saturday 13 February,
12pm – 2pm**

Cessna Reserve Environment Group

Meet in the reserve at the intersection of Hemsworth Avenue and Stanley Avenue, Middleton Grange

**Sunday 14 February,
9am – 11am**

Chauvel Park Environment Group

Meet at the park entrance at the end of Sammut Crescent, Chipping Norton

**Saturday 20 February,
8am – 11am**

Tucker Road Environment Group

Meet at the playground. Entry via the path off the crossing on Kendall Drive, Casula

**Sunday 21 February,
2pm – 4pm**

Streamwatch

Come along to investigate the water quality of the Georges River. Meet in the Light Horse Park car park, Riverpark Drive, Liverpool

**Saturday 27 February,
8am – 9am**

Light Horse Park Environment Group

Meet in the Light Horse Park car park, Riverpark Drive, Liverpool

**Saturday 27 February,
9am – 11am**

Voyager Point Environment Group

Meet in the car park at Voyager Park on Orlando Crescent, Voyager Point

**Sunday 28 February,
9am – 11am**

Streamwatch

Come along to investigate the water quality of Cabramatta Creek. Meet in the Ireland Park car park on Memorial Avenue, Liverpool

**Sunday 28 February,
12pm – 1pm**

Elouera Bushland Reserve Environment Group

Meet in the Ireland Park car park, Memorial Avenue, Liverpool

**Sunday 28 February,
1pm – 3pm**



For more information, phone 1300 36 2170 or go to our [website](#).

WORKSHOPS



REGISTRATIONS ESSENTIAL

CONSERVATION KAYAKING

When: Sunday 17 January 2021 | 8.30am – 3pm
Cost: Free

Join us for a day of kayaking and removing weeds that threaten the ecosystems at Chipping Norton Lake. On-site training, PPE, morning tea and lunch are provided.

Those new to kayaking will be given tips and guidance, however you will need a reasonable level of fitness to climb in and out of a kayak at the banks of the lake.

For more info and to register, visit [Eventbrite](#).



REGISTRATIONS ESSENTIAL

WILDLIFE AT TWILIGHT

When: Friday 29 January 2021 | 7pm – 10pm
Cost: Free

Join us for an amazing wildlife experience at the Lt Cantello Reserve, Hammondville where you will see what arboreal mammals and frogs can be found after dusk.

For more information and to register, see [here](#).



DRAWN TO NATURE GUIDED WALK

When: Saturday 30 January 2021
Cost: Free

Australian artist, Patrick Shirvington, will guide a bushwalk through Leacocks Regional Park, describing his process of connecting to the Australian landscape through art. Participants will learn to recognise features of the landscape and draw what they see.

Email your name, suburb and child's age to erp@liverpool.nsw.gov.au to register.



INTRODUCTION TO CLOTH NAPPIES

When: Monday 8 February 2021 | 6pm – 7pm
Cost: Free (online)

Did you know each baby will use between 4000 and 6000 nappies before they are toilet trained? Why not find out more about cloth nappies with a nappy expert. Places are limited.

Register to attend by emailing your name, suburb and name of the workshop to erp@liverpool.nsw.gov.au

COMING SOON

Online cloth nappy fact sheets and how-to video resources.

HOW TO BEAT THE HEAT IN LIVERPOOL THIS SUMMER

Need to cool off quickly over the summer holidays?

Why not visit one of our water play parks located at:

- Bigge Park, Liverpool
- Carnes Hill Community & Recreation Precinct, Carnes Hill
- Macquarie Mall, Liverpool
- Michael Wenden Aquatic Leisure Centre, Liverpool

Construction of another water park at Stante Reserve in Middleton Grange is underway with a forecast completion of March 2021.