

# ANNUAL ACHIEVEMENTS REPORT

2023-24



Citizen science in  
Victoria's waterways







#### Traditional Owner Acknowledgement

EstuaryWatch and WaterWatch proudly acknowledges Victoria's Aboriginal community and their rich culture and pays respect to their Elders past and present. We acknowledge Aboriginal people as Australia's first peoples and as the Traditional Owners and custodians of the land and water on which we rely.

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EW

ESTUARYWATCH

WW

WATERWATCH



PLATYPUS



BIRD



WATERBUG



FROG



EVENT

KEY







QAQC coordinator event 2024

# INTRODUCTION

## EstuaryWatch and WaterWatch: more than data collection

Throughout 2023-2024, 499 dedicated volunteers gathered regularly to collect water quality data at over 400 sites state-wide. Additionally, more than 8,000 people attended citizen science events, with 383 volunteers contributing data on platypus, birds, frogs, and waterbugs.

### The EstuaryWatch and WaterWatch programs are playing a crucial role in:

- **Early Response:** Volunteers are eyes on the ground, identifying and reporting crucial changes in waterway conditions, helping to mitigate potential issues.
- **Building Community Connections:** Our volunteers better understand the work of Catchment Management Authorities, helping their communities to trust the work that is taking place in waterways and biodiversity.
- **Increasing Water Literacy:** WaterWatch and EstuaryWatch help shape public knowledge, attitudes, and behaviours regarding waterway health and sustainable management.
- **Delivering Cost-Effective Monitoring:** EstuaryWatch and WaterWatch are locally relevant, affordable monitoring solutions, expanding the ability to gather vital data.

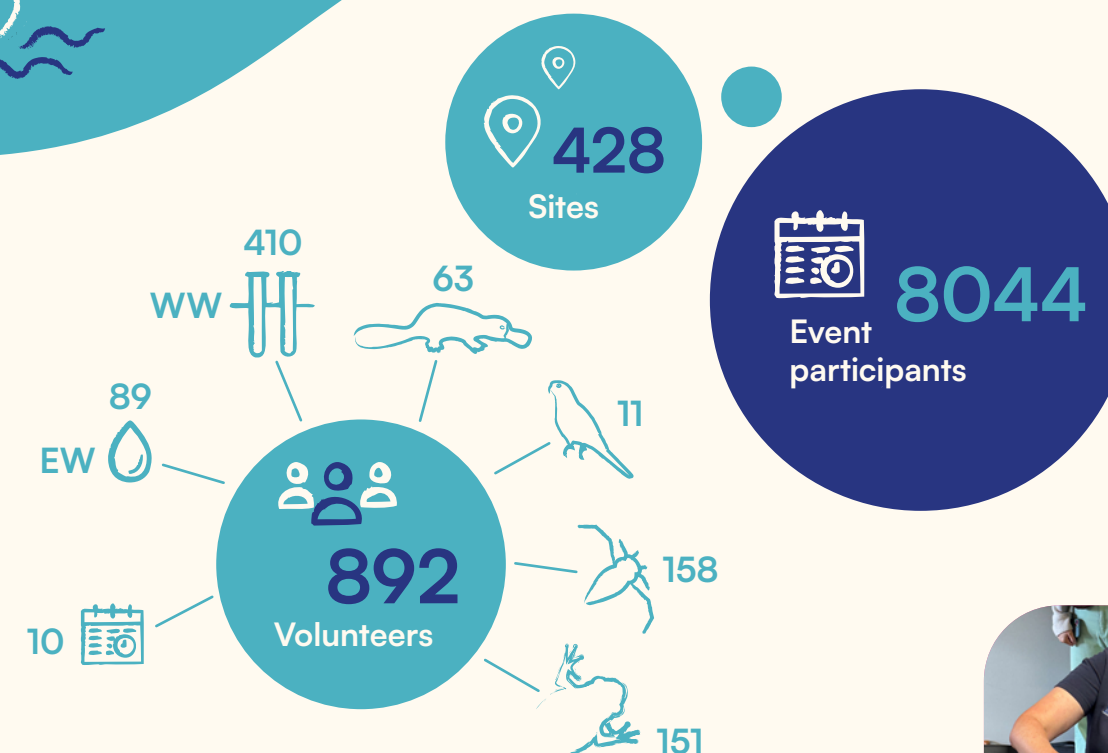
- **Expanding Monitoring Capacity:** Volunteers have helped broaden data collection across priority waterways, providing valuable insights for decision-making.

### Data improvements

This year saw significant improvements in our Quality Assurance and Quality Control processes, ensuring that the water quality data collected is more robust and reliable. Coordinators across the state distributed hundreds of lab samples and held workshops with their citizen scientists to improve their methods. These efforts are paying off, with continual improvements in data collection.

### Volunteer Engagement and Educational Outreach

We now have 499 active citizen scientists regularly participating in EstuaryWatch and WaterWatch programs across Victoria. Their data continue to inform decisions about the health of our waterways. With climate change becoming more pronounced, these data will play an even more important role in understanding the environmental shifts that are occurring. Educational outreach also made a



Deirdre Murphy

strong impact this year, with over 8,000 people attending events aimed at raising awareness about waterway health and biodiversity.

### Challenges and Opportunities

There is always room to improve how we communicate with our citizen scientists, especially when it comes to sharing how their valuable data is being utilised. Keeping them informed about relevant local projects that Catchment Management Authorities are working on is also essential for strengthening these connections. We are also striving to improve the diversity within our volunteer base to ensure that our program membership reflects our communities in which we live.

Looking ahead, we are excited to launch new opportunities for citizen science, including a state-wide frog monitoring program, which will leverage our existing citizen scientists to gather important data about frog populations. We are also upgrading the data portal with visualisation dashboards to improve the flow of information back to the community.

### A Heartfelt Thank You

Deirdre Murphy retired this year after sixteen years of dedication in the citizen science team

at Corangamite Catchment Management Authority.

Deirdre trained and supported hundreds of volunteers in both the WaterWatch and EstuaryWatch and supported many new coordinators to find their feet in their roles. Deirdre was a big part in celebrating 30 years of WaterWatch in 2023, she also represented the program at state and national conferences, created countless water quality reports, and her experience in macroinvertebrate surveys was vital to the broader work of her organisation. Deirdre was a huge advocate for citizen science and built many connections between the Corangamite Catchment Management Authority and the community across the catchment.

We wish Deirdre the best of luck in her retirement, she leaves behind an incredible legacy.

We also say a huge thank you to the 892 citizen scientists across Victoria, along with the broader community, for their commitment to our waterways and local biodiversity. Your dedication and passion are vital to enhancing our management of these precious ecosystems.

This project is part of a \$248 million investment by the Victorian Government to improve the health of waterways and catchments over four years.



# STORIES FROM ACROSS THE STATE

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Barwon, Moorabool and Yarrowee-Leigh river celebration

# CORANGAMITE

## CATCHMENT MANAGEMENT AUTHORITY

### Celebrating Partnerships and Volunteer Contributions in the Barwon, Moorabool, and Yarrowee-Leigh Catchments

This year, we proudly celebrated the collective achievements made across the upper catchments of the Barwon, Moorabool, and Yarrowee-Leigh rivers, reaching all the way to the Barwon estuary. We were honoured to have Christine Couzens MP, representing Minister for Water Harriet Shing MP, join us in acknowledging the outstanding contributions of more than 45 dedicated EstuaryWatch and WaterWatch volunteers. These volunteers play a critical role in enhancing the health of our waterways throughout the Corangamite region.

Our citizen scientists fill vital information gaps in waterway health, providing essential “eyes on the ground” to monitor water quality

and collect environmental data. Their efforts contribute significantly to informed decision-making and help establish important baseline data for priority systems, including the Moorabool, Leigh, and Barwon rivers.

During the event, we also recognised the invaluable contributions of Claire Mennem and Jayden Woolley from Wadawurrung Traditional Owners Aboriginal Corporation, who shared

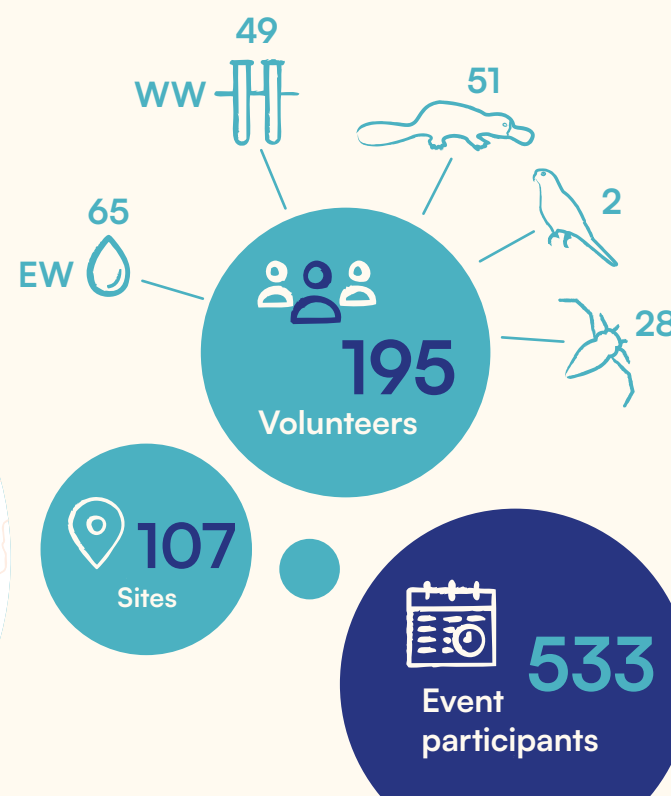
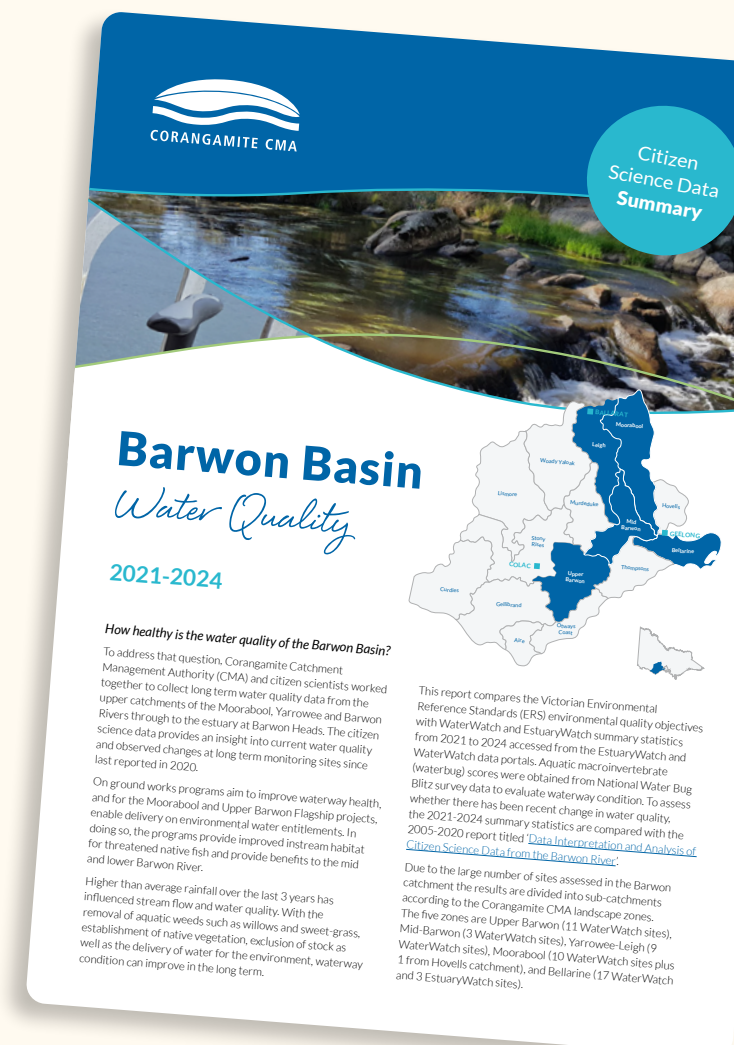


their citizen science experiences during recent monitoring efforts in the Moorabool and Durdidwarrah Wetland. Additionally, we celebrated Marie and Russell Ford, Williamsons Creek WaterWatch volunteers who have served as waterway stewards for over 30 years, making them our longest-serving WaterWatch participants.

### Launch of the Barwon Basin Water Quality Report 2021-2024

This year saw the release of the Barwon Basin Water Quality Report, which compiles data collected over the past three years by citizen science volunteers from 51 WaterWatch and 3 EstuaryWatch sites along the Moorabool, Leigh, and Barwon rivers. The report offers insights into current water quality and highlights changes observed at long-term monitoring sites since our 2020 report.

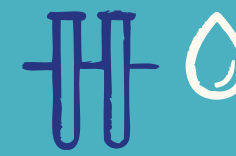
The Moorabool River environmental monitoring revealed better overall water quality and healthier macroinvertebrate communities, likely supported by above-average rainfall and environmental flows. However, turbidity in the lower catchment of the Barwon River has worsened since 2020, underscoring the need for a comprehensive, catchment-wide approach to protect water quality and preserve environmental values.



View the full report here:  
[https://www.ccmaknowledgebase.vic.gov.au/kb\\_resource\\_details.php?resource\\_id=5532](https://www.ccmaknowledgebase.vic.gov.au/kb_resource_details.php?resource_id=5532)







Bottle testing, Forge Creek

# EAST GIPPSLAND

CATCHMENT MANAGEMENT AUTHORITY

## Water Quality Monitoring in Forge Creek

Romawi Landcare Group has been consistently monitoring water quality along Forge Creek for the last thirteen years. Forge Creek is an ephemeral chain of ponds beginning just south of the Bairnsdale airport, and extends eastward over 10 kilometres to the Newlands Arm Backwater where it ultimately enters the Ramsar-listed Gippsland Lakes. The ponds are often disconnected but, during times of heavy rain, the ponds flow to form a continuous creek. Forge Creek is a diverse ecosystem and is home to native fish such as Australian Smelt, Dwarf Flathead Gudgeon, Common Galaxias and the endangered Flinders Pygmy Perch.

The Group has previously tested seven sites each month, but this year they expanded their monitoring to include an eighth site between

existing sites four and five. Over the last twelve months, they saw the creek flowing on only one occasion which was after heavy rainfall in December 2023. Their water quality results for that month showed a minor increase in phosphate levels, likely due to the increased flow and runoff into the system.

In addition to water quality monitoring, Romawi Landcare Group has undertaken significant revegetation along Forge Creek. Together with the East Gippsland Catchment Management Authority, rocks and vegetation have been placed in critical sites to control erosion, protect vulnerable ponds and aid water flow during periods of heavy rainfall. With flourishing undergrowth and improved water quality, many species, including the Flinders Pygmy Perch, have returned to the area. A rare species of water lily has been planted along the banks of the ponds and is now self-seeding.

“Revegetation of the Forge Creek Reserve, together with efforts over the past decade to exclude cattle from grazing the reserve, has continued to show a significant improvement in the quality of the whole system, both in terms of vegetation and associated wildlife such as birds and fish.”

Alistair Mailer,  
WaterWatch volunteer

Forge Creek,  
site 2 after rain,  
March 2024

Forge Creek, site 4



December 2023, flooding



March 2024







SW TAFE water quality monitoring workshop, Merri River Warrnambool

# GLENELG HOPKINS

CATCHMENT MANAGEMENT AUTHORITY

## EstuaryWatch in the Glenelg Hopkins region 2023-24

It has been another highly successful year of citizen science monitoring for our active and passionate Hopkins and Merri EstuaryWatch volunteers.

As a mark of both groups' commitment and coordination, monthly water quality monitoring and site observational data were captured every month throughout the year on both the Hopkins and Merri estuaries. This recorded some critical data and seasonal trends, particularly during the transition phase between very wet early winter conditions, into one of the driest spring, summer and autumn periods experienced on record in southwest Victoria. The consistency and validity of this data set will be critically important for many years to come.

Our volunteers also happily extended themselves beyond their routine monthly schedules, with additional involvement in a range of community and educational projects.

This included the addition of monthly bird observations at each of our Merri monitoring sites. Driven by volunteers Eleanor and James Cowell, both accomplished bird enthusiasts, the Merri group recorded 51 different species throughout the year.

The Merri EstuaryWatch volunteers also continued their partnership with Southwest TAFE to help deliver a highly enjoyable and informative student Water Quality Monitoring workshop. Students from the Diploma of Conservation and Ecosystem Management were



Annual QAQC testing, Merri EstuaryWatch, May 2024.

introduced to the EstuaryWatch Citizen Science program including monthly monitoring responsibilities, the importance of instrument calibration and the role that this captured data has on the management of our critically important intermittently closed estuaries. Volunteers Karen Wales, Tom Sheehan and Liz Carey, along with Jarred Obst from the Catchment Management Authority, ran through specific monitoring techniques at our Stanley Street M1 site, followed by the students getting hands on and undertaking water quality testing on their own water quality samples.

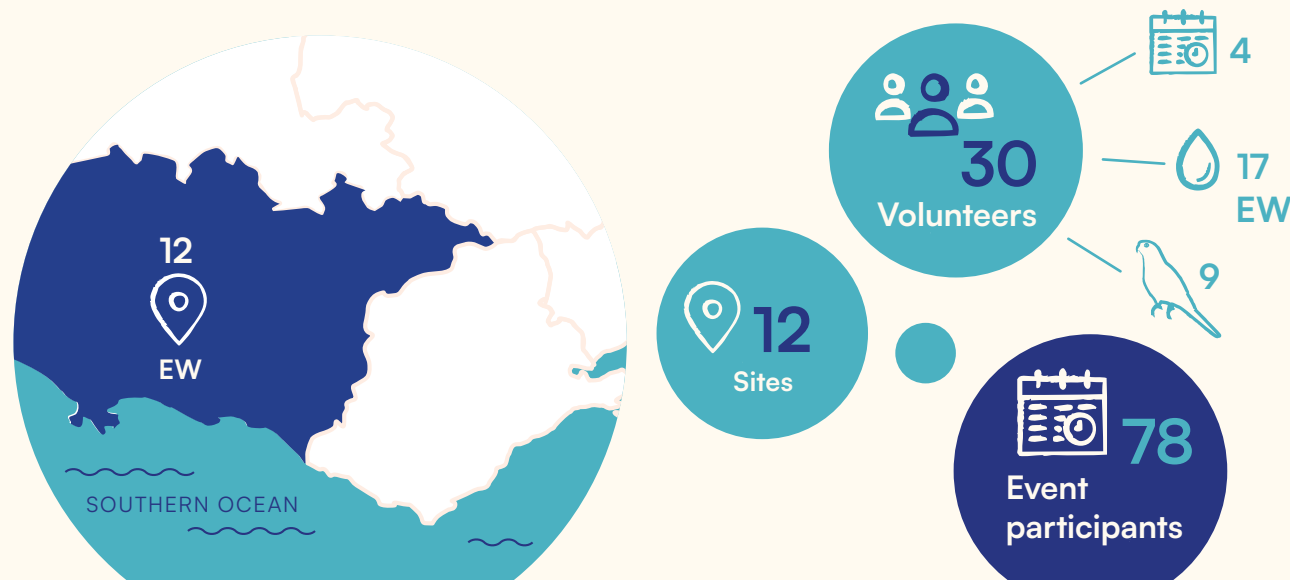
Additionally, our volunteers have also contributed to an exciting eDNA component of the Glenelg Hopkins Catchment Management Authority's Flagship Waterway Program 'Rivers of Warrnambool', with active involvement in site selection and undertaking site sampling.

Both the Hopkins and Merri Groups have continued to ensure the validity of their data by successfully completing annual QAQC testing. Vast improvements have occurred this year with the statewide roll-out of this initiative and all

volunteers have appreciated this continued learning opportunity. In appreciation of their yearly efforts and to help promote this important program, we've also been able to increase social media promotions, update monitoring equipment and PPE, host our volunteers for a 'thank-you' Christmas dinner, and provide some soon to arrive uniforms for our new volunteers.

Lastly, the EstuaryWatch program in the Glenelg Hopkins region is in an exciting shape with citizen science volunteer numbers increasing by 42% through the recruitment of five new volunteers in 2023/24.

The Glenelg Hopkins Catchment Management Authority remain indebted to all our volunteers for their continued efforts, and we look forward to continuing this important community citizen science program in the years ahead.







'Breakfast with the Birds' event at Reedy Swamp and a paddle down Kaiela

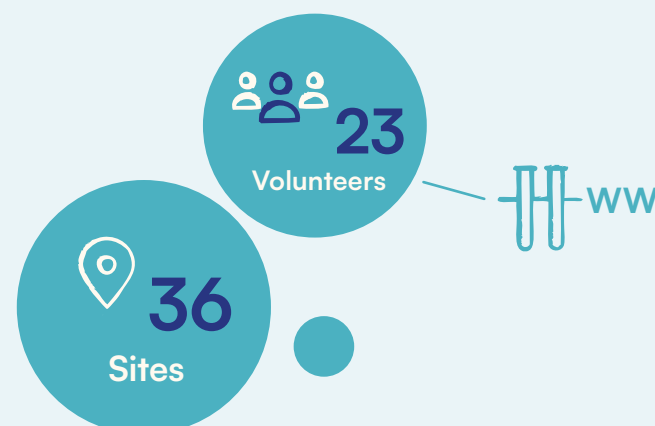
# GOULBURN BROKEN

CATCHMENT MANAGEMENT AUTHORITY

## Strathbogie WaterWatch Reinvigorated

A call was put out by the local community to reinvigorate WaterWatch in the Strathbogie Ranges. Volunteer numbers had been declining over recent years and existing volunteers had requested refresher training and an equipment check. The main driver for the reinvigoration is the Strathbogie Ranges Conservation Management Network, creating a dashboard page for their website to track the impact of climate change in the Strathbogie Ranges. The dashboard will be a place where data such as rainfall, groundwater levels, stream flow, water quality and results of fauna surveys can be viewed, analysed and shared — including the data collected by WaterWatch volunteers.

So, after a recruitment drive by long term WaterWatch monitor Janet Hagen, a training day was held on the banks of the Seven Creeks in Euroa in August 2023. Dani Beischer, a former WaterWatch Coordinator, was engaged to undertake the training. Eleven people attended the training and learnt about water quality and why it is important, and were amazed at the number and variety of waterbugs that Dani had on display. Dani then explained how to collect a water sample and use the equipment to record the temperature, pH, EC and turbidity. Training was also provided on safety, site selection, habitat assessment and how to enter their data on the WaterWatch Portal.



Emily Lange (RiverConnect education officer) and Wendy D'Amore (president SMULG) learning wetland planting.

## RiverConnect

RiverConnect aims to foster the community's love, respect and connection to the river environment through engaging events, collaborative projects and an inspiring education program.

Unique to the river and floodplains surrounding Shepparton and Mooroopna, RiverConnect is a wide reaching community-government partnership program under the auspice of Greater Shepparton City Council and jointly funded by the Goulburn Broken Catchment Management Authority. Since its inception in 2005, RiverConnect has been pivotal in building appreciation for the significance of our river environment.

By facilitating effective high-levels of collaboration and co-operation, the partnership model has enabled local government, land management agencies, Traditional Owners, health organisations, educational organisations, stakeholders and community members to come together to identify and action shared priorities.

Volunteer training day at Seven Creeks in Euroa, August 2023

"We thank our new and existing volunteers who are monitoring water quality in the Strathbogie Ranges and across the Goulburn Broken catchment."

Goulburn Broken Catchment Management Authority







Aunty Rochelle Patten sharing stories of The Flats during the curated Shepparton festival event.



Attendees painted a canvas inspired by aunty's stories



Greater Shepparton college student getting hands-on experience with streamology scientists, Goulburn River



## A snapshot of RiverConnect in 2023/2024

- **Curated** a new collaborative event 'An Elder's Stories' for the 2024 Shepparton Festival. Walking together, Aunty Rochelle Patten shared stories on The Flats, the very place she grew up. Arriving by the river side of Kaiela and with technical advice from Tammy-Lee Atkinson, attendees painted a canvas inspired by stories shared.
- **Connected** the Greater Shepparton Secondary College and educators from Streamology, who engage community as part of the Flow-MER project. Year 11 VCE Environmental Science students and Year 10 Students spent the day on Kaiela, the Goulburn River, learning about macroinvertebrates including their important role in stream health and stream geomorphology.
- **Proudly supported** headspace Shepparton's (auspice Goulburn Valley Health) "Nature Scripts" pilot project focused on helping young people receive a "Nature Dose" and evaluating their mental health outcomes. RiverConnect shared networks and ideas for the program alongside offering sessions for Nature Journaling, Nature Photography, bee hotel habitat building and Spotlight Walks.
- **Officially unveiled** the Monash Park Historical Signage, a project of the Shepparton Heritage Centre and supported by RiverConnect. Displayed near the original path of the Goulburn River, the sixteen interpretive panels highlight the early development of the Shepparton Township, including the river 'punt' crossing, early industries, recreational activities and the river redirection in 1969.
- **Enjoyed** popular community group partner events including Breakfast with the Birds (Birdlife Murray Goulburn), River Heritage Walk and Talk (Shepparton Heritage Centre), Nature Photography (Shepparton Camera Club), Canoeing on the Goulburn (Shepparton Canoe Club), Bat Night (Cussen Park Advisory Committee) and Botanic Gardens Open Day (Friends of the Australian Botanic Gardens Shepparton).



5154

people in 115 events and activities



1513

students from 18 schools and 2 kindergartens



Maintained partnerships with 50 groups/ organisations



In partnership with: Department of Education, Department of Energy, Environment and Climate Action, Goulburn Murray Landcare Network, Goulburn Valley Environment Group, Goulburn Valley Health, Goulburn Valley Water, Greater Shepp Young Champions, Parks Victoria.





Platypus conference,  
August 2023

Photo: Michael Jarrard/Unsplash

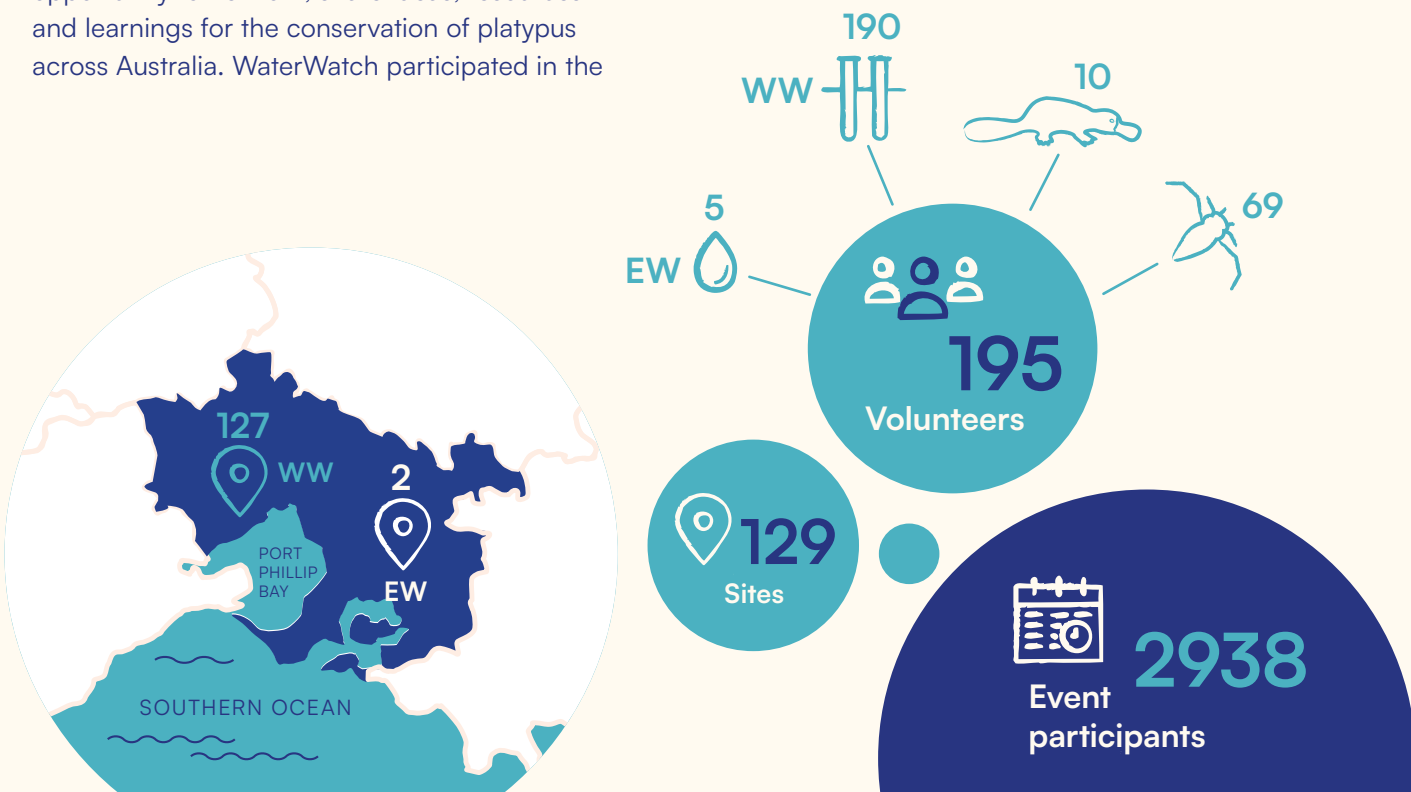
# MELBOURNE WATER

## The Future of the Platypus — Melbourne Water Conference

This year saw the return of the biennial platypus conference. After a four year hiatus, the Future of Platypus Conference returned in full force, bringing together key platypus experts, scientists, researchers, community engagement practitioners, wildlife managers, conservation enthusiasts and volunteer groups. Melbourne Water proudly sponsored the event, hosted by the Australian Platypus Conservation Centre at Healesville Sanctuary.

The conference provided an invaluable opportunity to network, share ideas, resources and learnings for the conservation of platypus across Australia. WaterWatch participated in the

conference, showcasing our program and engagement strategies and also led a workshop highlighting the positive impacts of community monitoring and how we can work together to achieve greater outcomes for platypus. A key outcome from the conference was the creation of the 'National Platypus Network', facilitated by WaterWatch. The Platypus Network is a network of platypus scientists, researchers, community engagement



Platypus

practitioners, government bodies and wildlife managers who now meet quarterly to continue the conversations around sharing ideas, knowledge and resources for the protection of platypus and their habitats. It also aims to identify opportunities to work collaboratively on key projects. The evolution of the network hopes to see the creation of a digital platform in the

coming months to allow organic sharing of information and networking outside of structured meetings. The Network has provided a fantastic opportunity to hear from guest speakers, enable collaborative discussions and facilitate key learnings from one another from across the east coast of Australia.



Danielle Wallace, ecologist  
University of Melbourne



Hansi Wegner,  
citizen science team leader



Amy Gregorovich,  
citizen science volunteer



Lily Setnik, citizen science  
volunteer project coordinator



### Webinar to celebrate Citizen Science Month April 2024

Melbourne Water hosted a panel discussion with four passionate citizen scientists to explore their motivations for getting involved in citizen science with a particular focus on the Frog Census Program. The impetus for the webinar was a desire to break down barriers by showing how easy it is to become involved and the rewards of taking part in meaningful action for the environment. There was an introductory explanation of the Frog Census Program and how the data gathered informs waterway management at Melbourne Water. Frog data has been used to inform the application of environmental water to wetlands to promote frog breeding and to maintain water levels to allow for the successful completion of breeding.

The panel included Amy Gregorovich, a volunteer citizen scientist; Danielle Wallace, an ecologist and PhD candidate at the University of Melbourne; Hansi Wegner, a team leader with the Citizen Science Crew at Devilbend Natural Reserve; and Lily Setnik, a volunteer project coordinator with the Citizen Science Crew.

The promotion of this webinar generated a lot of interest and our Facebook post reached over 2,400 people, indicating that there is a strong interest in getting more involved. During the webinar, the dedication of these citizen scientists was evident and it was wonderful to hear about the important projects they are working on.

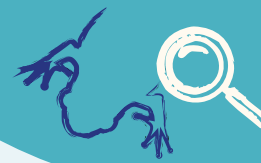
The Frog Census is a long-running data collection program, begun in 2001 to establish a greater understanding of frog populations across the Melbourne region. When the census first began volunteers went out into the field armed with cassette recorders to capture the call of frogs in their local area. Fast forward to 2016 and Melbourne Water developed the Frog Census app for smartphones which greatly improved accessibility and participation in the Frog Census Program. There are now over 14,000 frog reports in the database and more than two-thirds of these have been gathered since the introduction of the app.

Melbourne Water reaches out to the community in a range of ways to encourage participation in citizen science, either casually or on a more regular basis. We run training and information sessions, as well as evening frog walks across Melbourne. Look out for upcoming events on Melbourne Water's Events page.

You can watch the webinar here:

<https://www.youtube.com/watch?v=gLLmLdPpKJg>





Scientist  
Arjumand  
Khan at a  
community  
event

# MERRI CREEK

## Management Committee & STEM Catalyst Partnership delivered community events centred around the Growling Grass Frog in Fawkner

In 2023, a new wetland was completed at Fawkner, within the riparian zone of Merri Creek, an important waterway in Melbourne's northern suburbs. In recent years, after more than two decades of silence, Growling Grass Frogs (GGF) have been heard calling in Merri Creek near this wetland, but no more comprehensive surveys have been completed. The Merri Creek Management Committee (MCMC) decided to focus on gathering more information about the GGF population in this area to continue maintaining and improving the GGF habitat so that the population can survive and thrive. In addition to MCMC staff conducting monitoring in the wetlands and nearby Merri Creek, MCMC wants to involve the community, particularly the Culturally and

Linguistically Diverse (CALD) community. Many CALD communities live along and near Merri Creek, particularly in new suburbs emerging in Melbourne's northern growth area, where the Merri Creek Management Committee is working to ensure the waterways and biodiversity are protected as development increases. STEM Catalyst was engaged to support this target group. STEM Catalyst is an education provider and advocate for science, technology, engineering, and mathematics (STEM) literacy in CALD communities. Its founder and Director,

Arjumand Khan, found the Merri Creek to be the perfect setting for many activities. Beyond her talents connecting the people of Merri Creek, Arjumand is a qualified environmental scientist. Like many migrants, she was facing barriers to employment in Australia. But with a deep passion for inspiring the next generation, she began volunteering at various organisations, including her children's school. In 2017, the Royal Society of Victoria competitively selected Arjumand to deliver two newly introduced science curriculum components to Victorian schools. Arjumand undertook project management training and designed her science project with an aim to help break the stereotypical perceptions of STEM Careers amongst young Australians.

"I introduced nature-based STEM engagement activities, with an element of multicultural understanding," Arjumand says. "Students were surprised to see a hijabi scientist."

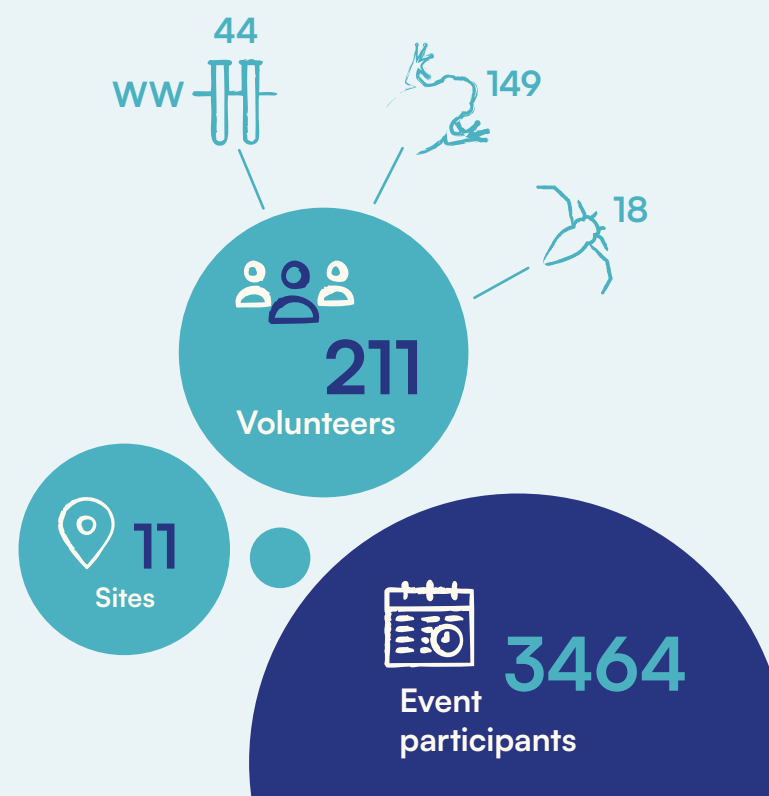
The aim of the GGF Fawkner community engagement was to:

- provide two events in GGF season to connect local community with the new wetlands and this reach of the Merri Creek
- 'train up' community members to monitor the GGF by inputting data to the MW frog census app, identifying GGF habitat as well as learning GGF biological information. This increased the community's understanding of what they can do to help protect this vulnerable species (conservation status in Melbourne).
- increase participant confidence in citizen science monitoring so that participants revisit the site, collecting data on the MW frog census app.
- focus on encouraging teenagers and children to learn about vulnerable species, citizen science and their local waterways.
- increase CALD community participation in waterway citizen science in the Fawkner area.

In January and February, two events were held with 56 adults, teenagers and children. Participants discovered local GGF food, waterbugs, learnt how to collect frog census data, as well as completing WaterWatch testing including salinity and turbidity, important parameters for GGF populations. This project has now expanded - MCMC WW has just won funding to establish a new WW group in Fawkner to collect WQ data that effects GGF populations. MCMC WaterWatch and STEM Catalyst are working hard to get this new group off the ground.

**"I introduced nature-based STEM engagement activities, with an element of multicultural understanding. Students were surprised to see (me), a hijabi scientist".**

**Arjumand Khan,**  
Director, STEM Catalyst



Growling Grass  
Frog







Platypus round table attendees

### Successful round table on Platypus Recovery, September 2023

To commemorate National Threatened Species Day, MCMC WaterWatch and the Merri Platypus Paddle, a sub-group of the Friends of Merri Creek, hosted a stakeholder round table to discuss ways to bring platypus back to the Merri. Representatives from participating councils (City of Darebin, Hume, Whittlesea, Merri-bek and Yarra) and organisations including Melbourne Water, the EPA, DEECA & AQUEST (RMIT) presented and discussed practical solutions to improve the water quality and quantity in Merri Creek to support platypus populations.

In addition to Merri Paddle and Friends of Merri Creek, the community was represented by Rotary, Bacchus Marsh Platypus Alliance and MCMC. There was a positive, collaborative and pragmatic approach that we hope will lead to new partnerships to help reduce pollution levels in the Merri.

Sincere thanks to the funders of the event: Melbourne Water, Friends of Merri Creek, MCMC and the City of Merri-bek with support from DEECA and the City of Darebin.

**“I would like to thank Merri Paddle for creating such a valuable opportunity for different organisations to come together to discuss these important topics. I’m certainly taking home lots to think about both in my role at Darebin and in my personal life. I look forward to seeing what comes out of this incredible initiative!”**

**Sofia Enrique**  
Urban Ecology and Biodiversity  
Officer, City of Darebin

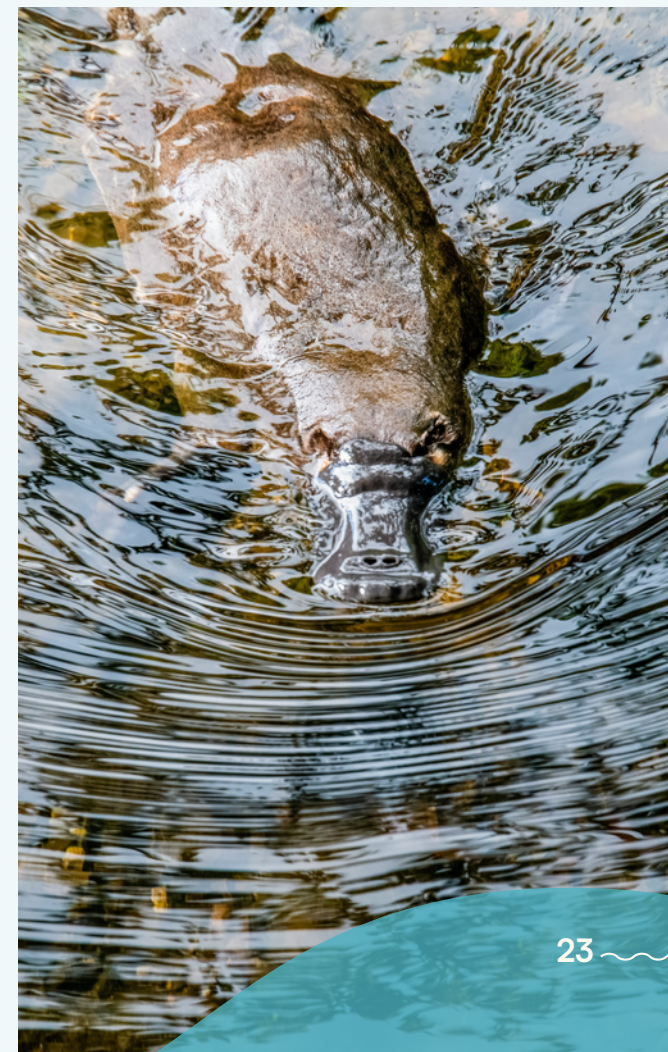
Platypus  
round table

Platypus

**“There was a very strong community presence, combined with research coming from academics, and on-the-ground responses from MCMC councils. Great work!”**

**Bernadette, Participant**

Photo: Trevor McKinnon/Unspalsh







Interns discover the world of waterbugs

# NORTH CENTRAL CATCHMENT MANAGEMENT AUTHORITY

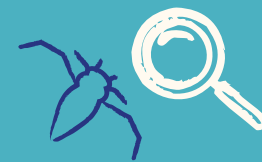
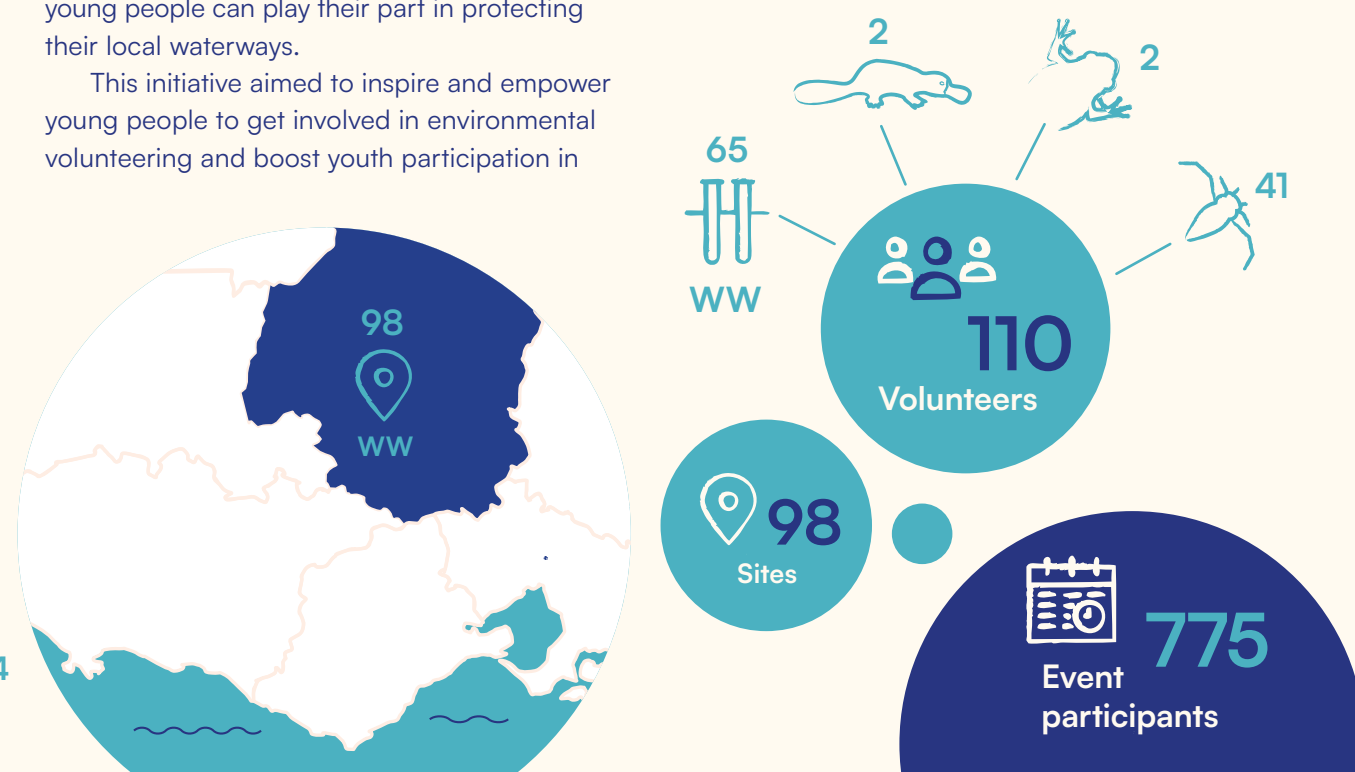
## Youth Take Over — Rally an Environmental Science Squad!

Youth Take Over is a project-based, group work experience program managed by the Campaspe Cohuna Local Learning & Employment Network, with funding provided through the Agnico Eagle Community Partnerships Program.

With support from the Victorian Government through the Environmental Volunteering New Growth Project, six young people from the Echuca region were selected to take part and 'Rally an Environmental Science Squad'. They learnt about citizen science and how young people can play their part in protecting their local waterways.

This initiative aimed to inspire and empower young people to get involved in environmental volunteering and boost youth participation in

environmental stewardship. The interns conducted a peer review of the North Central Catchment Management Authority's citizen science program and helped to create a more inclusive and engaging program. The goal was to inspire and empower youth to get involved in environmental volunteering. Over eight weeks, the project offered training and mentorship to participants, helping them develop their skills and knowledge in environmental stewardship.



Gunbower Forest Ramsar site project manager Amy Russell introduces interns to the forest.



Upon completion of their review, participants were able to put some of their recommendations into action and were supported to host an event as part of a broader Great Southern BioBlitz event; the Gunbower Forest Bat Blitz. They created an engaging experience for young locals, complete with bus transport to and from Echuca to ensure the event was accessible to young people. The interns played a key role in promoting the event, reviewing marketing materials, and planning, which contributed to its success.

The project allowed the interns to experience the Gunbower Forest (some had never been to this special Ramsar-listed site)

and to learn directly from industry leaders and ecologists.

Throughout the internship and the planning of the event, participants gained a wide range of skills including networking, public speaking, marketing and event management.

As an additional outcome following the program, one of the interns expressed interest in employment with the North Central Catchment Management Authority. She is a talented artist and has since been engaged to undertake some illustration work for the North Central Catchment Management Authority's River Detectives program.

'Bat Blitz' in the Gunbower Forest







Pesticide Watch  
sampling  
instruction



### Pesticide Watch Continues

Pesticide Watch is a citizen science program delivered by Deakin University that aims to improve understanding of the impact of pesticide residues on our waterways.

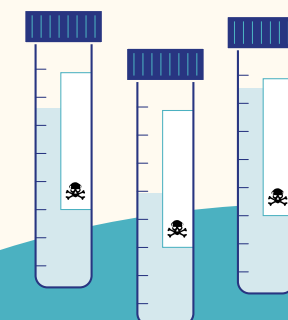
Initially participating in a pilot study in 2023, our partnership is ongoing with the researcher, who is continuing the program as part of a PhD over the next four years. North Central WaterWatch is helping to strengthen the programme's contributors by rallying our WaterWatch community to participate. This is a great addition to the usual water quality monitoring site visits by citizen scientists and a good demonstration of an effective partnership.

Through the pilot, we learnt that there are over 11,000 registered pesticides in Australia, some of which are banned in other parts of the world. Alarming, some now banned 'legacy' pesticides continue to remain in the environment. In our region, we saw some jaw-dropping results, with some sites showing residues of more than 100 different herbicides.

Herbicides accounted for over 40% of all pesticide detections, around twice the

frequency of insecticides (the next most common).

Pesticides are considered emerging contaminants, with many aspects not yet fully understood. As well as establishing a long-term citizen science initiative, Pesticide Watch also aims to educate and produce resources on pesticides and their associated risks, fostering collaboration as new information becomes available. North Central WaterWatch is pleased to be able to contribute to this important work and we thank our dedicated volunteers for taking on the extra task.



Read the Pesticide Watch 2023  
Summary Report:

[https://www.nccma.vic.gov.au/media/documents/Pesticide\\_Watch\\_2023\\_Summary.pdf](https://www.nccma.vic.gov.au/media/documents/Pesticide_Watch_2023_Summary.pdf)







Welcome to Country at the platypus and rakali event

# NORTH EAST

## CATCHMENT MANAGEMENT AUTHORITY

### Wildlife Wonders — Platypus and Rakali

An inquisitive crowd gathered at Wangaratta's Mullinmur Wetland on a balmy autumn afternoon to learn all about the fascinating platypus and rakali. The chance to learn more about these intriguing water mammals drew over 130 people of all ages to the beautiful wetland setting. The community was treated to a Welcome to Country by Uncle Dozer Atkinson who shared the traditional Bangerang origin story of Mullinmur (Bangerang language for platypus).

The event included a Q&A style presentation by local wildlife expert Ian Davidson, who kept the crowd engaged, entertained, and vying for the top spot in the best question or answer of the evening competition.

A highlight was a photo and video display from local award-winning photographer Ann Killeen, which included an incredible shot of a platypus fighting with a rakali.

Children and adults alike were delighted to discover a collection of water bugs that contribute to the diet of platypus and rakali. An engaging display of common threats to these species helped participants understand how they can help protect them.

The art and scavenger hunt activities were an absolute hit and built on the whole entertaining learning experience.



Platypus scavenger hunt



In the months leading up to the event, citizen scientists were invited to record their platypus and rakali sightings. Many people jumped at the chance to share images and experiences of sighting these animals on their adventures along the waterways in and around Wangaratta. The results were shared and discussed over a delicious BBQ dinner cooked by the dedicated volunteers of Wangaratta Landcare Sustainability.

This event highlighted the importance of healthy waterways for all species and was another successful joint activity for the partnership between the Rural City of Wangaratta, North East Catchment Management Authority and Wangaratta Landcare Sustainability.

Threats to platypus and rakali



“We really value this site for its ability to host these types of events and we are all very invested in the Mullinmur wetland as an urban waterway, keeping it healthy and continuing to restore it is a priority.”

**Corinne Hutchinson,**  
Environmental Water and  
Wetlands Officer, North East  
Catchment Management  
Authority

Community  
enjoying the  
event







WaterWatch  
volunteers  
monitoring  
Heart Morass

# WEST GIPPSLAND

## CATCHMENT MANAGEMENT AUTHORITY

### Heart Morass — an important wetland supported by dedicated volunteers

Heart Morass is a large wetland on Gunaikurnai Country at the end of Durt'Yowan (Latrobe River), part of the internationally recognised Gippsland Lakes Ramsar site. The Morass provides habitat for a range of waterbirds of conservation significance, supports threatened vegetation communities and is culturally important to the Gunaikurnai people.

At certain times, this important wetland receives fresh water diverted from the river to improve its ecological health.

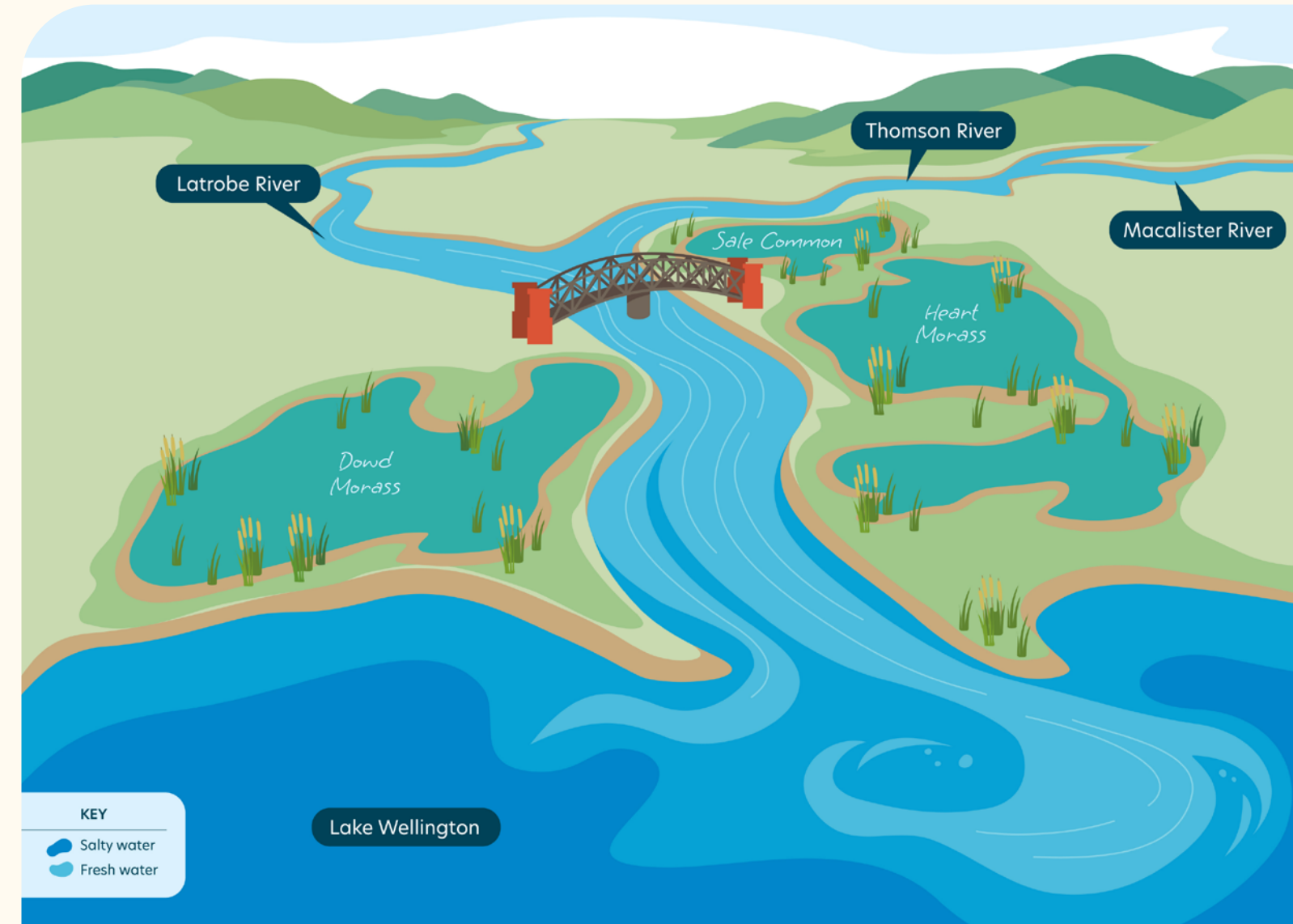
Eager volunteers from the Sale branch of Field & Game Australia work with West Gippsland Catchment Management Authority,

to provide WaterWatch data from nine sites each month. Due to the size of the wetland, this takes several hours and often involves navigating around floodwaters.

This data keeps the West Gippsland Catchment Management Authority's environmental water team informed about the water quality, which helps guide management actions to maintain the health and ecological function of this large and precious wetland.



### Heart Morass Wetland and surrounding Waterways



"It's really valuable to have the Heart Morass volunteers (we call them Heart Monitors) out there monitoring. The water quality data gives me a clearer picture of what is going on across the large and complex wetland.

The crew also adds field notes about what the vegetation is doing and if any notable birds have been seen. All of this information informs how we manage the water at Heart Morass."

Adrian Clements  
West Gippsland Catchment Management  
Authority, Environmental Water Officer





Left to right:  
Jim Stranger,  
Peter Bray and  
Tash Marty-  
Cripps (West  
Gippsland  
Catchment  
Management  
Authority)

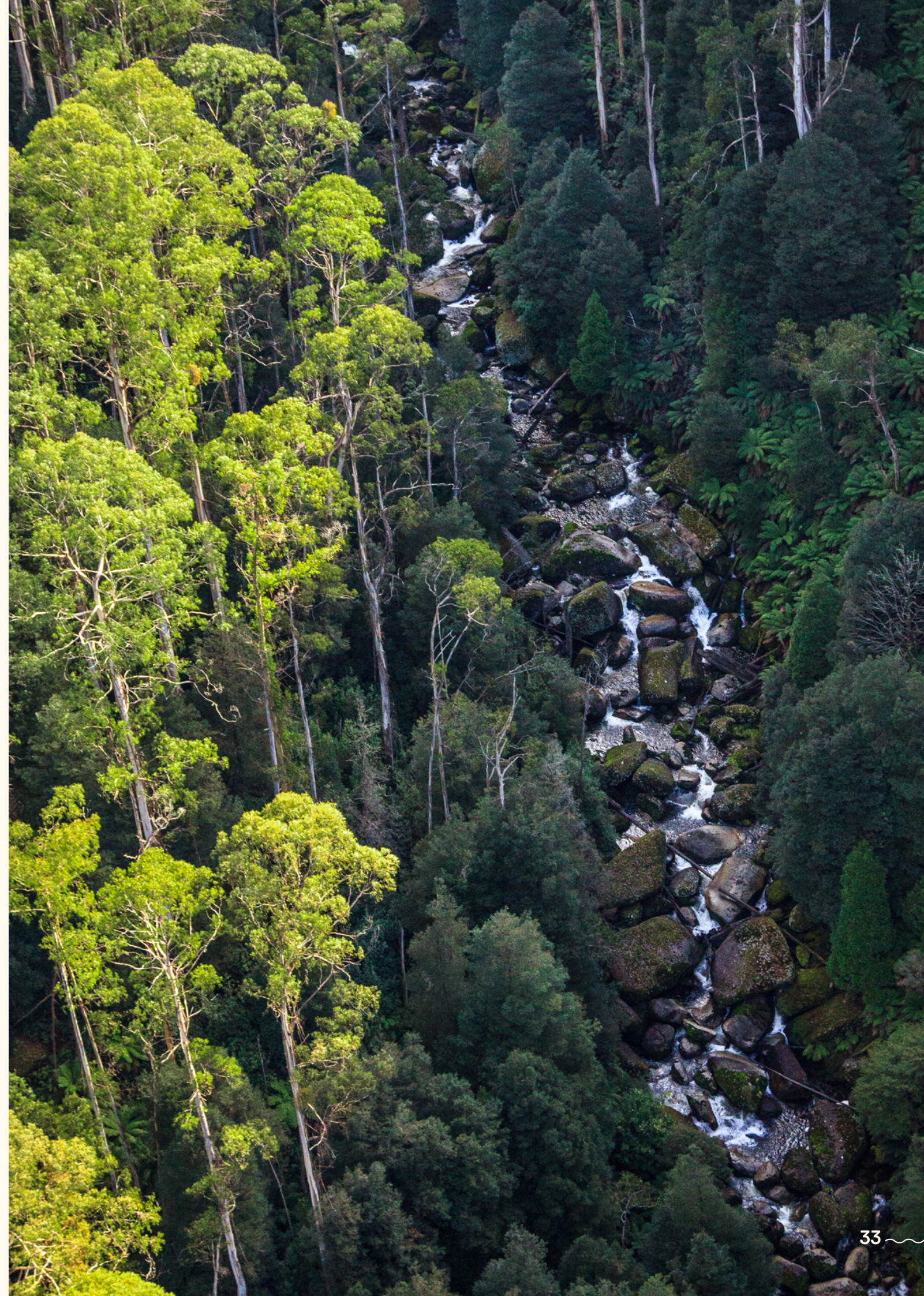
### Friends of Tyers Park

After completing 211 site visits over 16 years, the Friends of Tyers Park WaterWatch volunteers are handing in their kit. This diligent group of volunteers will now have more time to focus on other important environmental activities at Tyers Park in Gunaikurnai Country, such as maintaining the Wirilda walking trails, weed control, litter picking and other good deeds. West Gippsland Catchment Management Authority WaterWatch facilitator Tash Marty-Cripps praised the dedication of this hard-working group. “These volunteers have invested so much time and effort, diligently collecting data on the health of the Tyers River every month. This has created an incredible dataset that will be useful for years to come.

It’s also cemented a strong partnership between the Friends of Tyers Park and West Gippsland Catchment Management Authority as we work together to care for the river and the surrounding landscape.”

West Gippsland Catchment Management Authority would like to thank this group for their amazing contribution over more than a decade and hope to continue working with them on future citizen science programs.

Aerial photo of Tyers  
Park by David Stork





# DELIVERY PARTNERS

Many thanks to all the excellent delivery partners working within and alongside the EstuaryWatch and WaterWatch programmes. Your dedication and hard work are instrumental in achieving our shared goals and making a tangible impact on our environment.





## **WaterWatch Victoria**

[www.vic.waterwatch.org.au](http://www.vic.waterwatch.org.au)

## **EstuaryWatch**

[www.estuarywatch.org.au](http://www.estuarywatch.org.au)

## **National Waterbug Blitz**

[www.waterbugblitz.org.au](http://www.waterbugblitz.org.au)

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Energy,  
Environment  
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