



river

DETECTIVES

connecting young people to nature



Statewide Annual Report 2023

"This is such a great program. It provides an opening to talk about so many issues in the environment from water quality to land management to history of land use and so much more."

Chewton PS educator, North Central region

Toradale PS students at Back Creek



COMMUNITY
PARTNERSHIP
PROGRAM



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Barapa Barapa Traditional Owner Laura Kirby performing a Welcome and Smoking Ceremony at a River Detectives event.

Acknowledgement

The River Detectives program acknowledges Traditional Owners across the regions on which the program is delivered. We recognise their rich culture and spiritual connection to Country and the contribution and interest of Aboriginal people and organisations in land and natural resource management.

Program delivery

[River Detectives](#) is an engaging environmental education program that connects young people to nature by caring for their local waterway. Students participate in citizen-science, learn about the importance of healthy waterways through water quality testing and the benefits to land, plants, animals and people. Participating schools are provided with equipment, support, training and teaching resources.

The statewide River Detectives program is generously sponsored by Agnico Eagle Australia Community Partnership Program. The sponsorship enables the coordination and delivery of the program across four regions.

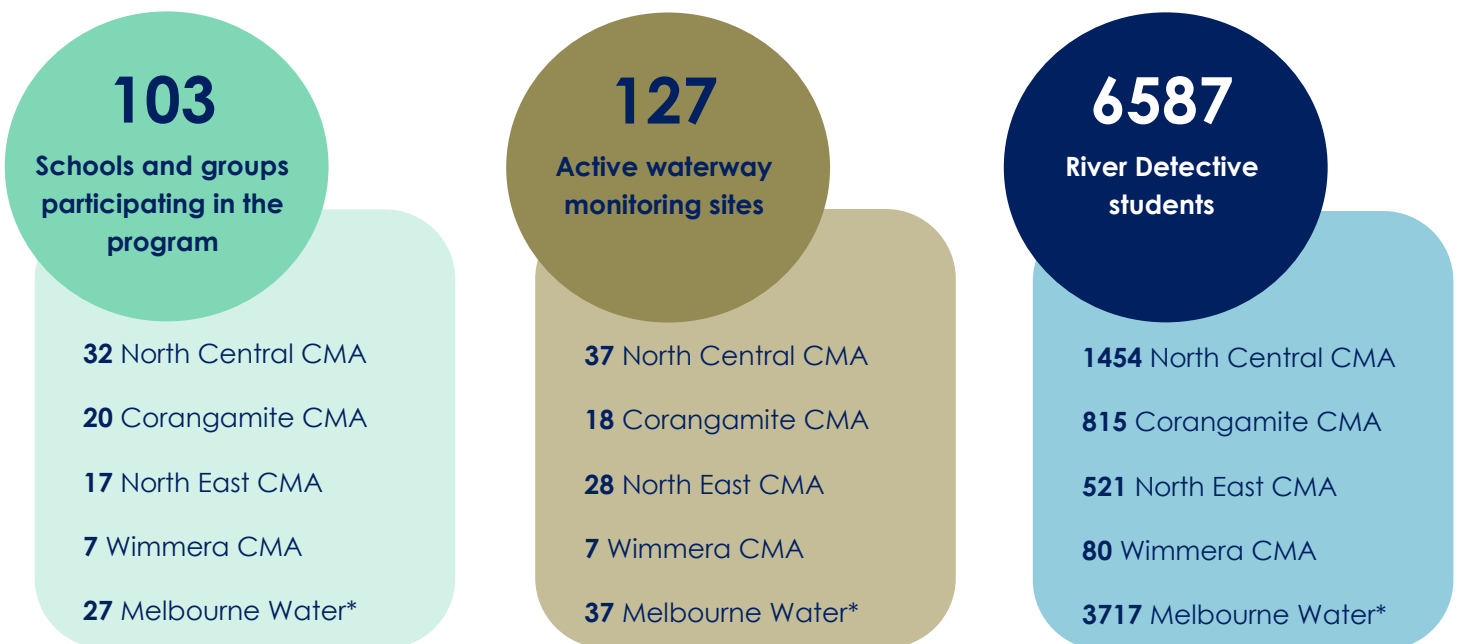
2023 River Detectives delivery partners

- North Central Catchment Management Authority (CMA)
- Corangamite Catchment Management Authority (CMA)
- North East Catchment Management Authority (CMA)
- Wimmera Catchment Management Authority (CMA)
- Melbourne Water*

*Melbourne Water’s participation in the program is secured through separate funding.

This report highlights statewide River Detectives program achievements during the 2023 school year. A visual summary can be viewed in this [video](#).

Statewide delivery snapshot



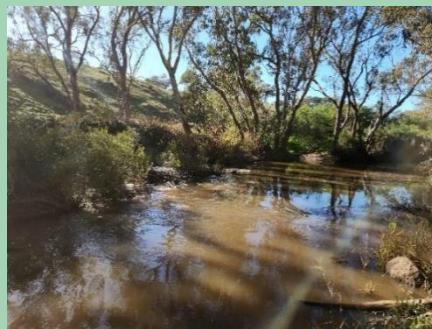
58%
Increase in statewide data entries from 2022

Statewide statistics

| Region | North Central CMA | Corangamite CMA | North East CMA | Wimmera CMA | Melbourne Water* |
|-------------------------|-------------------|-----------------|----------------|-------------|------------------|
| Registered groups | 32 | 20 | 17 | 7 | 27 |
| Active monitoring sites | 37 | 18 | 28 | 7 | 37 |
| Data entries | 80 | 26 | 25 | 8 | 49 |
| Water quality entries | 74 | 25 | 12 | 8 | 31 |
| Waterbug entries | 3 | 1 | 7 | 0 | 5 |
| Habitat assessments | 3 | 0 | 6 | 0 | 13 |



April 2023



July 2023



September 2023

Monthly site photos of the Campaspe River uploaded to the data portal by Redesdale Primary School track seasonal changes and add a visual record to water quality data.

Statewide highlights

Terms one and two highlights

Mid-year reporting

- Recording of an 'Ask the Expert' webinar, "Pinpointing Platypus".
- Addition of Pesticide Watch to the testing regime in 2024.
- Expansion of River Detectives in North East CMA region by 300 per cent.

Terms three and four highlights

Building Aboriginal histories and cultures into the program

River Detectives has welcomed Aunt Marilyne Nicholls to support students to learn about water through a First Nation's lens.

Aunt will be supported by Asha Bannon to engage with the eight respective First Nations groups across the statewide delivery area to understand how the program can support reconciliation and culturally appropriate learning. She will broker relationships with Traditional Owner groups, empower schools to build relationships and facilitate opportunities for students to spend time on Country.

Aunt will seek culturally appropriate material and resources for teachers and provide guidance for their use. A key focus going forward is developing a plan for the ongoing delivery of a cultural component to River Detectives post 2024.



A: Aunt speaking with Bridgewater PS students on the Loddon River.

B: Statewide River Detectives coordinator Nicole Howie in the webinar with ecologist Josh Griffiths.

Presented during ResourceSmart Schools' Sustainability in Schools webinar series.



Supported 133 teachers/educators to implement the program.

Held six online statewide coordinator network meetings.



Recorded 2 'Ask the Expert' webinars; "Pinpointing Platypus" and "Pesticide Watch".

'Pesticide Watch' Ask the Expert webinar

In November we were joined by Deakin University Honors student Brady Hamilton to discuss the preliminary findings from his 2023 research into the presence and prevalence of pesticide in waterways across the eastern seaboard. Approximately 30 River Detectives schools opted into this program, collecting six water samples across the year for testing in Deakin's lab. Students from around the state were given the opportunity to submit questions for Brady and these were posed during the recorded session.



PESTICIDE WATCH

- 110 sites nationally
- Volunteer groups, schools, CMAs, Traditional Owners and private industry
- Monthly water sample collected for six months of 2023

Q "How many waterways have you found that have pesticides in them?"

Cornish College Year 5 student

Q "Have you found anything alarming since you started the project? Or is it all as expected?"

Wodonga Middle Years College Year 8 student

Q "If we know pesticides are harmful, why are we still using them?"

Cornish College Year 5 student

The widespread use of pesticides to enable food production presents a conundrum that Brady outlined in this 45-minute recording suitable for middle primary – secondary students.

River Detectives schools can find out the answers to these insightful questions and start thoughtful conversations with students by viewing the [webinar recording](#).

Q "Are there organic non-toxic pesticide alternatives?"

Wodonga Middle Years College Year 8 student

Brady's research will be published and available at www.facebook.com/PesticideWatchDeakin



North Central CMA region

Coordinator Nicole Howie



2023 River Detectives participation

| | |
|--|------|
| Number of River Detectives schools registered | 32 |
| Number of students participating in the River Detectives program | 1454 |
| Number of teachers/educators being supported | 44 |

2023 River Detectives activity

| | Number | Participants |
|---|--------|--------------|
| Professional development sessions for educators | 17 | 60 |
| Coordination of state-wide network meetings | 6 | N/A |
| Delivery of school incursions | 23 | 864 |
| National Water Week event | 1 | 80 |
| Story of Change published | 1 | N/A |



Terms one and two highlights

- Strategic learning focus areas chosen by schools.
- Attendance at the Beacon Careers Expo on May 9.
- Presenting to Landcare facilitators to encourage groups to consider their involvement in the River Detectives program as a vehicle to connect with schools.
- Daylesford Dharma School receiving a North Central CMA Regional Recognition Award for contributing to the outcomes of the North Central Regional Catchment Strategy 2021-27 through their River Detectives learning and on-ground work at Cornish Hill Reserve.

Terms three and four highlights

Macroinvertebrate Professional Development Sessions

These sessions for teachers/educators, held in spring each year, enable hands-on exploration of waterbugs.

Teachers immediately see the value in waterbug surveys as an engaging way to gather further citizen-science data and learn about the needs and adaptations of these little-known creatures and their place in the food chain.

Sessions were offered to the broader community with staff from early childhood, camp facilities and schools not currently registered in the program attending. This resulted in two new schools signing up for River Detectives in 2024.

The slideshow was sent to all schools to refresh teachers' macroinvertebrate sampling skills and we noticed an increase in demand for waterbug incursions.



Session held at Epsom Primary School

"The waterbug PD and subsequent lessons we implemented at school were a big hit with staff, students and school visitors!"

Staff from Bullarto Primary School

National Water Week event

On Saturday October 21, River Detectives staff attended an event at the Bendigo Library. Aiming to connect the community with the 2023 theme of 'United by Water', staff joined North Central WaterWatch, Coliban Water and the City of Greater Bendigo to offer free, family-friendly water activities.

Positioned in front of the impressive aquarium showcasing our hopes for Bendigo Creek, families were invited to try waterbug identification, solve a stormwater puzzle and have a go at water quality testing.



The event was an opportunity to 'come and try' the program before the 2024 registration period opened. Great conversations were had with teachers and parents of prospective River Detectives schools.



Wetland Wonderland art exhibition

The River Detectives program contributed to an art exhibition at the Cohuna Art Gallery during October. A beautiful array of photos highlighted the flora, fauna and work of the North Central CMA in increasing the health of wetlands in the region.

During a River Detectives excursion to Lake Meran, grade 2/3/4 students from St Joseph's PS Kerang engaged in waterbug sampling, a flora/fauna walk and nature journaling. Their insightful drawings and reflections of Lake Meran were included in the art exhibition.



Story of Change

Daylesford Dharma school's ten year association with the River Detectives program has been [documented](#) to showcase the impact the program has made on staff, students, school and broader community.

The program is a perfect fit with the school's buddhist philosophical approach to teaching and learning and has been at the heart of their relationship with Friends of Cornish Hill Landcare Group.



"River Detectives keeps environmental learning front and centre in staff and children's minds throughout the year and over the years."

Tanya Wiggins, Learning Manager, Daylesford Dharma School

Demonstrating water quality testing during a Kids Teaching Kids school event at Cornish Hill Reserve Daylesford.

School incursions

North Central CMA River Detectives coordinator Nicole Howie delivered fourteen school visits including with primary schools and secondary schools and on site at waterways. Topics included waterbugs, flora/fauna, urban stormwater, water quality and cultural perspectives of waterways. Incursions provide a valuable experience and often lead to further learning.

Disappointing waterbug results at the Castlemaine Steiner School's wetland instigated a student project to make and install floating aquatic vegetation pontoons on the school wetland. Annual waterbug surveys will determine if habitat improvements influence bug results. Grade 3 Marist College Bendigo students used content from their River Detectives incursion to produce a mural of their school wetland that was displayed publicly.



Castlemaine Steiner School's vegetation pontoons.



Marist College mural.



Testing water quality with Marist College students.

"The hands-on aspect of the incursion was invaluable. Afterwards, classes had time to reflect on their learning and express their 'wonderings' about what further learning they would like to explore."

Kyneton Primary School teacher



Camp Hill PS prep student identifying bugs.



Joseph's PS Kerang on site at Lake Meran.

Terms three and four incursions

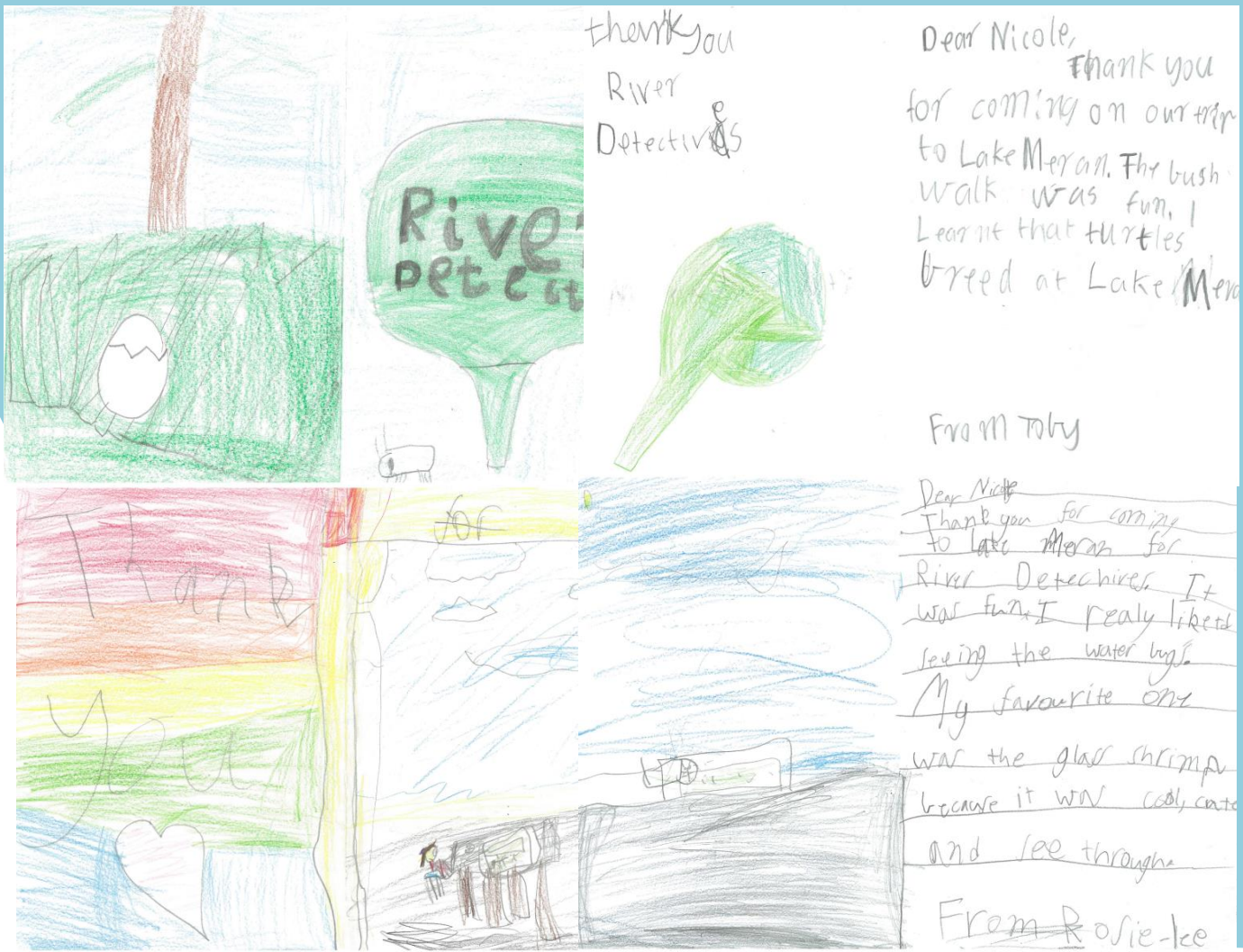
| School | Date | Year level | Students |
|--------------------------------|--------------|--------------|------------|
| 1. Taradale Primary School | 12 July | 5-6 | 17 |
| 2. Castlemaine Steiner School | 7 August | 3-4 | 24 |
| 3. Crusoe College | 16 August | 10 | 19 |
| 4. St Joseph's PS Kerang | 29 August | 2-4 | 40 |
| 5. Camp Hill Primary School | 30 August | Prep | 50 |
| 6. Marist College Bendigo | 4 September | 3 | 72 |
| 7. Langley Primary School | 5 September | 3,5 | 3 |
| 8. Woodend Primary School | 12 September | 4 | 60 |
| 9. Marist College Bendigo | 10 October | 3 | 57 |
| 10. Daylesford Dharma School | 25 October | 5-6 | 8 |
| 11. Bullarto Primary School | 13 November | P-6 | 20 |
| 12. Bridgewater Primary School | 20 November | P-6 | 9 |
| 13. Victory Christian College | 21 November | 9-10 | 25 |
| 14. Epsom Primary School | 5 December | 2-4 | 55 |
| | | Total | 459 |



"My favourite part was scooping out the little bugs with spoons, the glee of finding rare ones like the stick bug and the lesson that all creatures are important."

Grade 4 student Woodend Primary School

Dear Nicole,
 Thank-you for organizing our River Detectives Excursion.
 We appreciate it so much.
 From 2/3KD and 3/4AM
 S.+ Joseph's Primary School Kerang



Challenges

Each year there are schools who register but find it difficult to implement the program as they'd hoped and drop off the radar. The goal is to devise ways to re-engage them or to replace them at mid-year intakes with schools who have greater capacity to be involved.

Plans for 2024

Next year River Detectives plans to support a similar number of schools with priority given to schools who:

- Align with one of the North Central CMA's projects, including:
 - Reimagining Bendigo Creek Citizen Science Project
 - A Healthy Coliban Catchment
 - RiverScan
- Align with North Central Regional Catchment Strategy 2021-27 aspirations.
- Link River Detectives incursions with North Central CMA events such as Waterbird Month – February Takes Flight.

Communications and media in terms three and four



The collage shows a series of social media posts from 'North Central Chat' for each month from July to December 2023. Each post includes the River Detectives logo and various content such as:

- July 2023:** 'Make NADOC Week the time more about our elders'.
- August 2023:** 'River Detectives and Lam powerful partnership'.
- September 2023:** 'Celebrating success and planning ways to connect with a broader audience'.
- October 2023:** 'Out and about in schools'.
- November 2023:** '2024 River Detectives Registrations'.
- December 2023:** 'WaterWatch Victoria' and 'Pesticide Watch!'.

July, August, September, October, November, December 2023

North Central CMA
17 July ·
Our River Detectives team dropped in on Taradale Primary School Grade 5 and 6 students for a program induction and a visit to nearby Back Creek.

We spoke about why waterways are important, learnt about where the creek sits in the and how it connects to other waterways, and had some fun testing water quality. What an awesome morning!



North Central CMA
24 July ·
Great spot for some detective work

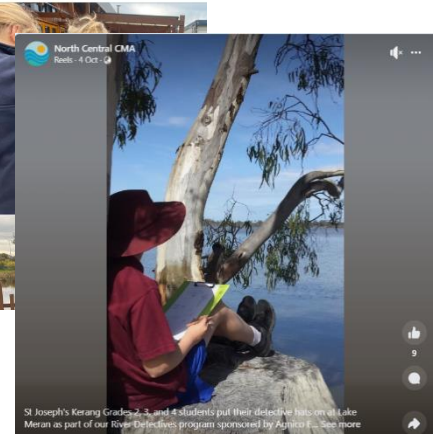
North Central CMA
31 August ·

Here's a great FREE chance to dive into waterbugs and update your skills on teaching macroinvertebrate sampling to your students, group members, or other volunteers. Get in quick. The sessions begin next week in Epsom, Woodend, and Kerang.



North Central CMA
27 September ·

Just before school holidays began, our River Detectives team had some great fun with Marist College Bendigo Grade Threes at their amazing school wetland. They tested water quality and learnt what to look for when recording their results. And we can't wait to see their wetland mural when it's finished... See more



North Central CMA
17 October ·

Our River Detectives team dropped in on all 4 students of Langley Primary School to help them test the water quality of the nearby Campaspe R. They learnt how to test for salinity, turbidity, and doing it



North Central CMA
18 October ·

Teaching the teachers is an important part of our River Detectives program. Our recent workshop was attended by current and interested teachers. Visit us at the Bendigo Library from 10am to 1pm on Saturdays with a River Detectives teacher or WaterWatch volunteer... See more



North Central CMA
22 October ·

Want to know more about becoming a WaterWatch volunteer or River Detectives host? Visit us at the #NationalWaterWeek event at the Bendigo Library from 10am to 1pm on Saturday and come and try your hand at discovering what's underneath the surface.



North Central CMA
30 November at 09:53 ·



North Central CMA
4 December at 20:02 ·

Registrations are OPEN for schools and youth groups to sign up to the 2024 River Detectives program. Use the Apply Now link at www.riverdetectives.net.au before February 14. North East CMA Wimmera CMA Corangamite Catchment Management Authority Melbourne Water Agnico Eagle Australia Community Partnership Program



North Central CMA
a day ago ·

River Detectives is a FREE and flexible environmental education program designed to understand, appreciate and care for their local waterway and catchment through cross-curricular, citizen-science activities.

Be inspired by @Bridgewater on Loddon Primary School - Victoria and sign up for the 2024 program by Feb 14 at www.riverdetectives.net.au



YOUTUBE.COM
Bridgewater Primary School

North Central CMA
a day ago ·

What do schools across the state love about? Sign up by Feb 14 to get your school/youth group into the 2024 program by Feb 14 at www.riverdetectives.net.au



YOUTUBE.COM
Bridgewater Primary School

We love all of it! The kids loved having hands-on practical experience in a real-world context.

North Central CMA
16 December 2023 at 12:00 ·

Did you know the River Detectives program is offered in five Victorian regions? It's FREE, fun and flexible environmental education program suitable for cross-curricular, citizen-science activities.

Sign up for the 2024 program by Feb 14 at www.riverdetectives.net.au



YOUTUBE.COM
Bridgewater Primary School

is currently rolled out in five regions across Victoria

North Central CMA
22 December 2023 at 20:02 ·

River Detectives is a FREE and flexible environmental education program inspiring young people to understand, appreciate and care for their local waterway and catchment through engaging, cross-curricular, citizen-science activities.

Be inspired by Deans Marsh Primary School and sign up for the 2024 program by Feb 14 at www.riverdetectives.net.au



YOUTUBE.COM
Bridgewater Primary School

a substantial commitment to environmental education

17
North Central CMA social media posts reaching 1000's of users

433 Likes
36 shares

Corangamite CMA region

Coordinators Deirdre Murphy and Kristen Lees



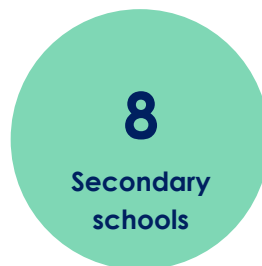
2023 River Detectives participation

| | |
|--|-----|
| Number of River Detectives schools registered | 20* |
| Number of students participating in the River Detectives program | 815 |
| Number of teachers/educators being supported | 20 |

2023 River Detectives activity

| | Number | Participants |
|---|--------|--------------|
| Professional development sessions for educators | 5 | 7 |
| Attendance at state-wide network meetings | 3 | N/A |
| Delivery of school incursions | 10 | 407 |
| National Water Week event | 1 | 50 |
| Story of Change published | 1 | N/A |

* Serendip Sanctuary is counted as one River Detectives group but they deliver to multiple schools that visit them throughout the year.



Thanks to Kristen Lees

In November, Kristen moved into a different role with the Corangamite CMA after being involved in River Detectives since 2016 when the region first joined the program. Kristen has been a passionate, supportive and highly skilled coordinator to schools across the region and a wonderful ambassador for the program.

Terms one and two highlights

- Delivery of online data entry training for teachers.
- Attendance at the Ballarat Begonia Festival visited by 2000 community members.
- River Detectives event with local Landcare Group at Moorabool River on March 9.

Terms three and four highlights

National Water Week

On October 18, River Detectives staff partnered with Central Highlands Water to celebrate National Water Week with 50 grade 3/4/5 students from Caledonian Primary School at Kirks Reservoir Park, Gong Gong.

Caledonian Primary School joined the program to learn about the health of the Yarrowee River wanting to capture students' interest with an inquiry in the outdoor learning environment.

At this event, students were involved in macroinvertebrate sampling, the Story of A River activity and a book reading.

"We have a number of disengaged students who could gain benefit from investigation style learning and be able to share their success with the school community."

Caledonian Primary School teacher



These experiences explored this year's National Water Week theme of 'United by Water' by highlighting how water is essential for life and has a vital role in connecting us all.

Collaborating with Central Highlands Water in National Water Week is a successful annual occurrence for the Corangamite CMA River Detectives team.

School incursions

In 2023, Waterbug Discovery was the standout incursion activity. Waterbugs spend part or all of their lifecycle in the region's creeks, rivers and wetlands so their presence provides a snapshot of waterway condition.

During spring, six primary and secondary schools requested waterbug activities proving this topic is more popular in terms three and four than in the autumn. Three spring events occurred at school wetlands, local rivers and wetland reserves while three occurred in school classrooms.

As a classroom incursion, a River Detectives Waterbug Discovery begins with the arrival of trays, magnifiers and a bucket of water full of life. The sorting and identification of waterbugs is a hands-on experience where students use observation and counting skills to learn about diversity and abundance and an overall score for the site is obtained.



For schools with timetable flexibility and a nearby waterway, a waterbug activity that begins with the on-site collection of waterbugs provides a greater in-depth experience.

Students understand the diverse habitat requirements of waterbugs and appreciate the value of these animals in the food chain. Students also learn about the scientific method and equipment used. Then the sorting and identification begins as it would in the classroom approach.

L: Cape Clear PS students sample waterbugs at Rokewood Reservoir.



Freshwater Creek Steiner School students sample waterbugs at the school wetlands.

Story of Change

Timboon P-12 School's River Detectives journey has been featured in the Corangamite CMA region's 2023 [Story of Change](#).

This rural school of 470 students has been lauded for its Timboon Agriculture Project (TAP), described by the Minister for Education as "a best practice example of what can be achieved with a strong partnership between schools, industry and community."

After concern about blue-green algal blooms and fish deaths in 2022, the school forged connections with several local environmental groups to develop and implement a plan to rejuvenate the Power Creek Reserve over two school terms.

This initiative, boosted by joining River Detectives and monitoring the water quality of Curdies River during 2023, has led to a huge variety of multi-curricular activities being conducted across the entire school. Their story is a wonderful example of how River Detectives can be embedded into a school culture that places value on sustainability, community connections and empowering students.



L: Year 10 Geography students testing Curdies River water quality with Deirdre.



A: Year 1/2 River Detective students in action.

"We haven't created something new with River Detectives, but we have been able to super-charge a new focus within the Timboon Agriculture Project across year levels and curriculum areas, on the Curdies catchment, river and estuary."

Timboon P-12 School TAP coordinator



R: Prep/1/2 students bringing the Rainbow Serpent to life.



L: Year 1/2 students investigate the water cycle and how water flows across a catchment

Terms three and four incursions

| School | Date | Year level | Students |
|------------------------------------|------------|--------------|------------|
| 1. Skipton Primary School | 20 July | 3-4 | 30 |
| 2. Freshwater Creek Steiner School | 28 July | 5-6 | 25 |
| 3. St Brendan's PS Coragulac | 2 August | 3-4 | 50 |
| 4. Cape Clear Primary School | 8 August | P-4 | 8 |
| 5. Clairvaux College | 14 August | 3-4 | 100 |
| 6. Clonard College | 9 October | 7 | 100 |
| 7. Tap's On 23 with Timboon P-12 | 9 November | 2-4 | 72 |
| School and Simpson PS* | | Total | 385 |

*non River Detectives school

St Brendan's PS Coragulac Term 3, Week 5 newsletter article about their River Detectives incursion (right) and wire art waterbugs inspired by River Detectives experiences. (below)



River Detectives

Last Friday, our senior school "River Detectives" boarded the school bus and headed to the Gellibrand river that flows through the Carlon family's property.

They engaged in water quality testing using a range of scientific techniques. They tested the ph: acidic/alkaline levels, turbidity, salinity, temperature and phosphorus levels.

We will visit this site again later next term, compare the results and investigate what happens to water quality as the seasons change.

We will also compare water samples taken from other water sources such as underground water and tank water.

The children really enjoyed the outdoor classroom and the relevance this topic it has to their lives.



Challenges

Changes in citizen science staffing at Corangamite CMA impacted how the River Detectives program was delivered. A River Detectives coordinator has a unique set of skills and aims to maximise classroom engagement in the specialised field of environmental education. This was overcome by employing a casual staff member to assist with the delivery of the program, particularly waterbug incursions.

Some Landcare Groups in the Corangamite CMA region are involved in WaterWatch (a River Detectives equivalent for the community). To connect with local schools they provide experiences in water quality testing or macroinvertebrate sampling for students. This is a private arrangement with neither the Landcare Group nor schools registered as River Detectives participants. There is an opportunity for the River Detectives program to become the vehicle that enhances this arrangement, providing support to Landcare members through training and networking opportunities with River Detectives coordinators and colleagues. The schools involved will benefit from the loan of equipment, their own data portal account to record water quality results over time and a raft of teaching and learning resources.

Plans for 2024

Corangamite CMA will maintain the program in 2024 and look forward to supporting teachers with water testing kits, professional development sessions and incursions.

There will be a new staff member undertaking induction and training to lead the program in 2024. Existing experience within the citizen science team will ensure a smooth transition.

Focus will be on educating Landcare Groups and schools who currently enjoy a partnership to sign up and receive the benefits of being registered River Detectives participants. Activities and events that encourage partnerships between schools, Landcare and their communities will be encouraged to raise awareness of waterway health.



Communications and media in terms three and four

How Healthy is our River?

Article: Sylvia Maseyk
Pics: Kerry Butcher

On Saturday 4 November, Winchelsea Land & River Care (WLRC) volunteers learnt how to test the quality of our river water.

Our trainer was Deirdre Murphy, Regional Citizen Science Project Officer from Corangamite Catchment Management Authority (CMA). Deirdre separated the training into two strands: diversity and abundance of water bugs, and chemical testing.

While the adults in attendance might have thought the water bugs part was 'for the kids' it was clear that everyone thoroughly enjoyed sifting through the specimen trays to reveal freshwater shrimps, mayflies, water boatmen, and caddis fly larvae that disguise themselves as sticks and leaves. By categorising and counting all the bugs according to an old school pencil-and-paper algorithm, we learnt that the Barwon at Winchelsea is in good to very good health: we have a diversity of bugs, including some very sensitive species.

Then the chemistry lesson began. We learnt how to test for water turbidity, acidity, oxygenation, salinity, and phosphorous content: using a science kit that is retained locally for monthly measurements. Again the tables were turned on the adult learners; some of the kids had already 'done all this at school' as part of the River Detectives program at Deans Marsh Primary School.

We discovered that while the Barwon at Winchelsea has good acidity and electrical conductivity levels, the phosphorous and turbidity was a little too high. This can be caused by stormwater, but in the absence of recent storms, is likely caused by organic compounds entering the waterway: fertilisers, car washing into stormwater drains, and wait for it... dog poo. Please pick up after your pet. It has ramifications bigger than someone else stepping in it.

Data collected by volunteers is added to the Waterwatch Victoria data portal (www.vic.waterwatch.org.au). This publicly accessible website contains statewide data contributed by individuals, landcare groups, schools and clubs, and is used by researchers all over the world.

(continues next page)

WLRC volunteers have contributed to the care of Winchelsea's riverbank environment since 1995. Landcare began in Australia in the 1960s and brings together the knowledge of farmers, conservationists, scientists and first nations people to improve both farm quality and natural ecosystems.

At 9:00am on the first Saturday of almost every month (December 2 is our next), the Winchelsea group gathers at Guye Reserve in Barwon Terrace before heading off to plant local species and remove weeds along the river. After work, a coffee and chat keep us all connected. If you're new to Winchelsea, it's a great way to meet other nature lovers.

The River Detectives schools program opens again for registration on 15 November.

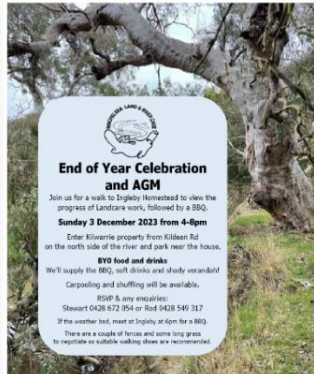


pH testing the river water

1
Article in local print media



Deirdre Murphy (far left) training Winchelsea Land & Rivercare volunteers in water bug identification



November 2023 Winchelsea Star

NOTICE OF AGM
Winchelsea Land and River Care
Annual General Meeting
Sunday December 3rd 2023 at 6pm
to be held at
"INLEDY" - Ingleby Rd Winchelsea
Business
- President's report
- Financial report
- Election of Committee

18 Winchelsea Star 14 November 2023

Winchelsea Star 14 November 2023 19

Corangamite Catchment Management Authority · Follow
11 August · 🌐

We love teaching the next generation of Citizen Scientists!
#RiverDetectives



Cape Clear Primary School · Follow
8 August · 🌐

Today the P-2's became River Detectives! We had lots of fun exploring all of the animals that live in the Rokewood Reservoir. Thank you to Deirdre from Corangam... See more

2
Corangamite CMA social media posts reaching 1000's of users

Corangamite Catchment Management Authority · Follow
11 December at 10:37 · 🌐

River Detectives is an amazing project that we love being part of. If you're interested in getting your school involved, go to www.riverdetectives.net.au and click on the APPLY NOW tab!



It's just wonderful learning and leadership in action.

YOUTUBE.COM
Bridgewater Primary School River Detectives
Bridgewater Primary School is using River Detectives as part of their outdoor learning program.

North East CMA region

Coordinator Anna Hall



2023 River Detectives participation

| | |
|--|-----|
| Number of Schools registered for River Detectives | 17 |
| Number of students participating in the River Detectives program | 521 |
| Number of teachers/educators being supported | 22 |

2023 River Detectives activity

| | Number | Participants |
|---|--------|--------------|
| Coordination of teacher professional development sessions | 4 | 8 |
| Attendance at state-wide network meetings | 6 | N/A |
| Delivery of one school incursions | 6 | 141 |
| Production of Story of Change | 1 | N/A |



Thanks to Anna Hall

Anna rejuvenated the River Detectives program in the North East CMA region during 2023. Anna grew the program from five schools to seventeen with her enthusiasm and drive, making a real impact on schools as she capably supported them through their inaugural year. We thank Anna for her efforts and wish her well in her future endeavours.

Terms one and two highlights

- Growth in the number of schools by 300%.
- Enthusiasm of new schools joining the program.
- Training provided to prepare Anna for her role supporting schools.

Terms three and four highlights

The North East CMA was abuzz with enthusiasm and activity as schools received their water quality testing kits, learned about testing procedures and explored resources, equipping them with the confidence to educate students about waterways and catchments. It was wonderful to observe schools initiating and maintaining their River Detectives journey, allowing students to evolve into citizen scientists and gain a deeper understanding of their surrounding environment.

Coordinator professional development

New to the role in early 2023, North East CMA River Detectives Coordinator Anna actively pursued training opportunities to enhance her skills and knowledge to effectively deliver the program.

Anna shadowed Nicole Howie, North Central CMA River Detectives Coordinator on September 4. Together they ran a school incursion at Marist College Bendigo and conducted a macroinvertebrate training session for teachers held at Epsom Primary School in the late afternoon.



This collaborative experience provided valuable insights allowing Anna to develop a more comprehensive understanding of the River Detectives role and the role of others within the broader program.

On October 22, Anna attended a waterbug training session with freshwater ecologist Dr John Gooderham organised by Wodonga Urban Landcare

Network. Beyond the educational aspect, the event provided the chance to network with local Landcare groups. The interaction facilitated knowledge exchange and served as a platform to actively advocate for the River Detectives program within the community.



Participation in 'Ask the Expert' webinars

North East schools demonstrated their ongoing commitment to seek expert insights by actively engaging in November's Ask The Expert webinar. Wodonga Middle Years College Year 8 students submitted insightful questions for the Pesticide Watch webinar featuring Brady Hamilton (Deakin University honors student).

"How many samples have you tested since starting this project?"

"Are you likely to find more pesticides in waterways around farms/agricultural areas or in urban areas?"

"Do pesticides build up in the animals that live in waterways, such as fish? What happens if we eat these fish?"



Schools adapting the program to meet their unique needs

The most powerful learning experiences come when schools embed the River Detectives program into school life and utilise resources in innovative ways to suit their situation. Dederang Primary School had the fantastic idea of making the River Detectives waterbug identification chart into a large sign which was erected the sign by their school creek.



"The students helped to install the sign next to our water monitoring station and refer to it constantly when sampling at our school creek."

Dederang Primary School staff member

Story of Change

Rutherglen Primary School joined River Detectives for the first time in 2023 journey and their [story](#) describes how they quickly embedded water quality testing into their middle years integrated curriculum.



School staff saw River Detectives as a fantastic opportunity for students to engage in meaningful and relevant learning opportunities about their local environment that covered a number of concepts across the curriculum.

“Lake King is well known by all students. It would be wonderful to learn more about water quality, habitat, fauna and ways that they, and the wider community can care for this resource. We were involved with Rutherglen Landcare in planting 100s of plants around the Lake when it was developed, so to continue to have an involvement other than a recreational one would be great. Knowledge and engagement is key in them respecting this water resource now and in future.”

Rutherglen Primary School staff member

School Incursions

After spending the first half of the year consolidating and growing the program, travelling to six schools across the region in terms three and four provided an excellent chance for the North East River Detectives coordinator to connect with teachers and students, reinforcing the integration of the program into the schools' curriculum.

During these sessions, students and staff participated in water quality testing, macroinvertebrate sampling, art activities, nature exploration, habitat surveys, and had the opportunity to meet a Project Officer from the North East CMA.

Connecting other CMA staff with schools is a great way for natural resource management projects to extend their reach and for students to understand practical restoration activities occurring in their area.



Incursion with Rutherglen PS.

At Grace Christian College (right), year seven and eight students were introduced to water quality testing processes for temperature, pH, salinity, turbidity and reactive phosphorus.



At Beechworth Primary School (below), year three and four students enjoyed a rotation of activities; water quality, waterbugs, habitat/nature studies and catchment health. Students created mandala art displays using vegetation from the area and designed murals featuring healthy and unhealthy waterways.



All thirty-one students of Wandiligong Primary School (left) engaged in citizen science to learn the skills needed to monitor Morses Creek in Alpine Park Wandiligong.

Year three and four students at Rutherglen Primary School and the whole cohort from both Dederang and Mitta Mitta Primary Schools thoroughly enjoyed their incursions during the spring months.



Terms three and four incursions

| School | Date | Year level | Students |
|-------------------------------|--------------|--------------|------------|
| 1. Grace Christian College | 24 July | 7-8 | 33 |
| 2. Beechworth Primary School | 7 August | 3-4 | 24 |
| 3. Rutherglen Primary School | 31 August | 3-4 | 25 |
| 4. Wandiligong Primary School | 11 September | P-6 | 31 |
| 5. Dederang Primary School | 11 September | P-5 | 16 |
| 6. Mitta Mitta Primary School | 20 November | P-6 | 12 |
| | | Total | 186 |

“The kids loved having hands-on practical experience in a real-world context. The main highlights were the visits to the lake every fortnight and the waterbug incursion with NECMA.”

Rutherglen Primary School staff



Challenges

Teachers in 2023 are consistently faced with high workloads, leaving them time-poor in various aspects of their role. The North East Coordinator found it was difficult for River Detectives teachers to maintain correspondence throughout the year. Understanding the demanding nature of educators' schedules, efforts will continue to focus on fostering responsive and flexible communication and collaboration, in recognition of the constraints imposed by the busy nature of the teaching profession.

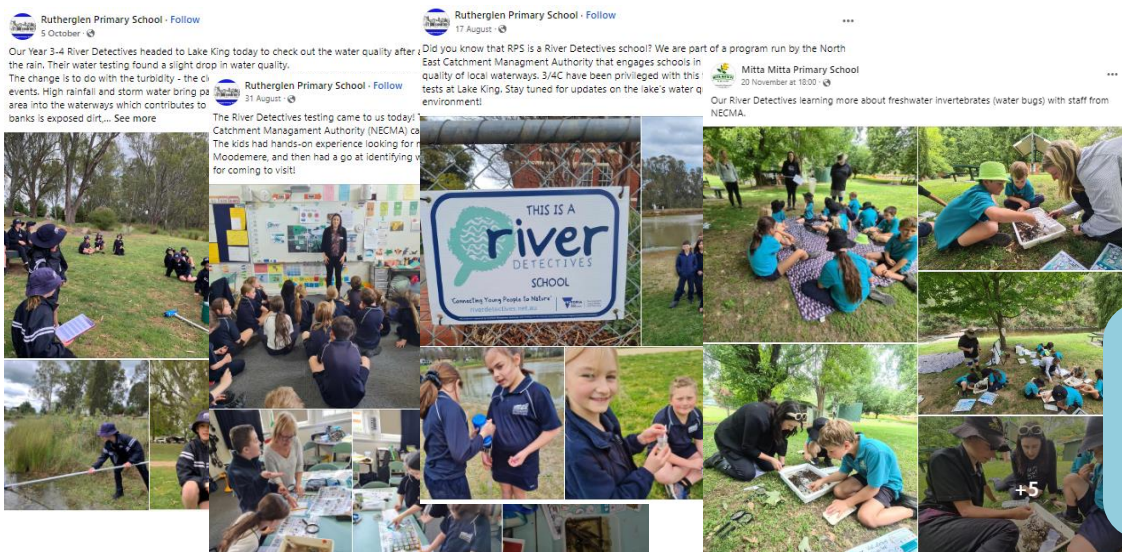
Plans for 2024

The North East is recruiting to fill the Citizen Science Support Officer role, aiming to have the position filled by early 2024. Given the meticulous preparation invested in structuring the program throughout 2023, the new Project Officer will be well-positioned to seamlessly step into the role and sustain the momentum generated during the current year.

In 2024, should the demand for incursions increase, there is a potential concern that a part-time River Detectives Coordinator might find it difficult to meet schools' needs. However, within the North East CMA there is a pool of Project Officers who have expressed a willingness to assist in delivering incursions. This collaborative approach will enable the program to meet the demands and interest of schools in the region.

This initiative will also forge connections with several on-ground works projects, thereby creating a more integrated and impactful approach to environmental conservation and stewardship throughout the community.

Communications and media in terms three and four



4
Social media posts
on school pages

82 Likes
4 shares

River Detectives Excursion



On Monday, 3/4P were lucky to be able to attend an excursion to Lake Sambell run by NECMA (North East Catchment Management Authority), as part of our River Detectives Program. The session was run by Anna and Hannah from NECMA. The students participated in a rotation of activities, including making a nature mandala, drawing healthy and unhealthy waterways, waterbug sampling and water testing.

The students learnt how to complete the water testing and how to use the equipment that measures electrical conductivity, turbidity, pH, reactive phosphorous, temperature and dissolved oxygen. The water testing revealed that at the moment the quality of the water in Lake Sambell is excellent.

Our next step is to get the students proficient and performing these tests and then we can work on comparing the water quality of Lake Sambell to other water bodies.



The other highlight for the students was the Waterbug testing. Hannah showed us the correct technique for catching the waterbugs with the net and gave us some tips on the best places to find the waterbugs. The students used the Identification charts to work out the names of the waterbugs and to see the level of sensitivity that the bugs have to water pollution. We found a range of waterbugs including Waterboatmen, freshwater snails, backswimmers, glass shrimps and Damselfly larvae.

With better around the corner, we are looking forward to getting down to Lake Sambell regularly to continue our monitoring.

Beechworth Primary School's term 3, week 5 newsletter article about their River Detectives visit.

Below: Beechworth PS students test water quality.



"I feel like this program was something the students got a lot from. They don't get many opportunities to do their learning outside of the school environment. I think it leads to them looking after their environment better as well. It gives different students (not necessarily academic) an opportunity to shine.

Personally, this was my first year of teaching STEM and the first year it was taught at my school, so there was a lot of learning to do and I didn't have the time to put into River Detectives that I would have liked, so I'd like to have another go next year!"

Beechworth Primary School staff

Wimmera CMA region

Coordinator Jeanie Clark



2023 River Detectives participation

| | |
|--|----|
| Number of River Detectives schools registered | 7 |
| Number of students participating in the River Detectives program | 80 |
| Number of teachers/educators being supported | 7 |

2023 River Detectives activity

| | Number | Participants |
|---|--------|--------------|
| Professional development sessions for educators | 8 | 13 |
| Attendance at state-wide network meetings | 3 | N/A |
| Delivery of school incursions | 4 | 91 |
| Provision of learning resources for educators | 6 | 11 |
| Story of Change published | 1 | N/A |



"The creek is directly behind our school so we can be actively involved in monitoring. As a previous Biology and Environmental Science teacher I know how valuable this program is for students."

St Mary's PS Warracknabeal staff member

Terms one and two highlights

- Coordination of five introductory professional development sessions for educators.
- Production of World Wetlands Day and Saltwatch Week digital presentations.
- Jeparit Primary School helping Jeparit WaterWatch celebrate 30 years of service.

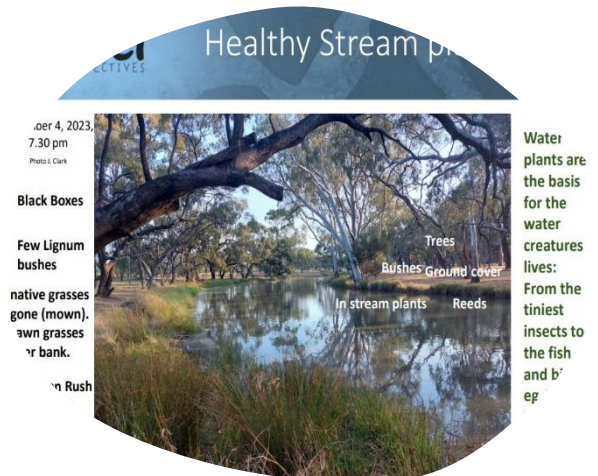
Terms three and four highlights

Two-part teacher training

During semester two, teacher training was provided by learning from Jeanie as she delivered school incursions/excursions with students. Topics covered included flora, waterbug identification, waterbug adaptations and plant surveys.

Teachers, particularly in small schools, find it valuable to learn from visiting experts who introduce specific knowledge and skills to students and provide educators with inspiration for follow up class activities.

As part two of the training sessions, a school-specific presentation was provided for each school showcasing the aquatic flora and fauna found at their adopted waterway. This provided educators with the background they need to confidently work with their students on future River Detectives content.



Story of Change

A unique investigation by Jeparit Primary School has featured in Wimmera CMA region's written 2023 [Story of Change](#), as a story of connection and belonging. This very experienced River Detectives school, with a long history of monitoring local waterways, had the unique opportunity to visit Lake Hindmarsh in October after above-average rainfall from late spring 2022 resulted in the Lake holding water for the first time in ten years.



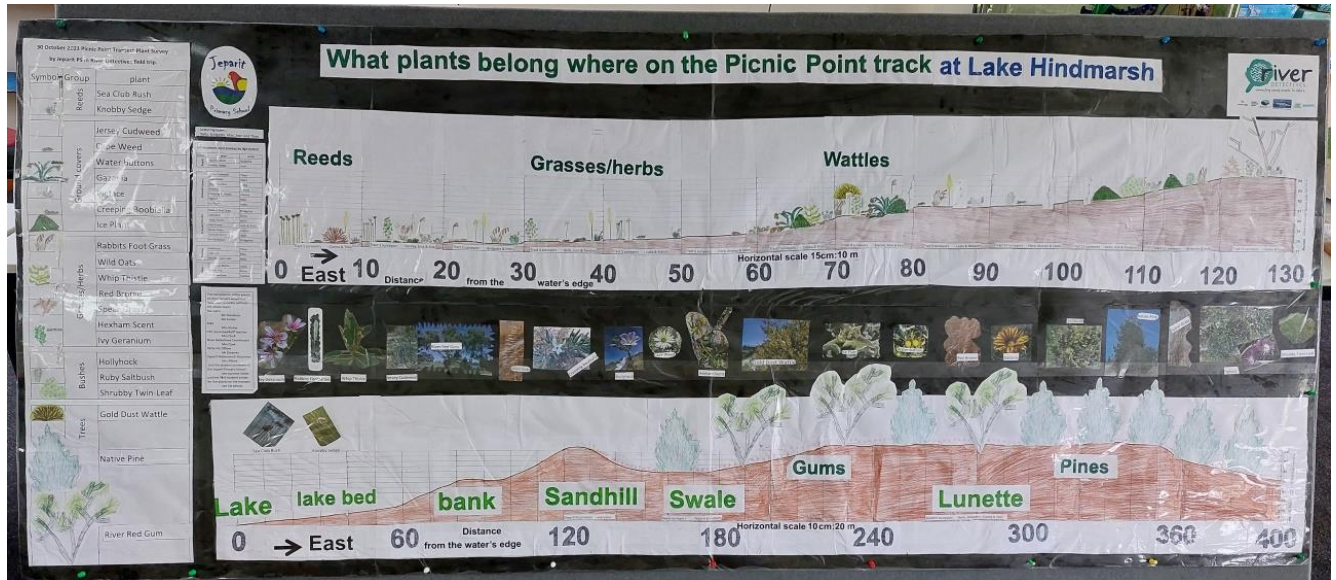
With receding water creating various micro habitats, students completed a survey of the vegetation growing in each zone from the lake edge across the lunettes.

Plants were identified using a flora guide prepared by Jeanie, with students surveying ten metre transects. Students discussed the differences they noted in each zone and discovered what conditions enabled the plants to survive in their preferred habitat. They



heard from Parks Victoria staff and a local Jeparit WaterWatch volunteer about their memories of the lake and how it is managed.

As a perfect example of the unexpected spinoffs that can come from one intentional teaching moment, this exercise then led to a wonderful project. Over six weeks and with guidance from Jeanie, students transformed their observations, photos and sketches into a two-metre poster displaying the vegetation of Lake Hindmarsh.



The poster will be displayed in the local supermarket window during the summer holidays and all families of the school have been given their own copy of the flora guide.

What a great story of belonging, connection, collaboration and learning that involved various community and permeated several curriculum areas!



"I think this project was a highly relevant and interesting experience for students and staff. The science, maths and literacy activities afterwards, recording results and creating a transect were all so engaging."

Jeparit Primary School staff member

School Incursions

On September 1, twenty-two grade 3/4 students, staff and parent helpers from Stawell Primary School enjoyed a River Detectives excursion to Lake Cato, one of their adopted waterways. Students learnt about the vegetation that creates aquatic habitat at the Lake and completed a waterbug sampling activity.



Learning about waterbugs complemented their knowledge and understanding of water quality and how it impacts species with varying sensitivity to temperature, pH, salinity, turbidity and phosphorus. The outing was celebrated in the school's Term 3, Week 10 newsletter.



"Jeanie had all the information and resources ready to go. She was informative and supported us so well. She checked in with me afterwards and answered questions I had about the results and bugs."

Stawell Primary School staff member



On October 5, an incursion was held with twenty-two grade 5 students at Holy Trinity Lutheran College Horsham. The focus was macroinvertebrates and how these little waterbugs have evolved to enable them to survive and thrive in their aquatic environments where they are prey to everything above them in the food chain.

Students loved discovering more about the life in the Wimmera River and the activity stations proved very popular for other students at lunchtime.



On December 5, the end of year was celebrated with a waterbug incursion delivered to eighteen Year 1/2 students at St Mary's Primary School Warracknabeal. Seeing a session run by the River Detectives coordinator can provide the confidence and inspiration for educators to have a go at implementing it themselves.



"A fantastic face to face session where the children were all engaged. I would like to also run this down by the creek during the cooler weather."

St Mary's Primary School staff member

This visit was reported on in the school's term 4, week 10 newsletter:

River Detective Program

On Tuesday December 5, Wheat class had a visit from Jeanie Clark as part of the River Detective program we have been participating in this year. During Term 2, we walked along the creek, observing plant and animal life, and using our scientific skills to classify and sort what we had seen. On Tuesday, Jeanie explained to the children what plant life we could find along the same stretch of creek we had been to, and the types of waterbugs we might see in our water samples. The children were very excited to hunt through their water samples and find different types of creatures. They placed them in bug viewers so the creatures could be seen better. Some water creatures found were boatman, caddisfly larva, mites, water fleas, bloodworm, damselfly nymph and even a couple of small pest fish called a gambusia or mosquito fish, that are no bigger than a finger. Towards the end of class, students placed each of the bugs found on a food chain. Thank you Jeanie for your time and effort in preparing and teaching the students about plant and animal life along the creek. (Fiona Holland - Specialist Teacher)



Stawell PS students.



Terms three and four incursions

| School | Date | Year level | Students |
|--|-------------|--------------|-----------|
| 1. Stawell Primary School | 1 September | 3-4 | 22 |
| 2. Holy Trinity Lutheran College Horsham | 5 October | 5 | 22 |
| 3. Jeparit Primary School | 30 October | P-6 | 22 |
| 4. St Mary's PS Warracknabeal | 5 December | 1-2 | 18 |
| | | Total | 84 |

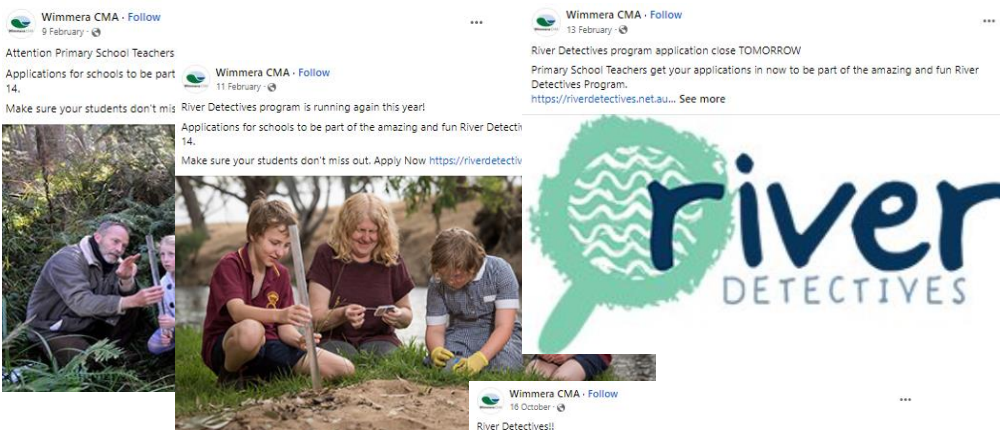
Challenges

Regular on-site monitoring has been difficult for Wimmera CMA region schools for a variety of reasons including timetabling, teacher/student ratios, weather, behaviour management and safety concerns. Although visiting waterways is the ideal scenario, it is not essential. Jeanie has worked closely with each of the schools to provide alternatives to enable effective engagement with the program in a way that suits their unique needs.

Plans for 2024

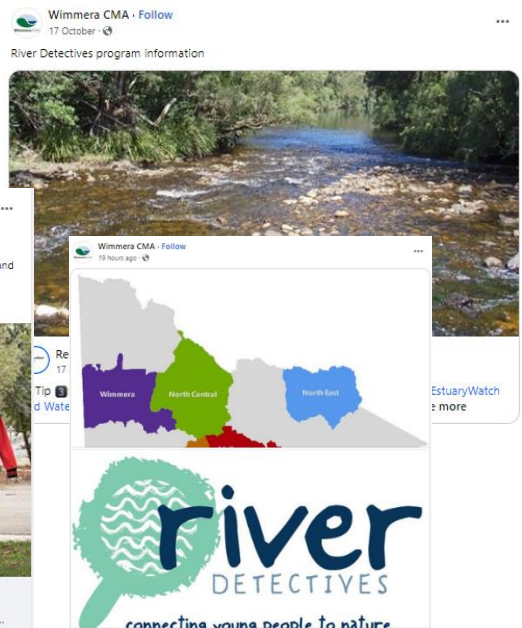
The program will be further tailored to the needs of schools in the Wimmera CMA region where in-class catchment education sessions by the Wimmera River Detectives coordinator are highly sought by schools. School will continue to collect citizen-science data when they can with incursions providing the context, discussion and extension. These sessions will be aligned with the curriculum needs of schools to demonstrate how River Detectives can be embedded into school life whilst providing valuable learning opportunities for students and upskilling teachers.

Communications and media in terms three and four



8
Wimmera CMA
social media posts
reaching 1000's of
users

36 Likes
4 shares



Melbourne Water

Coordinator Jane Petch



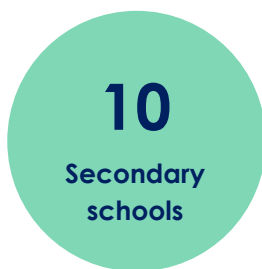
2023 River Detectives participation

| | |
|---|------|
| Number of River Detectives groups registered (23 schools and four partner organisations) | 27 |
| Number of students participating in the River Detectives program | 3717 |
| Number of teachers/educators being supported | 40 |

2023 River Detectives activity

| | Number | Participants |
|---|--------|--------------|
| Professional development sessions for educators | 3 | 19 |
| Attendance at state-wide network meetings | 3 | N/A |
| Delivery of school incursions (Melbourne Water) | 1* | 74 |

* As partner organisations, Healesville Sanctuary, Environmental Education for Kids, Werribee River Association and Greater Western Water also deliver River Detectives incursions to multiple schools throughout the year.



Thanks to Jane Petch

Jane has been a capable and passionate River Detectives coordinator in the Melbourne Water area since 2016. Jane has helped River Detectives occupy a very valued space within the broader Melbourne Water education program. We thank Jane for her efforts and wish her well in her new role.

Terms one and two highlights

- River Detectives schools gaining recognition at the ResourceSmart Schools Awards.
- Delivering training to eight science teachers at Heathmont College. The school was preparing to deliver the program across multiple year levels to engage students in hands-on citizen-science.

Terms three and four highlights

Lyndale Greens Primary School Dandenong

Lyndale Greens Primary School has been a passionate River Detectives school over several years, using the program as part of a suite of sustainability education initiatives to achieve learning outcomes and environmental change.

On September 7, sixty-four grade 4 students and ten staff enjoyed a River Detectives field trip at their adopted site on Dandenong Creek within Tirhatuan Park Dandenong. After a Welcome to Country and Smoking Ceremony with Bunurong Land Council students participated in a rotation of activities including a bush walk, birdwatching, macroinvertebrate sampling and water quality testing. They also planted more than 1000 indigenous trees.



During 2023 the school was awarded as a Living Links Ambassador. Living Links is a collaborative urban nature program working to create a web of green spaces across Melbourne's south-east. By linking up the many parks, reserves and other natural places, it aims to make the area a world-class urban ecosystem. This will improve habitat for wildlife and make it easier for people to connect with nature as part of their daily lives.



Under the guidance of teacher Judith Sise, the work of Lyndale Greens Primary School is a great example of how the River Detectives program seamlessly blends with other like-minded environmental programs.

Clusters of schools get involved together to triple the benefits

Seven years ago Greg Woolford, Western Cluster Engagement Leader, encouraged three schools he is involved with to join the River Detectives program. This was the beginning of a journey for these schools in developing strong ties to their local waterway; Kororoit Creek.

Students from St Theresa's Primary School Albion, Our Lady of the Immaculate Conception Primary School Sunshine and Mother of God Primary School Ardeer have participated in River Detectives activities annually over the past seven years. This has developed into much broader cross-curriculum learning opportunities for students.

On July 11, grade 3 and 4 students enjoyed an excursion to Kororoit Creek. The day was facilitated by Friends of Kororoit Creek leader Jessica, Werribee River Keepers John and Tanika, and supported by Landcare (supply of native plants and tree guards) and the River Detectives program at Melbourne Water (supply of water quality and waterbug equipment).

Students participated in three activities. Jessica involved students in tree planting along the banks of Kororoit creek to help improve habitat values and bank stability. John shared stories about the flora and fauna in and around the creek and introduced students to a gorgeous platypus called Perri. Tanika helped the children identify waterbugs that call Kororoit Creek home and performed water monitoring tests to assess the health of the creek. Based on the two citizen-science tests, students learnt that Kororoit Creek was in good condition.



A water boatman is an insect that is common in ponds. In ponds a water boatman is harmless and also an omnivore and would feed and suck on algae or eat animals but mainly they eat algae. The water boatmen is found in Australia and Tasmania and is in water streams. Water boatman habitats are water streams or ponds since they stay in the shallow area. A water boatman can't stay in the water for long so they go back to the surface after a while. Water boatmen create air bubbles using hairs on their body to breathe. Water boatmen aren't endangered and are still existing.



"Students planted 306 trees on the day and behaved brilliantly. Feedback from students, staff and several parents indicated the excursion was very enjoyable."

St Theresa's Primary School Albion teacher

Pesticide Watch at Cornish College

Cornish College actively participated in the River Detectives program during 2023 entering water quality data for their adopted site on the Patterson River at Bangholme, participating in Pesticide Watch water sample collection and making the most of every learning opportunity by submitting insightful questions from their grade 5 students for the two Ask the Expert webinars.

Students demonstrated their interest and deep-thinking skills by posing questions to Josh Griffiths and Brady Hamilton about platypus eDNA testing and pesticides so that not only they, but their fellow River Detectives students could broaden understandings.



Staff featured their active science program in the winter edition of the school's 'The Difference' newsletter:

At Cornish we search for ways to involve our students in real life projects. In particular, projects which involve the wider community and some form of sustainability. So when the opportunity arose to be involved in the River Detectives Program we were excited.

This program is an initiative of Catchment Management Authorities, which inspires teachers and students to understand, appreciate and care for their local waterway through engaging, cross-curricular, citizen-science activities.

Students learn how water, land, plants, animals, people and communities are all integrally linked and we were provided with equipment, training and teaching resources.

Once accepted into the program the teachers involved undertook some specialist training before our year five students began testing at two locations along the Patterson River. Our two testing locations were registered on the WaterWatch site, where all data can be viewed.

The students tested temperature (air and water), pH, electrical conductivity, reactive phosphorous and turbidity. In addition, they also conducted a habitat assessment. Lots of maths, science, geography and literacy all rolled into our fabulous outdoor classroom!

As a result of this program, we were asked by Deakin University to be involved in their Pesticide Watch project which involves collecting a filtered water sample. Once collected, the sample is frozen and stored until ready to be mailed to the university's laboratory at Burwood, where it is analysed for about 800 pesticides with very high sensitivity.



A pesticide monitoring project of this scale is the first of its kind in Australia and it is expected to grow in the future. Currently the network extends from Central Queensland down to Southern Tasmania, with monthly sampling having begun in April and will conclude in September. Our research will go towards building a map which identifies where pesticide residues are located in Australian streams. We are really pleased to be involved in cutting-edge science that will make a real difference to our local waterways!

Above text from Cornish College's 'The Difference' newsletter

Positive feedback from participating schools

"Students across year levels engaged in the program in different ways. Year 1s looked at the waterbugs and wrote information reports on them describing their features and using materials from the river detectives website. Senior students used data for maths statistics units."

Rachel McMurtrie, St Mary of the Cross
MacKillop PS

"Having students experience real fieldwork. We are excited as we are in the process of embedding the testing of the new site at Nelson Drain into our learning program."

Urszula Faulkner, Mount Lilydale Mercy
College

"The students' enthusiasm was a highlight. They were very keen to continue this year."

Marina Rich, Mitcham Primary School

"Our students live on and around the Yarra and Little Yarra Rivers but never really look at the health of their rivers. This program enables them to see what is happening to the waterways in their local communities."

Tracey Shallcross, Upper Yarra Secondary
College

“Kids made a great connection to the creek. They see it as a healthy place, demystifying beliefs about how dirty it is. They see the areas around the creek that are good to play on.”

Greg Woolford, St Theresa's Primary School
Albion, Our Lady of the Immaculate
Conception Primary School Sunshine and
Mother of God Primary School Ardeer

“Students created sway blogs documenting ecological health.”

Josephine Postema, Taylors Lakes
Secondary College

School incursions

Terms three and four incursions

| School | Date | Year level | Students |
|----------------------------------|-------------|--------------|-----------|
| 1. Lyndale Greens Primary School | 7 September | 4 | 64 |
| | | Total | 64 |



Lyndale Greens PS students.

Plans for 2024

Melbourne Water River Detectives staff are conducting an analysis of the schools involved in the program since 2016. Ascertaining the duration of their participation and their location will help the program reach the organisation's goal of matching environmental education programs with schools in postcodes demonstrating lower water literacy and also ensuring a geographic spread of the program across the Melbourne Water area.

Communications and media in terms three and four

Applications open soon for the 2024 River Detectives program

River Detectives is a free education program for schools. Through engaging and cross-curricular citizen-science activities, the program inspires teachers and students to understand, appreciate and care for their local waterway.

Schools adopt a site on a local waterway and undertake water quality monitoring and associated activities over the year.

Supported by a regional River Detective facilitator, schools are provided with the equipment they need and teachers will have access to online resources, and a range of events and webinars throughout the year to help with teaching and learning.

This program is suitable for primary or secondary schools and ideal for schools that have a waterway within walking distance of their school.

Applications for the 2024 program will be opening at the end of November!



1
Melbourne Water, WaterEd newsletter article featuring the River Detectives Program

October 2023

1
Facebook post by project partners

19 July 2023 Werribee River Association

Werribee River Association Werribee Riverkeeper
19 July 2023
Pleased to take a River Detectives session on Kororoit Creek yesterday. Great fun and learning with students from St Theresa's School. Good science carried out on water quality and invertebrates, plus sharing the story of Perri our lovely platypus. Melbourne Water Brimbank City Council Wyndham City Friends of Kororoit Creek





Year 4 at Kororoit Creek



Our Lady of the Immaculate Conception PS Sunshine July 14 newsletter article about their day at Kororoit Creek.

Testimonials

Quotes from end of year evaluation surveys by teachers statewide

What were your 2023 highlights?

"The students are very passionate about our results and we're happy to see improvements from last year's poor water quality post floods."

Georgeie Green, Skipton Primary School,
Corangamite CMA region

"It was great having the River Detectives program as a linchpin to base other learning areas around."

Andrea Vallance, Timboon P-12 School,
Corangamite CMA region

"We found some freshwater mussels in the Moorabool River!"

Warwick Fincher, Nelson Park School,
Corangamite CMA region



Woodend PS students sampling waterbugs.

"We had willows removed in 2022 and revegetated with 300 indigenous plants along the Deep Creek tributary adjacent to our school."

Libby Fullard, Newham Primary School,
Melbourne Water area

"Our students have a better understanding of the history of Dandenong Creek including how indigenous people used and cared for the area."

Emmanuelle Emile- Blake, Silvertown PS,
Melbourne Water area

"Students completed water testing as part of the Volunteer Service Award for the Duke of Edinburgh Program. Students had to log hours of testing and provide photo evidence."

Nicole Ware, Sirius College Eastmeadows
Campus, Melbourne Water area

"The highlight was our trip to Lake Meran - water bug sampling, habitat survey and nature journaling. Kids loved it and still talk about the day. These days are so impactful. Even if the same tasks are explored at school, the children are not as engaged as when they are taken out of the school environment."

Kirstie English, St Joseph's Primary School
Kerang,
North Central CMA region



St Joseph's PS Kerang students at Lake Meran

"Grade 4 students entered a Maths competition sparked by their interest in the salinity of the creek. They investigated if high salinity would impact the breakdown of rubbish and wrote about their findings."

Kathryn Treloar, White Hills Primary School,
North Central CMA region

"We found the pesticide testing very interesting."

Sally Anderson, Lockwood South PS,
North Central CMA region

"Students got to experience hands-on application of geographical principles and a greater awareness of our local area."

Ellen Kennedy, Grace Christian College,
North East CMA region

"Seeing students connect with nature, providing a vehicle for linking biodiversity with curriculum and links to the ResourceSmart Schools project."

Darren Wood, Bright P-12 College,
North East CMA region

"The kids were really engaged in collecting the data and recording the data."

Fiona Holland, St Mary's PS
Warracknabeal,
Wimmera CMA region

"Our community enjoy hearing stories about our discoveries in the creek and are eager to help on tree planting days to further improve habitat in our school creek area."

Monika King, Dederang Primary School,
North East CMA region

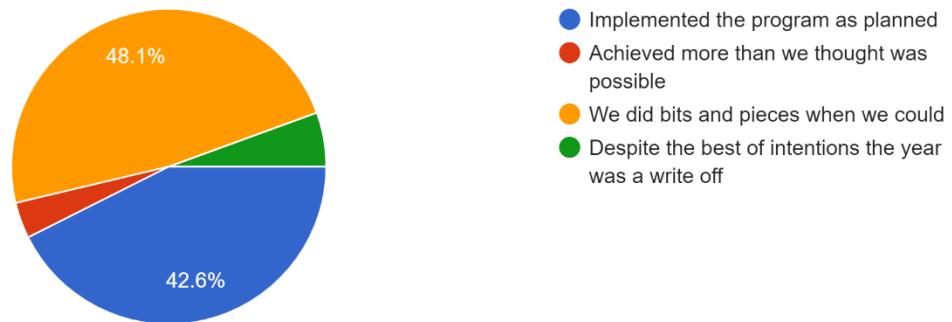
2023 Evaluation

Evaluation statistics from 2023 end of year surveys by teachers statewide

54 respondents from 103 schools participating in River Detectives in 2023

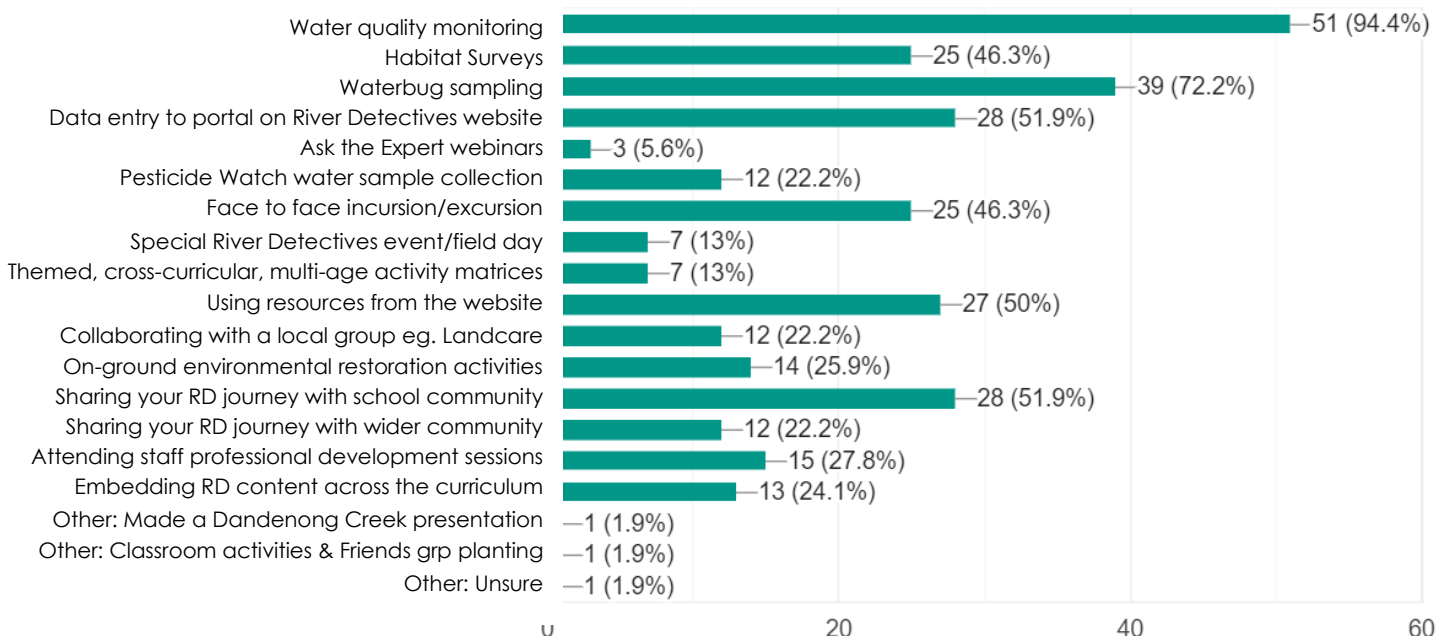
Which statement reflects your school's participation in the River Detectives program during 2023 ?

54 responses



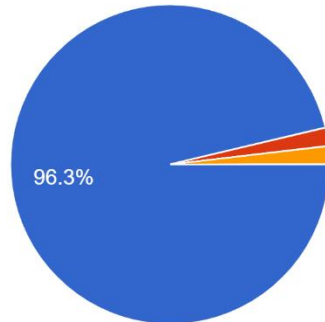
What activities did you get involved with ? tick any that apply

54 responses



How did you find the communication / support from your regional River Detectives coordinator ?

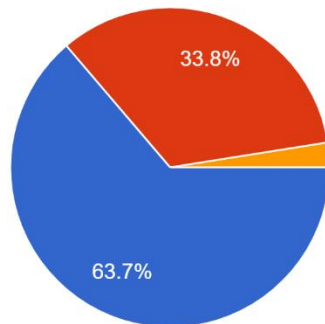
54 responses



- Timely, relevant and effective
- Too frequent, expectations of our participation too high
- Infrequent - would have appreciated more

What would you like to do in 2024 ?

80 responses



- Roll over our registration from 2023 and continue with the program
- Join the program in 2024
- Thanks for everything but discontinue with the program

