



North Central CMA Mid-Year Report 2025



Gunbower P5 students' woven habitat pods

"This is a fabulous program which has contributed an enormous amount to the three schools I have implemented it with. Our River Detective facilitators are highly knowledgeable and extremely generous with their support. I can't speak highly enough about the value of this program."

Chewton Primary School educator



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 the 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 connecting young people to nature by understanding and caring for their local waterway.

Students participate in citizen science and learn about the importance of healthy waterways through water quality testing, macroinvertebrate sampling and habitat surveys. They learn how healthy waterways and catchments are inextricably linked to healthy land, plants, animals, people and communities.

Participating schools are provided with equipment, support, training, and teaching resources to collect real data about waterways in their local area. Building a sense of place then encourages them to advocate for their waterway and take practical action by collaborating with their community.

River Detectives proudly began in the North Central Catchment Management Authority (CMA) region over twenty years ago and is highly valued by our organisation as an effective vehicle to:

- Achieve our purpose: Connecting rivers, landscapes, and people to deliver lasting positive change
- Demonstrate our values: Care, courage and connection
- Enable active communities; Encouraging and supporting community action for the environment
- Focus on 2025/26 strategic priorities: Taking action on climate change and supporting Traditional Owner and Aboriginal self-determination
- Engage a youth audience and through them, connect with a broader audience
- Embed education and citizen science in broader North Central delivery projects

ResourceSmart Schools

[ResourceSmart Schools](#) (RSS) is a like-minded sustainability program. Many RSS facilitators have been inducted to the River Detectives, are resourced with water quality and waterbug equipment and are available to deliver River Detectives content to schools involved in both programs.

In the North Central CMA region, we enjoy an extremely positive partnership with RSS Loddon-Mallee facilitator Emily Condon who has co-delivered some River Detectives school incursions and run extra incursion independently during 2025 so far. This aids schools and enhances capacity of each program.



The 2025 River Detectives program is also offered by these delivery partners:

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

Engagement snapshot

Terms one and two, 2025



River Detectives coordinator, Nicole Howie

2222

Students engaged



87

Participating schools / groups statewide

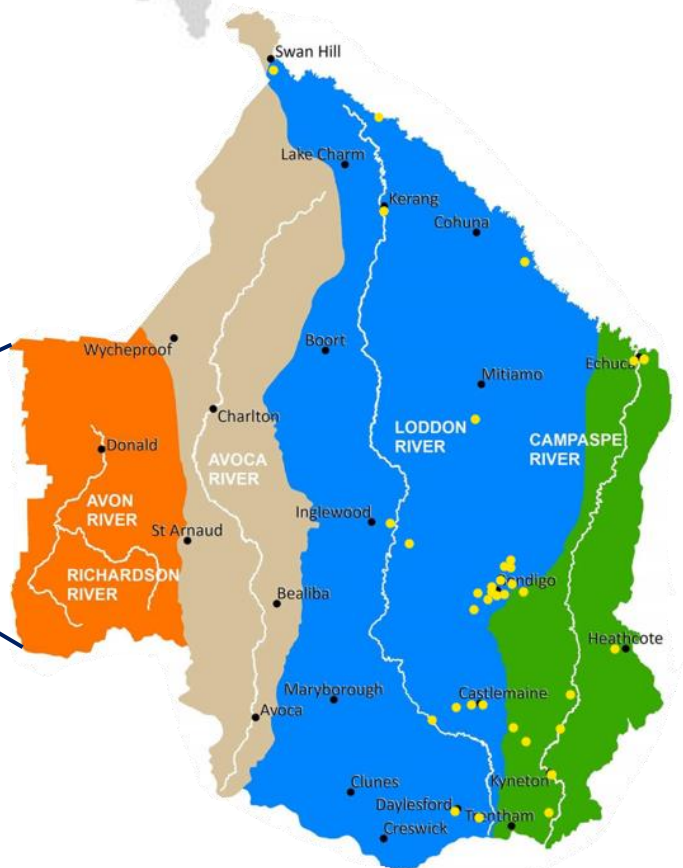
35 North Central CMA

20 Corangamite CMA

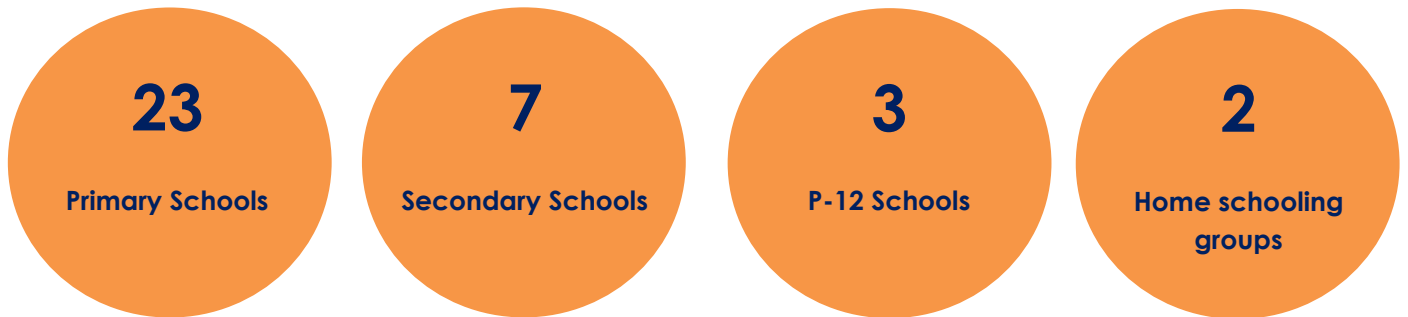
6 North East CMA

6 Wimmera CMA

20 Melbourne Water



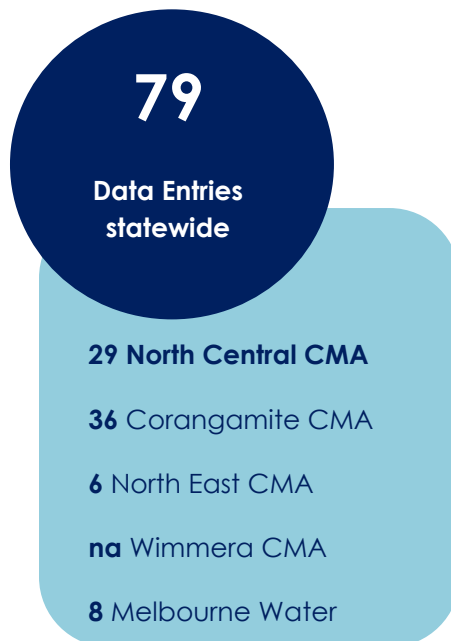
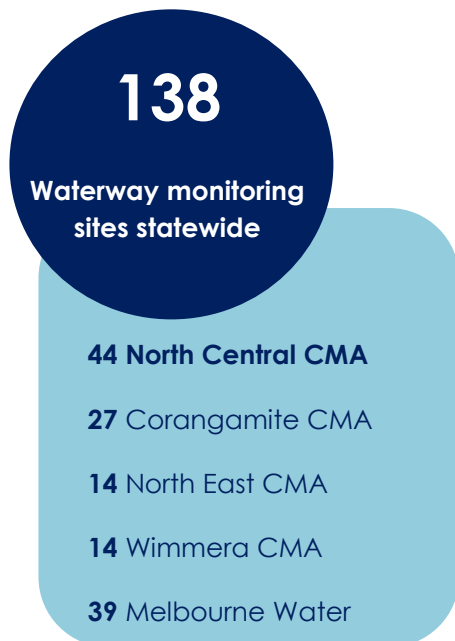
In the North Central CMA region, 35 River Detectives groups are made up of:



- **Bendigo Creek Citizen Science Project** (9 schools)
- **Healthy Coliban Catchment Project** (1 school)
- **RiverScan Project: lower Loddon and Gunbower Forest area** (4 schools)

Being affiliated with a priority project provides additional opportunities for schools to:

- Connect with project staff
- Learn about on-ground works happening in their local area
- Get actively involved in on-ground rehabilitation work
- Contribute data to help evaluate on-ground works



48

Educators supported

"The River Detectives program has been integrated into our year 7 curriculum. We would love to continue to use the Bendigo Creek as a way to link what they are learning in geography/science with real life."

Weeroona College Bendigo educator

"The Carlsruhe campus is based on hands on learning linked to environmental and sustainable practices. The River Detective program enhances our ongoing program and inquiry units. It enables students to experience real life examples of science, maths, literacy and geography in practice and how they can impact their local community."

Woodend PS, Carlsruhe campus educator

"The children had a massive interest in the program and found ways this connected them to their culture. Many of the elders found it interesting with the information shared from the younger generation."

Mallee District Aboriginal Services youth group leader



A training workshop in action

5

Educator workshops delivered

3

Online Project Prattle sessions delivered

Project Prattle online sessions provide an opportunity for educators from each of our priority project schools to gather together to learn and share. Educators:

- Receive a summary of the best teaching and learning resources related to their specific waterway/project area
- Enjoy an update about the project; the research / on-ground works being undertaken
- Hear from North Central CMA project staff
- Share ideas with each other

9

School incursions delivered

262

Students engaged in incursions

Schools value River Detectives incursions to support them implement the program and keep momentum going.

Students enjoy hearing from a visiting expert, doing fun activities and learning more about waterways and catchments.

Educators appreciate the sessions as informal professional development as they learn from River Detectives staff (Nicole and Asha) or RSS staff (Emily).

School	Date	Year level	Students	Held at
1. Victory Christian College	25/2/2025	9/10	20	School
2. Victory Christian College (RSS)	21/3/2025	9/10	19	Kennington Reservoir
3. Marist College	23/4/2025	3	55	Bendigo Creek Huntly
4. Campbell's Creek PS, Guildford	12/5/2025	P-6	10	School and Loddon River
5. Redesdale PS	10/6/2025	P-6	8	School
6. Langley PS	10/6/2025	3	1	School
7. Kyneton PS (RSS co-delivered)	13/6/2025	1	80	Campapse River
8. St Francis of the Fields PS	23/6/2025	4	46	Sheepwash Creek
9. Daylesford Dharma School	25/6/2025	P-6	23	School

Total

262



Water Quality testing incursion at Victory Christian College



Waterbug incursion at Langley Primary School

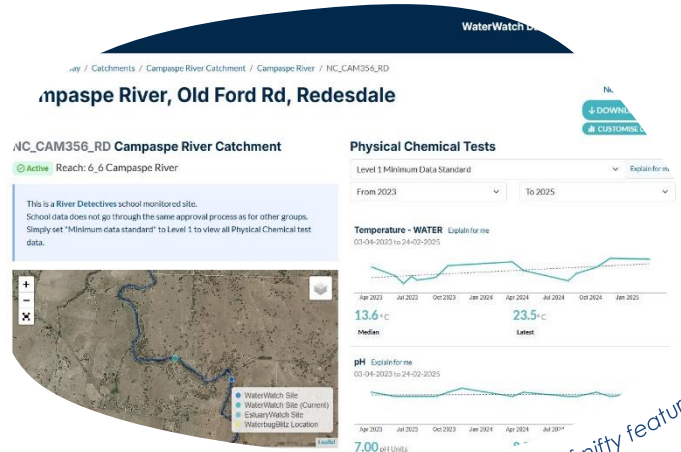
Statewide highlights

‘Delving Into the Data’ Ask the Expert webinar

Justine Holmes, statewide WaterWatch facilitator, was our Ask the Expert webinar guest in May. The water quality data gathered by schools is uploaded, via the River Detectives website, to join with data collected by community WaterWatch volunteers across the state.

This data is publicly accessible and is a valuable resource for university students, researchers and natural resource management agencies to study patterns over time, assess the health of our waterways, track the progress of rehabilitation works and plan future priorities for waterway management.

Schools can also extract, compare and interpret this real-life data as part of their studies in science, mathematics and humanities. The newly revamped WaterWatch website allows students to study trends at their waterway site and compare data to sites up-stream, down-stream, on other waterways within the catchment or from waterways elsewhere across the state!



The WaterWatch portal has a range of nifty features

In this webinar, Justine guided us through the new data portal to show how to make the most of the features available. The recording, suitable for schools, Landcare groups and the general community is available at the River Detectives website and [youtube](#) for on-demand viewing.

River Detectives schools shine at the 2025 ResourceSmart Schools Awards

River Detectives program staff attended the event at the MCG with an interactive display in the showcase area. Participation in the River Detectives program featured heavily in the nominations of six schools short-listed as finalists across five award categories.

It was wonderful to see top honors taken out by two River Detectives schools. Marita Ryan, educator at Albion Primary School, won Teacher of the Year (Primary). Marita has been a passionate River Detectives educator since 2016! More award winners on Page 10 of this report.



River Detectives showcase display

Regional highlights

Bendigo Sustainability Festival

River Detectives played a large role in the North Central CMA's display at this year's festival on Sunday 30 March. Youth was the focus of the 2025 festival with much of the event organised by a youth committee with a youth audience in mind. With River Detectives being the flagship project that engages young people in environmental stewardship, the North Central CMA were keen to showcase the program.

The organisation's stall featured an interactive waterbug display and water quality testing. We were joined by students and ex-students of Castlemaine Steiner School (Sonny, Tavish and Caromy) to demonstrate citizen science techniques to passers-by.



The North Central CMA stall at the festival



Caromy, Tavish, Sonny and River Detectives coordinator Nicole

A highlight of the day was River Detectives coordinator, Nicole Howie, interviewing Sonny, Tavish and Caromy in front of a small audience as part of the festival's 'kitchen table talks' program about their inspiring environmental work.

Tavish and Sonny were both foundation members of school's student Eco Club and all three are active members of their local Landcare group.

Tavish was recognised for his contribution to Landcare in 2024, winning the Victorian Junior Landcarer of the Year award.

"I sometimes lead bird walks for my Landcare Group. We record observations and upload the data to e-bird and iNaturalist."

Tavish, Post Office Hill Landcare

ResourceSmart Schools awards victory

Two North Central CMA region River Detectives schools were named as finalists at the 2025 Victorian ResourceSmart Schools awards in the same category; Curriculum Leadership School of the Year.

Participation in the River Detectives program played a strong role in both of their nominations.

Castlemaine Steiner School's nomination: The vision of Castlemaine Steiner School & Kindergarten is to foster a learning environment that embraces ecological stewardship as part of the Australian Steiner Curriculum Framework, including through its wetlands management project.

The school community works together on hands-on activities to enhance the biodiversity and health of Basset Creek and wetlands area, working with the North Central Catchment Management Authority.

Students have removed invasive species, planted over 200 native plants, constructed bird hides from recycled materials, recorded bird species and assisted in fish audits.

Victory Christian College's nomination: VCC embeds sustainability deeply into its curriculum, especially through its Environmental Science pathways for Years 9 to 12. These courses allow students to work on many different environmental projects, giving them hands-on experience and a chance to contribute to local sustainability efforts.

For three years, students have collaborated with local organisations to monitor nesting boxes for the Brush-tailed Phascogale. They contribute to citizen science – photographically documenting local biodiversity, tracking changes during dam repairs at Kennington Reservoir, collecting water samples, and entering data into the River Detectives database. Student efforts also include breeding native fish and planting aquatic plants to aid ecosystem restoration.

VCE students delve into topics like pollution and food security. Through hands-on methods such as dissecting fish to assess microplastic pollution, they discovered significant levels in species such as Tench. Their findings on plastic pollution have been shared with local authorities, to raise broader awareness.

Victory Christian College took out the prize, announced by emcee Costa Georgiadis.



Learning about traditional ways to care for waterways

The North Central CMA's Native Fish Recovery Program funded a cultural session for River Detectives schools Gunbower PS, Murrabit PS and St Joseph's PS Kerang. Students and staff worked with young Yorta Yorta Barapa Barapa man Kai Lane under the mentorship of Traditional Owner elder Uncle Ron Galway to weave Yedabila habitat pods from native cumbungi and lignum using traditional techniques.

These spherical pods can be used as temporary biodegradable shelters for wildlife (turtle hatchlings, fish, etc) or to protect young aquatic vegetation in wetland systems.

Kai and Uncle Ron shared their knowledge of the area, telling cultural stories and used a marngrook (traditional football made from possum skin filled with emu feathers) in a question-and-answer session.

The session was a beautiful way for the students to experience culture and make something tangible to help waterways. It was also a great opportunity for Kai, a previous trainee ecologist with the North Central CMA, to hone his presentation skills. He now works for Ecology Restoration Australia and is passionate about sharing his knowledge with other young people.



Murrabit PS students proud of handiwork lead by Kai



Weaving cumbungi to place inside the lignum spheres



Lignum woven into a sphere as habitat pods

River Detectives schools involved in other North Central CMA projects

River Detectives schools have lots of opportunities to be immersed in the work of the broader North Central CMA organisation through engagement with other projects.

North Central CMA's Gunbower Forest Ramsar project, Turtles Australia and Ridely Corporation worked together in late 2024 to construct turtle sanctuaries. The floating islands help protect the endangered and critically endangered populations of turtles on the Gunbower Forest floodplain and in Gunbower Creek by providing a safe space for them to lay their eggs, away from the predators that decimate their population.

Gunbower Primary School students have a strong connection to the area and take part in the River Detectives program. They enjoyed a turtle education session with Turtles Australia in 2024, were invited to watch as the islands were placed in Gunbower Creek late last year and in 2025 were challenged with the task of naming the islands.

Students came up with some very creative names and designed signs for the islands. Five names were chosen: Hatchling Harbour, Shellax Island, Big Turtle Island, Turtle House, Turtle Safe Home, Turtle Mania, and Ridley's Turtles.



Cameras capture turtles using the islands



The islands are launched in Gunbower Creek

**"It was beautiful to see the turtles.
It is good to know facts about
them. The islands are a great idea
to protect their eggs from
predators."**

Scarlett, Gunbower PS



Gunbower PS students with their winning island names

A study of Bendigo Creek

Many River Detectives schools value-add to the core program by adding complementary activities to embed waterway education throughout the curriculum.

Marist College Grade 3 classes completed an inquiry unit about Bendigo Creek in Term Two. They researched Bendigo Creek by utilising resources on the River Detectives

website, particularly enjoying videos about the creek's gold mining history and the rehabilitation works being done as part of the Reimagining Bendigo Creek project.

They completed water quality testing from sites along Bendigo Creek to understand how results differ along the length of the urban section.



Water quality testing during class at school

In April, students and staff enjoyed a tour of Bendigo Creek sites before an overnight campout at school. They visited the Huntly Streamside Reserve where they participated in waterbug sampling with River Detectives coordinator Nicole Howie.



Identifying waterbugs scooped from Bendigo Creek

They moved on to visit an original section of the Bendigo Creek that exists in the Bendigo Botanic Gardens, they stopped to learn about the Wanyarram Dhelek site in White Hills where Djaara have worked with council to create aquatic habitat to cleanse stormwater runoff and they visited the frog ponds at No.7 Park in Kangaroo Flat.



Waterbug sampling of the school wetland

Back at school after their day-long excursion, they followed up their learning by conducting waterbug sampling and water quality testing of their school wetland to compare results with those gathered along the Bendigo Creek.

They also researched a chosen waterbug to create fact files and watercolour illustrations.



Researching and illustrating waterbugs



Teachers were thrilled to see students so keen to continue the learning back at school. When students wanted to do more waterbug sampling during lunchtimes, equipment was provided for the students to search for waterbugs in a shallow creek bed that is fed by stormwater caught on classroom rooves.



Waterbug sampling at lunchtimes!

This comprehensive inquiry unit was a great example of what can be accomplished by River Detectives Schools.

To share the learning between educators, Marist College teacher Jana Mollison joined me online to record a session for other River Detectives educators in schools along Bendigo Creek to speak about their inquiry unit; the excursion,

the bus tour, the follow-up learning back at school, the resources they found most useful and how they encouraged and captured children's enthusiastic learning.

Grants foster further learning

River Detectives schools in the North Central CMA region have been actively seeking grants to further their learning.

Daylesford Dharma School have received a Junior Landcare Grant to work with their local Landcare group to restore a wetland in the Cornish Hill Reserve in the heart of Daylesford. Smith's Creek is the focus of this restoration project where they will be targeting an overgrown section and turning into habitat for frogs, waterbugs and water birds. Students use the creek for River Detectives monthly water testing and weekly Bush School.

In June, River Detective coordinator Nicole Howie visited the school for a refresher session about water quality testing and waterbugs and to discuss the features of healthy riparian habitat to help the students plan their project.

In Term Three they are planning on visiting Yalukit Willam Reserve in Elsternwick. The site was once a golf course and is now a thriving wetlands habitat. They will meet with the Friends group to learn from their experience.



Yalukit Willam Reserve, Elsternwick

Castlemaine Steiner School and Kindergarten have also received a Junior Landcare Grant for their 'Wetlands Management Project – Threatened Duck Refuge.'

The school has several wetlands onsite, capturing all rainfall, stormwater, grey water and even treating all their blackwater on school grounds. These wetlands are continually being rehabilitated to ensure they also provide quality habitat.

Over the years the school has completed revegetation, built floating aquatic vegetation pontoons, designed and installed signage and built a bird hide whilst monitoring water quality and water bugs to track progress.

This project will see more habitat added to one of their wetlands with large 'bridges' of sticks and rocks installed on the dam banks, aquatic vegetation planted and endangered native fish released.

The school is also seeking funding to have a recycled water line added to the dam to keep it full year-round and to purchase an aerator and a floating emission reading device that will gather evidence about the way healthy wetlands can combat climate change through carbon sequestration. How's that for innovation!