

Slide 1: I'm Nicole Howie from the North Central Catchment Management Authority where I coordinate the River Detectives program, working with schools and youth groups in our region. I also have a statewide role to support coordinators like me in other Victorian CMA regions.

With my teaching background and love of the environment I am incredibly passionate about connecting young people with nature.

I truly believe it is one of the most powerful things we can do for the future of our planet and that fostering a life-long love of nature is one of the best gifts we can give to young people. *For a whole heap of reasons.*

Slide 2: Acknowledgement. The RD program works hard to embed cultural perspectives to enrich learning about waterways and catchments in the past, present and future.

The program supports schools with a successful model to achieve two of the three Victorian cross-curriculum priorities; learning about sustainability and Aboriginal and Torres Strait Islander histories and cultures.

Slide 3: The River Detectives program is an exciting environmental education initiative inspiring young people (usually through primary and secondary school involvement) *and their educators* to understand, appreciate and care for their local waterway and catchment through engaging, cross-curricular, citizen-science activities.

It is a free, fun and flexible program supporting the Victorian curriculum and inquiry-based learning, enabling schools to collect real data from local waterways in their own community, track waterway health for real-life learning and upload data that is then housed on the WaterWatch portal for public access.

Participants are provided with a water quality kit and supported with training, school incursions, webinars and the River Detectives website full of resources and inspiration to take their learning further.

Schools enjoy regular water quality monitoring, macroinvertebrate sampling and habitat surveys with opportunities to value add to their experience with other citizen science activities.

Slide 4: The RD program began in Victoria's North Central CMA region in the early 2000's as a youth equivalent of the very successful community WaterWatch program, now in its 32nd year.

In 2016 it expanded to the following regions.

The program is genuinely valued and highly sought after by schools for a whole raft of reasons and we are immensely proud of it.

Slide 5: I could run through impressive statistics about the number of schools, students and educators that have been involved since its inception but as the title of this presentation suggests, the power of this program is not just what we *deliver* in schools but the incredible initiatives that participants go on to put in place at their schools as a result of being involved and more impressively what many achieve in their *community* with the support and networks we provide.

Slide 6: It's a circular concept where citizen science activities help develop an intimate knowledge and appreciation of waterways, enabling students and educators to become empowered to advocate for waterways and take action by collaborating with their community. This action can then be measured by continuing to participate in citizen science.

The real magic of the River Detectives program is when citizen-science meets citizenship – where students have a voice and step into a role as environmental stewards.

Examples of that magic is what I'd like to focus on in this presentation by sharing fantastic examples of what schools have achieved.

Slide 7: Daylesford Dharma School – central Vic

- Participating for many years
- Monitor Smith's Creek in the Daylesford's Cornish Hill Reserve
- Have been involved in many environmental field days for schools run by Friends of Cornish Hill – learning
- On ground – reveg and have installed signage at the site and an Observations box
- Bush school
- Desire to take a leading role
- Training day then Kids Teaching Kids event with local schools – sharing knowledge of waterbug cit sci methods.
- Currently have a JLC grant to develop a small wetland at their bush school site
- Have visited a best practise wetland project in Elsternwick to gather ideas

Slide 8: Chewton PS – central Vic

- Very proactive school highly active in environmental and cultural learning
- Regular WQ monitoring of Forest Creek had highlighted increasing phosphorus levels
- Students were concerned
- They knew that phosphorus levels can be increased when dog poo washes into creeks. They also knew that many people walked their dogs on the path beside Forest Creek.
- Without prompting by educators they came up with "the Dog Poo Project"
- They made DPP badges

- They designed signs to educate the local community about the importance of being responsible pet owners
- With the help of staff they met with local Parks Victoria staff who were very impressed with their initiative and committed to having the signs professionally made and installed along the path to raise community awareness
- Last November they ran a “Healthy Waterways Day” for local schools attended by over 200 students.
- Students ran some of the activities to teach their peers

Slide 9: Victory Chistian College – north central Victoria

- Environmental Science students in Years 9-12 are involved in River Detectives
- Monitor the health of Bendigo’s Kennington Reservoir
- In 2024 the reservoir wall required stabilisation works so the water was drained
- The council was proactive and sought a Victorian Fishing Authority grant to take advantage of the low water levels and boost in stream habitat
- Rather than seeing no water as a reason to pause the program, their proactive teacher Ro Rimmer saw it as an opportunity to get involved.
- Council biodiversity staff were invited to school to explain the project and students were involved in planting the sod trays of aquatic plants and caring for them whilst works progressed
- North Central CMA staff tasked the school with raising endangered small-bodied wetland specialist fish, hoping to see the reservoir become a surrogate site.
- I visited to deliver an incursion about micro plastics

Slide 10:

- Frozen fish salvaged from the reservoir during the draining were then dissected by students with microplastics found in the digestive tracks of many – eye opening
- The aquatic sods grew well and fast forward to this year the works were completed and water returned to the reservoir covering the many hundreds of logs that had been installed for habitat
- Recently, students worked with council staff to ‘plant’ the aquatic vegetation
- In two weeks, students will return to the reservoir to see the Southern Pygmy Perch they’ve raised be released.
- The school were very proud to win the 2025 Resource Smart Curriculum Leadership School of the Year.
- They are looking forward to continuing their water quality, waterbug and habitat monitoring to track the results of the restoration work.

Slide 11: Rutherglen PS – north east Victoria

- In 2024, River Detectives students from Rutherglen Primary School, teacher Tash Middlin, and North East CMA River Detectives coordinator Blair were honored to be asked to present at the Murray Darling Basin Authority's River Reflection Conference in Albury.
- On day two, three students showed great courage to discuss their experiences and knowledge of River Detectives to a room of adults and water conservation experts. Rutherglen PS is a very active River Detectives school, regularly uploading water quality data.
- Students received a special mention from event organisers, who acknowledged their confidence in the conference's closing remarks.
- What great ambassadors for the River Detectives program.

Slide 12: Timboon P-12 College – Corangamite region

- Timboon P-12 College focus on land use, the effects of upstream activity on water quality, and its impact on the estuary as part of the school's TAP (Timboon Agriculture Project).
- In April 2024, the school launched '[Curdies' Tales: Stories of the river by its people](#)'; a collection of narrative histories of the Curdies River catchment developed by Year 9 Humanities students.
- Fifteen community members were interviewed by students and five others provided written pieces for the publication.
- A book launch was held with students hosting a morning tea for the community members who contributed their memories of the Curdies River catchment.

Slide 13: I think those examples speak for themselves about the value of citizen science. Not just the value of the data but the value to being involved in it's collection and how this can change, inspire and activate the people involved.

The River Detectives program has a tangible ripple effect; it's a vehicle for CMA's to not only reach a younger audience by educating students about the importance of waterway and catchment management but, through them, reaching a more diverse audience of educators, family members and the broader community.

I know I feel positive about the future of our environment when witnessing the work of these schools and I hope you do too after listening to this presentation.

Slide 14: Thanks for listening. If you'd like to know more about River Detectives or collaborate with us please check out our website or reach out.

Sadly, funding is always a challenge. We have a prospectus with a variety of sponsorship options available.

Thankyou. Are there any questions?