



Waterwatch & EstuaryWatch
Citizen science in
Victoria's waterways

North East

Regional Report

2019-2020



Environment,
Land, Water
and Planning



**NORTH EAST
CATCHMENT
MANAGEMENT
AUTHORITY**



Victoria sustains a vibrant history of community-based environmental monitoring and citizen science programs, including the Waterwatch and EstuaryWatch programs. These programs are instrumental in informing waterway management decisions while strengthening community engagement and fostering environmental stewardship and advocacy. Catchment management authorities, water authorities, local government and other delivery partners play a crucial role in facilitating the programs.

Through the EstuaryWatch and Waterwatch programs, citizen scientists are supported and encouraged to become actively involved in local waterway monitoring and on-ground activities. Citizen scientists involved in the 2019-2020 programs contributed a total of **232,580** hours to care for our waterways, equivalent to 31,011 volunteer days. This contribution provides an economic value of the 2019-2020 volunteer effort of **\$9,707,889**. For more information, see the Waterwatch & EstuaryWatch Citizen science in Victoria's waterways Annual Achievements Report 2019-2020.

Aboriginal Acknowledgement:

EstuaryWatch and Waterwatch proudly acknowledge Victoria's Aboriginal community and their rich culture and pays respect to their Elders past, present and emerging. We acknowledge Aboriginal people as Australia's first peoples and as the Traditional Owners and custodians of the land and water on which we rely. We recognise and value the ongoing contribution of Aboriginal people and communities to Victorian life and how this enriches us. We embrace the spirit of reconciliation, working towards the equality of outcomes and ensuring an equal voice.

If you are interested in participating in citizen science in your region, please contact North East CMA on (02) 6043 7601 or visit <https://www.necma.vic.gov.au/>.

Regional Stats



1,086

Event
Participants



5

Active Groups



42

Active Sites



33

Active
Volunteers

Waterwatch Volunteers Respond to Bushfire Call

From January through March 2020, bushfires ripped through the Victorian Alps, causing a lot of destruction and pain in remote communities. The most affected areas were the Upper Murray region (Corryong-Cudgewa-Walwa), the Buckland and Buffalo sub-catchments of the Ovens River, and the Cobungra-Bundara reaches of Upper Mitta Mitta.

Despite the disruptions, some Waterwatch volunteers answered the call for increased vigilance by checking water quality in affected waterways.

Monitoring intensity increased markedly with the volunteers visiting and monitoring more sites each week rather than the previous monthly visits, even while their communities were severely impacted by the fires.

The aim was to fast-track waterway monitoring soon after the bushfires to assess the impacts and continue the accelerated (weekly) monitoring over a few months to understand how the waterways were recovering. Priority sites were selected on the following waterways: Cudgewa and Nariel Creeks in Upper Murray, Bundara River in Upper Mitta, the Ovens River at Mullinmur, Hurdle Creek (King Catchment), and the Buffalo and

Buckland Rivers. In total, 58 weekly site assessments were conducted over this period.

New Waterwatch volunteers in the region, Gavin Melgaard and Jane Bateson, gladly offered to conduct accelerated monitoring on two priority sites on the Buckland and Buffalo Rivers. Corryong teacher and Waterwatch volunteer, Vicki Kane, involved her chemistry students from Corryong College in her water monitoring activities. The changing results in water quality provided her students with valuable, real-life learning experiences in chemistry.

“The students could see the water wasn’t in great condition, but by undertaking tests they could see how measures like turbidity could go from very poor, improve, then - after heavy rains washed ash into the creeks - very poor again,” Vicki said. “With weekly monitoring they could observe and confirm that overall water quality in Cudgewa and Nariel Creeks slowly improved after the fires.”

The Waterwatch monitoring, coordinated by the North East CMA, not only complemented the formal monitoring conducted by agencies, it supported crucial decisions by local water and land management agencies after the bushfires. It was vital in helping waterway managers understand the impacts of the fires on aquatic habitats, particularly the effects of



Waterwatch volunteer Gavin Melgaard undertaking water quality testing near the Porepunkah Jetty. Credit: Kathie Le Busque.

low dissolved oxygen and high turbidity on fish. The data will be essential for informing and monitoring the recovery of waterways across North East Victoria and provides important baseline information to plan for and respond to future fires.

Still, the bushfires significantly disrupted the Waterwatch program as some of the volunteers were unable to continue with their monthly site monitoring between March and May. It also meant Waterwatch staff could not provide face-to-face support to volunteers. Nevertheless, the enthusiasm of our volunteers and the value of the Waterwatch program in monitoring bushfire-affected waterway health and recovery has been well demonstrated during this challenging period.

“While the farmers were busy rebuilding homes and fences, my monitoring activities with Waterwatch gave me something I could do to contribute and help farmers by giving them feedback about their water quality.”

***Vicki Kane,
Waterwatch Volunteer and Chemistry
Teacher, Corryong College.***



Corryong College students conduct water quality tests on bushfire-affected Nariel Creek. Credit: Vicki Kane.

Waterwatch

Helping to Transform Mullinmur Wetland

Mullinmur Wetland is situated on the Ovens River floodplain just north of Wangaratta City. Located on private land belonging to Catholic Education Victoria (CEV), the wetland is managed and protected by Wangaratta Landcare & Sustainability Inc (WLS) in partnership with the CEV's Borinya Wangaratta Community Partnership (Borinya), whose centre is nearby the wetland.

Borinya is an alternative learning program, spearheaded by CEV, for young people at risk of disengaging from mainstream education. Aptly, Borinya is a local Bpangerang word to describe a river that parts from its main course for a short time, then later rejoins it.

Over the last three years, North East CMA (NECMA) has supported the WLS to rehabilitate and improve the Mullinmur billabong. Funding was provided to develop a wetland demonstration site and management plan, enrich the aquatic habitat through constructed wetlands, carry out weed control and revegetation, raise community awareness, and remove feral carp.

The project has transformed the billabong into a valuable wetland and demonstrates that appropriately managed wetlands are important in the regional landscape. An allocation of environmental water through the Victorian Environmental Water Holder ensures the billabong is refreshed during the dry summer months and supports the translocation of native catfish back into Mullinmur Wetland.

The site is a major drawcard for the local community and is used for outdoor learning by Borinya, Galen Catholic College and other local schools. Further partnerships with Arthur Rylah Institute, Rural City of Wangaratta and other organisations have also been established.

In July 2019, the North East Waterwatch program partnered with WLS and Borinya to introduce water quality monitoring at Mullinmur as part of the site's management. Waterwatch trained six WLS volunteers and over 100 Borinya students to conduct testing of the billabong and nearby Ovens River at four new monitoring sites. By monitoring baseline and seasonal trends in Mullinmur's water quality, the community gains an understanding of how

management interventions are improving the habitat for the catfish and other fauna. Thus, the new water quality monitoring has a vital role to play in conserving the wetland.

Delivery of Waterwatch activities at Mullinmur has been led by the Rural City of Wangaratta, following a partnership agreement with NECMA in July 2019. Concurrently, NECMA also partnered with Petaurus Education Group to expand the Waterwatch program across Victoria's entire north east region.

"It's really exciting to provide a healthy habitat for the translocated freshwater catfish."

Kelvin Berry
volunteer Wangaratta Landcare & Sustainability Inc.



Waterwatch training at Mullinmur