

Rivers, the veins of our Country

Six case studies of First Nations involvement in managing water for the environment in the Murray-Darling Basin 2021-22

Protecting the sacred Nga:tjar (totemic species)

Ngarrindjeri community co-develop native yabby and fish monitoring project in the Lower Murray

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The Ngarrindjeri Aboriginal Corporation (NAC) and the Department for Environment and Water (DEW) jointly held a series of Yarning Circle workshops across the Lower Lakes, Coorong and Murray Mouth region in 2020-21. The Yarning Circles identified that the care and protection of Nga:tjar (totemic species) and maintaining a connection to Ruwi (Country) through hands-on cultural activities are very important to Ngarrindjeri. Younger community members described feeling a bit detached from cultural activities and wanted to spend more time on Ruwi, and Ngarrindjeri elders noted a decline in river flow and overall health of Ruwi. Ngarrindjeri participants all expressed a keen interest to actively be involved in understanding how change in river flow is affecting wetlands and their culturally significant Nga:tjar.

Community feedback from the Yarning Circle workshops helped the NAC and fish ecologist Dr Scotte Wedderburn from the University of Adelaide, co-develop a yabby (Kaltuwari) monitoring project within wetlands of the Lower Murray. Ngarrindjeri Yarning Circle participants helped to define the wetland locations and

shared in the monitoring, through setting and baiting traps and retrieving and sorting the catch of yabbies. The yabbies were also sexed, weighed, measured and photographed before being returned back safely to the wetlands. This monitoring project was undertaken in January 2022 with support from DEW and funded through the Murray-Darling Basin Authority - The Living Murray (TLM) Indigenous Partnership Program. The NAC Yarlular-Ruwe Project Coordinator Rick Hartman was instrumental in the development of the project scope, organising Ngarrindjeri community support, taking photos and contributing to the final report.

The NAC also teamed up with the University of Adelaide and DEW to undertake small-bodied threatened fish monitoring in the Lower Lakes during March 2022. Ngarrindjeri community members set and retrieved fyke nets and sorted through the fish catch to find southern pygmy perch and Murray hardyhead (Terukurar), which are respectively listed as Endangered and Critically Endangered in South Australia, and culturally important to Ngarrindjeri.



*Preparing to measure a yabby caught at Goolwa.
Photo credit: Luke Vial, Department for Environment and Water.*



Ngarrindjeri community members and Associate Professor Qifeng Ye sorting through the fish catch at Salt Creek. Photo credit: Rick Hartman, Ngarrindjeri Aboriginal Corporation.



Tina Kartinyeri and Trevor Sumner measuring and recording yabbies. Photo credit: Kirsty Wedge, Department for Environment and Water.

Southern pygmy perch caught, measured and released back into the Lower Lakes. Photo credit: Scotte Wedderburn, The University of Adelaide



Retrieving fyke nets as part of threatened fish monitoring in the Lower Lakes. Photo credit: Scotte Wedderburn, The University of Adelaide.

A further partnership between the NAC, DEW and the South Australian Research Development Institute (SARDI) Aquatic Sciences was also developed with monitoring undertaken to assess fish passage at Salt Creek and Morella Basin regulators in November 2021. Associate Professor Qifeng Ye and fellow fish ecologists Chris Bice and Brenton Zampatti jointly designed the monitoring project with support from DEW and the Ngarrindjeri community.

A total of seven species of fish were trapped moving through the fishways which included species such as congolli (Kungguli), yelloweye mullet (Kanmeri), smallmouth hardyhead, blue spot goby (Takarakai), black bream (Tji:ri), southern shortfin eel (Kunungk) and flat-headed gudgeon. The monitoring identified a number of fish species using the fishways, and highlighted a need to fine tune the volume and timing of freshwater delivery through the regulators and fishways to optimise their effectiveness.

The variety of monitoring projects undertaken in 2021-22 provided a great learning experience for all involved and directly contributed to the aspirations identified by the Ngarrindjeri community as part of the Yarning Circle workshops. Ngarrindjeri shared cultural knowledge and experiences with DEW staff and scientists and also learned new skills in

ecological monitoring based on western science. This two-way sharing of knowledge is a valuable experience as everyone learns something - such as newly developed skills, a deeper appreciation for Ngarrindjeri culture, and a fostering of collaborative partnerships for the future. Ngarrindjeri community members found the experience very rewarding, and as a result, the joint monitoring will continue and be expanded through the TLM Indigenous Partnership Program in 2022-23.

Ngarrindjeri community member Owen Love Jnr said he thoroughly enjoyed the experience and commented “fish monitoring is Ngarrindjeri cultural practice.” Cyril Trevorow Jnr also said “it’s an interesting learning experience and great to be out on Country.”

Tina Kartinyeri further commented “Being on Country and in water, learning about our native fish species is a way to keep our cultural knowledge alive for our youth of tomorrow!”

Ngarrindjeri people are water people and their connection to water is a part of their identity – they are one with the sea (Yarluwar) and Country (Ruwi). Being involved in fish and yabby monitoring and the protection of their Nga:tjar is important culturally and spiritually for current and future generations.