

# What's happening at Toorale?

## Update on Toorale Water Infrastructure Project – August 2021



The Toorale Water Infrastructure Project is located in Toorale National Park (Toorale) about 65kms south-west of Bourke in north-western NSW.

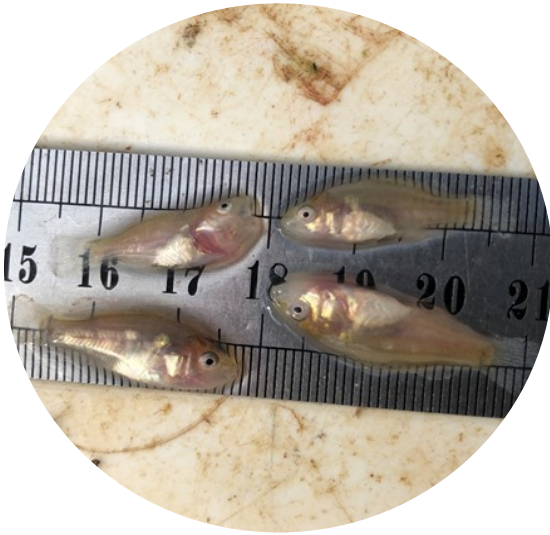
Toorale was jointly purchased with the Australian Government and added to the NSW reserve system to protect its outstanding environmental and cultural values. The Commonwealth Environmental Water Holder holds the Toorale water access licences for both the Warrego and Darling Rivers. These licences are used to deliver environmental benefits on Toorale and in the Darling River.

The Toorale Water Infrastructure project ensures that the important values of Toorale are maintained or enhanced, while achieving greater flexibility to pass more water to the Darling River.

Phase 1 of the project concluded in October 2019 with the removal of Peebles Dam. Phase 2 is underway with the modification of Boera and Homestead Dams. These modifications, including new regulators and fishways, will enable more water to flow to the Darling River when downstream needs are a priority, provide for ongoing watering of important habitats on Toorale when needed, and support fish passage between the Warrego and Darling Rivers.

### **Environmental value: Fish of the Warrego River and Toorale Floodplains**

The waterholes, wetlands and channels associated with the Warrego River provide



aquatic habitat and refuge to animals, fish and plants in an otherwise dry landscape. Nine species of fish have been identified in the lower Warrego River at Toorale including Spangled Perch, Golden Perch, Australian Rainbowfish and Bony Herring. In addition, four fish species listed as ‘Threatened’ may potentially occur on Toorale. These are the Murray Cod, Olive Perchlet, Purple Spotted-Gudgeon and Silver Perch ([Ecological Australia 2019](#)).

Fish species sampled within the Warrego River area adapted to ‘boom and bust’ conditions and show high levels of resilience by surviving and maintaining populations during highly variable flow conditions. Individuals appear to persist in this section of the Warrego because of the dams, which provide refuge habitat during periods of no flow. While fish spawning and recruitment is greatest in larger events, they can still occur during smaller floods. It is likely that Golden Perch recruits from the Warrego catchment are contributing to the wider Darling Basin and perhaps Murray-Darling Basin Golden Perch populations ([Ecological, 2019](#)).

## Fishways at Boera and Homestead Dams

The installation of fishways at Boera and Homestead dams will facilitate fish passage along the Warrego River between Boera Dam and the confluence with the Darling River. This will increase connectivity and support healthier fish populations in the Warrego and Darling Rivers. Boera Dam will have a vertical slot fishway installed that will provide fish passage independent of the regulator gates. Homestead Dam will have a spillway with a rock ramp-style fishway.

The Toorale Joint Management Committee, Public Works Advisory and NSW Fisheries have

had significant input into the design of the Homestead fishway. The fishway ridges will be ‘roughened’ and coloured to help offset aesthetic and cultural heritage impacts. Both the Boera and Homestead fishways have been subject to thorough design and testing to ensure that they will perform their intended function effectively.

A Fishway Management and Monitoring Plan will be prepared to inform the operation of these fishways once construction is completed.

The Commonwealth Environmental Water Office (CEWO) also provide Monitoring, Evaluation and Research (MER) activities around the junction of the [Warrego and Darling rivers](#). Their Flow-MER program is helping to build knowledge about the best ways to improve the health of rivers and wetlands.

## Stay up to date

The Department will continue to keep stakeholders and communities informed of progress throughout the year. Find more information, including previous studies done for the project, on the Department’s [Environment, Energy and Science Toorale Water Infrastructure Project webpage](#), or for specific enquiries, email the Project Team at [toorale.project@environment.nsw.gov.au](mailto:toorale.project@environment.nsw.gov.au).

Cover photo: Wetland walk on the western floodplain of Toorale. The western floodplain provides increased habitat and food sources for fish when it is inundated and connected to the rivers, 2020, J. Smith. Above left to right: Juvenile Golden Perch sampled at Toorale, 2019, Ecological; Inspection of fishway panels to be contracted at Boera Dam, July 2021, A. Blakester/ DPIE)

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