



Trout Cod

Maccullochella macquariensis

Endangered

The overall objective of the Action Plan is to re-establish and maintain in the long term, viable, wild populations of Trout Cod as a component of the indigenous aquatic biological resources of the ACT.

Strategies in the Action Plan include:

- **Protect:** protect reintroduced populations, such as Bendora Reservoir as a refuge and resource for Trout Cod conservation.
- **Maintain habitat:** manage and maintain riverine habitats with appropriate seasonal flow regimes, intact riparian zones, pool depths, and minimal sediment inputs from surrounding areas.
- **Collaboration and partnership:** work with partner organisations on regional Trout Cod recovery efforts and continue to support national and regional re-establishment effort.

Population Trend (2018–23): Declining

Trout Cod populations have not been detected in their historical range in the Murrumbidgee River. However, Bendora Reservoir has an established but variable population derived from two stocking events between 1989–90.

Figure 1 shows the Bendora Reservoir Trout Cod population recruiting periodically, though with highly variable detection rates year-on-year.

Rates of recruitment are estimated to be intermittent, likely from the influence of dam water levels and seasonal variation. Further research is required to determine optimal environmental factors.

Conservation actions include genetic research into the diversity of the species, ongoing management and restoration works in the Murrumbidgee River Corridor, weed control and installation of Engineered Log Jams to address sedimentation and habitat loss.

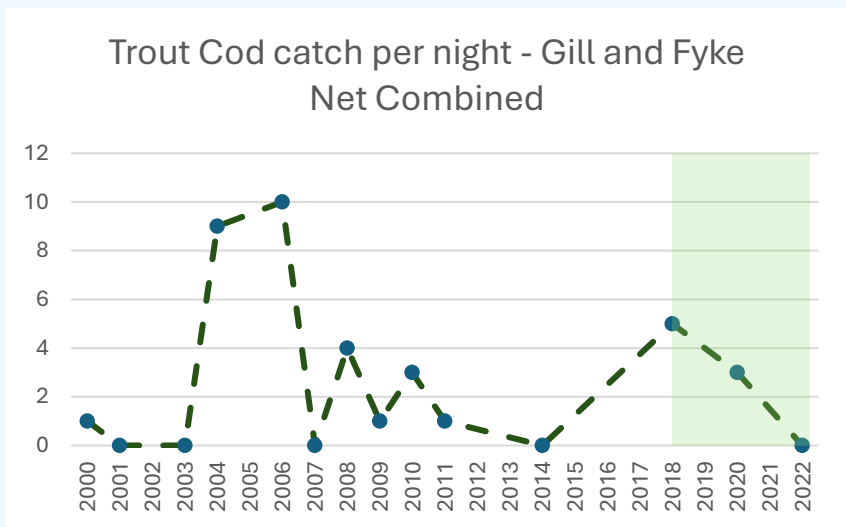


Figure 1: total catch of Bendora Reservoir Trout Cod per night (using gill nets and fyke nets). The rate during the Action Plan implementation period is highlighted green.

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Action Indicator	Progress 2018-23
Protection	
Namadgi and Murrumbidgee River Corridor populations continue to be protected in national park or nature reserve.	Achieved
Murray Cod not stocked in riverine environments. Incidence of hybrid cod (Murray/Trout cod) is investigated.	Achieved
Monitoring	
Riparian zones are protected from impacts of erosion, sedimentation, prescribed burns.	Mostly achieved - ongoing
Wild recruitment detected in reintroduced populations.	Mostly achieved - ongoing
Habitat conservation	
Habitat is managed appropriately (indicated by low rates of sedimentation, maintenance of appropriate riparian cover, provision of suitable flows, availability of suitable pool habitat, maintenance of fish passage).	Mostly achieved - ongoing
Aquatic habitats adjacent to known Trout Cod habitat are managed to improve suitability for the species.	Mostly achieved - ongoing
Collaboration	
Engagement and/or collaboration with other agencies/individuals involved in Trout Cod conservation and management.	Partially achieved - ongoing
Community awareness materials/programs produced and enhanced community awareness evident.	Mostly achieved - ongoing

Note: this is a summary of progress for action indicators. For the full Effectiveness Review Report, please contact OfficeofNatureConservation@act.gov.au.



Outcome:

Monitoring has concluded that historical stocking been successful in Bendora Reservoir but has not produced a viable population in the Murrumbidgee River. Interbreeding between Trout Cod and Murray Cod in the Murrumbidgee River has been observed. Overall, while the species has not made any substantial population recovery in its former range the population in Bendora Reservoir is ongoing.

What's next for the Trout Cod?

- Undertake actions to expand the understanding of the genetic diversity of Bendora Reservoir Trout Cod, with the possibility of stocking for a more genetically diverse population.
- Continue management of the ACT Murrumbidgee River by the Murrumbidgee River Corridor PCS, with the specific aim of improving the physical condition of the ACT Murrumbidgee River.
- Work with NSW Department of Primary Industries and Regional Development on the re-establishment of regional populations.