

Listing of *Percalates colonorum*

Background

In light of Bryan Van Wyk's honours dissertation there is an identified need to protect the one remaining population of the estuary perch in Tasmania at Arthur River. The need arises from the apparent intermittent recruitment of new fish to the population. It is most likely the population is entirely sustained by recruitment through the population's spawning rather than immigration from elsewhere. This is the only known extant population in Tasmania but historically they may have existed across the entire North coast and the upper East coast as evident from the previously known Ansons River population.

As reviewed by Rob Freeman in November 2017 the listing of estuary perch through Commonwealth or State threatened species legislation is a way to afford more protection for the Arthur River population. Under State legislation, *Tasmanian Threatened Species Protection Act 1995 (TSP Act)*, the appropriate listing would be "Rare". Under section 131 of the *Inland Fisheries Act 1995* a fish may be declared as a Protected Fish by Ministerial Order preventing the take of any protected fish, fine not exceeding 50 penalty units.

The listing of the species under threatened species legislation would make it difficult to remove such protection should the status of the species change due to establishment of further populations. A declaration of the species as a Protected Fish allows for this flexibility.

The Inland Fisheries Protected Fish Order affords the species legislative protection that would prohibit "take" of the species. With "take" being defined to include:

- (a) fish for, remove, gather, catch, capture, kill, destroy, dredge for, raise, collect, carry away or obtain in another way from water, land under water or the foreshore; and
- (b) land from a boat or bring ashore; and
- (c) attempt, cause or permit anything mentioned in paragraph (a) or (b) ;

The Protected Fish Order by preclusion of take for the species effectively prohibits the fishing for the species. This would therefore reduce if not eliminate targeting of species and thus reducing the most threatening process.

Recommendation

Estuary perch (*Percalates colonorum*) should be declared a Protected Fish under section 131 of the *Inland Fisheries Act 1995*.

Consultation for this legislative change could occur in 2019 alongside that for the review of *Inland Fisheries (Recreational Fishing) Regulations 2009* and *Inland Fisheries (General) Regulations 2009*.

Communication of this change (as a Protected Fish) needs to be developed. The target audience being anglers and users of the Arthur River. The IFS website would provide an

avenue for some of this communication. An article in the Advocate newspaper would help disseminate information to the target audience.

Further actions for protection of estuary perch in Tasmania

The establishment of another population of estuary perch in Tasmania would provide extra surety for the existence of the species in the state.

Ideally Arthur River estuary perch should be used for a breeding program to produce stocks for another population.

A study of this population was undertaken by Bryan van Wyk (IMAS) during 2014-15. The results of this study suggests the population size is low (1, 594 (\pm 775)) and recruitment is highly variable with the number of mature individuals at times, likely to be low.

Given the apparent small population at Arthur River the procurement of stocks from there may put this population at risk of further decline.

The Victorian Fisheries' estuary perch stocking program uses brood stock obtained from western Victorian rivers. These fish are transported to a commercial hatchery at Narooma, NSW. Progeny are then used to stock impoundments in Victoria for recreational fishing.

The genetics of the Tasmanian stock needs further investigation to determine the similarity to the Western Victorian stocks. Additionally an import risk assessment would be required. The latter would ensure that no pathogens would be introduced to Tasmanian waters via this importation.

The re-establishment of the Ansons River population with imported stock should be seen as the best way to achieve a second population of estuary perch in the state. The environmental constraints on the species at Ansons River which led to its previous demise needs to be addressed. The main constraint being access between the river reaches and the estuarine section. Through liaison with Tasmanian Department of State Growth this could be achieved.

In order to further the establishment of an additional Tasmanian population the following needs to be undertaken:

- Genetic analysis looking at the origins of the Arthur River population and similarities to western Victorian stocks.
- Removal of impediments to migration between Ansons River and the estuary (Ansons Bay).
- Import risk assessment of NSW hatchery originated estuary perch.
- Pursuit of funding avenues.