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RECOMMENDATION

AMBASSIS AGASSIZII – (OLIVE PERCHLET)

The Fisheries Scientific Committee, established under Part 7A of the *Fisheries Management Act 1994* (the Act), is making a recommendation to list the western NSW population of the olive perchlet, *Ambassis agassizii* as an ENDANGERED POPULATION in Part 2 of Schedule 4 of the Act.

Listing of an Endangered Population is provided for by Part 7A, Division 2 of the Act.

The Fisheries Scientific Committee has found that:

1. *Ambassis agassizii* Steindachner, 1866 is a valid species, and now includes the junior synonyms *Ambassis castelnaui* (Macleay, 1881), *Ambassis pallidus* (De Vis, 1884), *Ambassis olivaceus* (Ogilby, 1910) and *Ambassis nigripinnis* (Ogilby, 1910). In addition to olive perchlet, the species is also known as Agassiz's perchlet, Agassiz's or western chanda perch, Agassiz's glassfish, silver spray, or doody.
2. Female *Ambassis agassizii* may have at least 2000 eggs. Spawning occurs in November and December when the water temperature reaches 23°C. The eggs are scattered among vegetation. Both sexes reach maturity in one year, with some males surviving and breeding for two years and some females breeding in their third year.
3. In NSW *Ambassis agassizii* was once widespread in the Lachlan, lower Murrumbidgee, and lower Murray Rivers and throughout the Darling drainage system and in coastal streams in northern NSW. It now occurs in coastal drainages north of Lake Hiawatha and into Queensland. (eastern population). Its distribution throughout the Murray-Darling system (western population) has significantly declined in recent years and now appears to be limited to a few localities in the Darling drainage upstream from Bourke. It has not been recorded in any NSW survey of the lower Murray or lower Darling below Bourke since the 1960s. Previously the eastern and western populations were considered two distinct species. The western (Murray-Darling) population is the western and southern limit of the species' geographic range. Although genetic studies of the two populations have not been completed, the populations are likely to be genetically distinct.
4. *Ambassis agassizii* is listed as extinct in Victoria, with the last record in 1922. The last confirmed record in the Murray drainage of South Australia was a single individual in 1986. The IUCN Red List includes the species as Data Deficient. The species is not listed by either the Australian Society for Fish Biology or under the EPBC Act.

5. The causes of the decline in the western population of *Ambassis agassizii* may include:
- Predation by introduced fish such as Mosquitofish and Redfin perch.
 - Habitat degradation and loss.
 - Rapid fluctuations in water levels (due to river regulation) that have deleterious effects on successful reproduction and recruitment.
 - Cold water pollution from impoundment water release restricting spawning.
6. In light of 3, 4 and 5 above, the Fisheries Scientific Committee is of the opinion that the numbers in the western population of *Ambassis agassizii* have been reduced to such a critical level that the population is in immediate danger of extinction in NSW. The Committee is also of the opinion that this population is disjunct, at the limit of its geographic range and is likely to be genetically distinct. Therefore, the population qualifies for inclusion in Part 2 of Schedule 4 of the *Fisheries Management Act 1994* as an ENDANGERED POPULATION.

Dr Andrew Sanger
Chairperson
Fisheries Scientific Committee