

## RECOMMENDATION

### *MOGURNDA ADSPERSA* – (PURPLE SPOTTED GUDGEON)

The Fisheries Scientific Committee, established under Part 7A of the *Fisheries Management Act 1994* (the Act), has made a recommendation to list the western NSW population of the purple spotted gudgeon, *Mogurnda adspersa* 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. *Mogurnda adspersa* (Castelnau, 1878) is a valid species.
2. Female *Mogurnda adspersa* may lay several batches of eggs per season (30-1300 per batch). The eggs are deposited in clusters on solid objects such as rocks, wood or broad leaved plants. The male guards and fans the eggs until hatching (3-8 days).
3. In NSW *Mogurnda adspersa* was once widespread throughout the Murray-Darling system and in coastal streams. It now occurs in coastal drainages north of the Clarence River (eastern population). Its distribution throughout the Murray-Darling system (western population) is very limited and has significantly declined in recent years. Historically it was found in disjunct areas, but has been recorded only once since 1983 in the western population. Some evidence suggests that the eastern and western populations of this species are genetically distinct.
4. *Mogurnda adspersa* is listed as 'Restricted' by the Australian Society for Fish Biology. Environment Australia lists the species as a whole as 'rare' and acknowledges that the western population is severely depleted.
5. The causes of the decline in the western population of *Mogurnda adspersa* may include:
  - Predation by introduced fish such as Gambusia and Redfin perch.
  - Habitat loss.
  - Rapid fluctuations in water levels (due to water regulation) that have deleterious effects on successful reproduction and recruitment.
6. In light of 3, 4 and 5 above, the Fisheries Scientific Committee is of the opinion that in the western population of *Mogurnda adspersa* the numbers have been reduced to such a critical level that it is in immediate danger of extinction in NSW. 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

Established Under Part 7A (Threatened Species Conservation) of the NSW *Fisheries Management Act 1994*