

# River Murray: Flow dependent fish



## Fish population condition

SA trend and condition report card 2020

STATEWIDE



Trend  
**Stable**



Condition  
**Poor**



Reliability  
**Poor**

### Trend

**The population age structure of flow-dependent fish is generally stable but varies between species.**

Murray cod and golden perch are two iconic fish species found throughout the Murray–Darling Basin. Successful reproduction and recruitment of these species requires a particular set of flow cues and conditions.

Golden perch age structure is considered stable, although there has been no recruitment to the population since 2013–14. The age structure of the Murray cod population is improving, with recent recruits detected in all years from 2012–13.

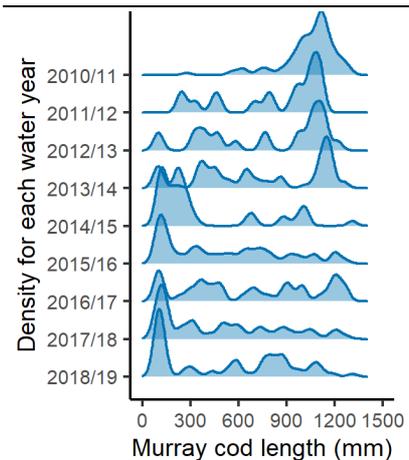
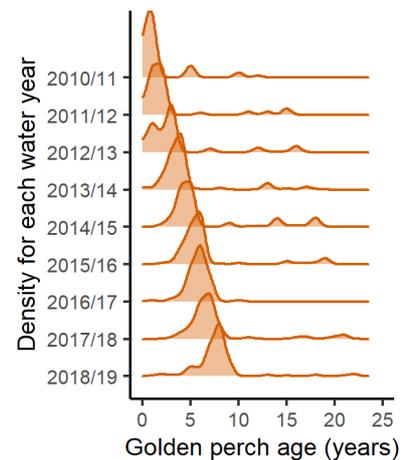
### Condition

**The condition of flow-dependent fish populations is poor.**

The condition of Murray cod and golden perch populations is determined by the age classes within the population. A population in good condition has a variety of age classes. Population age structure is based on age for golden perch and on length for Murray cod.

Golden perch (top figure) has shown a desirable age population structure in only 4 of the past 10 years. The Murray cod population is considered to be in slightly better condition, with 8 of the past 10 years showing a desirable age population structure (bottom figure).

**Golden perch populations are stable, while Murray cod populations are improving.**



### Why are River Murray flow dependent fish important?

Murray cod and golden perch are iconic, large-bodied fish of the Murray–Darling Basin.

Murray cod is a nationally threatened species. It is an important cultural and recreational species that also plays an important role in the river ecosystems as a key predator. Golden perch is also an important commercial, recreational and cultural species within the Murray–Darling Basin, and is also an important indicator of hydrological connectivity at larger spatial scales.

### What are the pressures?

The health of the Murray–Darling Basin has been significantly affected by river regulation, consumptive use of water resources and drought. This has led to changes in flow conditions, decreased connectivity and reduced water quality. These changes have affected the movement and reproduction of flow-dependent fish species, particularly in the South Australian Murray–Darling Basin.

Other impacts include recreational and commercial fishing, and the degradation of habitat, such as the removal of woody debris and snags in the river.

### What is being done?

Delivery of water aims to improve flows for fish reproduction and recruitment. In particular, restoration of late spring to summer flow pulses within the river channel is considered important.

Complimentary actions such as re-snagging of channel habitats, and new approaches to managing weirs and other regulating structures will improve fish recruitment.

For further information, see [Technical information](#)



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