

Inland waters: invasive fish

Established invasive fish abundance and distribution

SA trend and condition report card 2020



STATEWIDE



Trend
Stable



Condition
Poor



Reliability
Fair

Trend

The distribution of established invasive fish in South Australia is stable.

This assessment is of the change in distribution of established invasive fish in the state's inland waters (lakes, rivers and streams) since 2015. Trends vary locally, but are generally stable in the Murraylands and Riverland (MR), Green Adelaide (GA), Hills and Fleurieu (HF), Limestone Coast (LC) and Kangaroo Island (KI) regions (top figure).

Goldfish, mosquito fish, oriental weatherloach, redfin perch, roach, speckled livebearer and tench are established in our waterways. Distribution expansion is monitored through passive surveillance, with reports of aquatic pests, indirectly through projects that monitor the ecological health of freshwater systems, and at times through targeted local surveys.

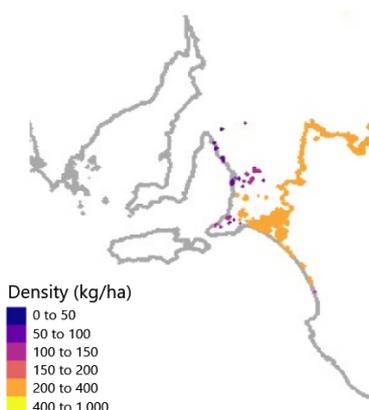
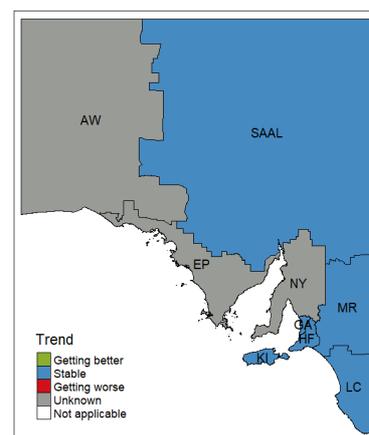
Trends of established invasive fish are unknown in the Eyre Peninsula (EP), Northern and Yorke (NY), and Alinytjara and Wilurara (AW) regions due to limited data.

Condition

The current condition of inland waters is poor because established invasive fish are widespread, with high biomass in some catchments.

Invasive fish are found in almost all South Australia's waterways. Once an invasive fish species has established a population in a waterway, it is difficult to eradicate. Current modelling estimates that approximately 550 kilograms per hectare of carp are in the South Australian section of the River Murray (bottom figure). As a result of river regulation (i.e. locks, weirs, flood plain levees), wetlands are predominately shallow, well-vegetated, slow-flowing habitats, which are characteristic of areas that carp actively seek for spawning and nursery sites.

Invasive fish are widely distributed in large numbers in South Australia's waterways.



Why are inland water invasive fish a problem?

Invasive fish have environmental, social and economic effects on our waterways. They can alter the structure and function of aquatic ecosystems, compete with native species, reduce water quality, spread disease, and affect recreation and tourism. For example, common carp is estimated to cost the recreational fisheries sector \$44 million annually in the Murray-Darling Basin.

What are the pressures?

Invasive fish can disperse beyond their natural range and become established naturally or by human activity, such as translocation of fishing species. With increasing trade, transport and development, the risk of new incursions is high.

Invasive fish distribution and abundance can change in response to climate, and changes in water flows and availability.

Some invasive species are not easily seen and may be hard to identify, meaning that they are more likely to establish and spread without detection.

What is being done?

The primary focus of invasive species management is community education to prevent human-assisted dispersal.

Once an invasive fish is established in a natural waterway, it is difficult to eradicate. At a local scale, control options may include removal, smothering and chemical treatment.

Invasive aquatic species are managed through environment and fisheries legislation, and biosecurity policies.

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



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