

# Established invasive species abundance and distribution

## Biodiversity | Inland waters



South Australia's environmental trend and condition report cards 2023



PRESSURE

### Trend

The trend in the abundance and distribution of established invasive species in inland waters in South Australia is stable.

Trends in the abundance and distribution of established invasive aquatic species (fish, invertebrates and weeds) are considered stable in 4 landscape regions and are unknown in the other 5 landscape regions due to limited data (top figure).

European carp, goldfish, mosquito fish, oriental weatherloach, redfin perch, roach, speckled mosquitofish (or speckled livebearer), sleepy cod, tench, marron, Canadian pond weed, celery buttercup (or poison buttercup) and sagittaria are established in the state's waterways. Outbreaks of other aquatic weeds, such as leafy elodea, are seen occasionally.

Invasive species abundance and distribution in inland waters is monitored through passive surveillance. This includes information from public reports of invasive species (e.g. Fishwatch), projects on ecological health monitoring of freshwater systems, Lakes and Coorong Fishery data, and some targeted local surveys.

### Condition

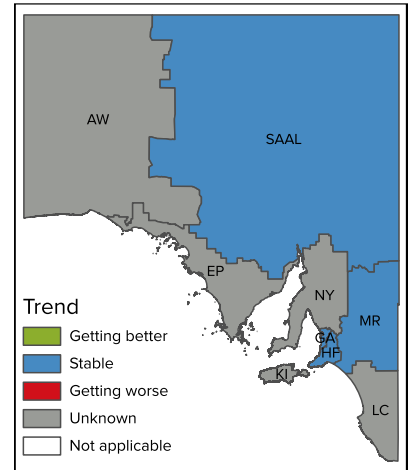
The statewide condition of inland waters due to established invasive species is rated as poor.

Invasive fish are found in almost all South Australian waterways and are in high biomass in some catchments. Aquatic weeds and invertebrates are also established in many of the state's waterways.

There have been no reports of established invasive aquatic species spreading to new regions.

There is very limited information on abundance, except for European carp which is monitored as part of the wider Lakes and Coorong Fishery assessments.

**Abundance and distribution of established invasive species in inland waters is stable in South Australia.**



### Why is managing inland waters invasive species important?

Invasive aquatic species can cause environmental, social and economic harm. They can alter the structure and function of aquatic ecosystems, compete with native species, reduce water quality, spread disease, and impact recreation and tourism. For example, European carp is estimated to cost the recreational fisheries sector \$44 million annually in the Murray–Darling Basin. Once an invasive aquatic species is established in a natural waterway, it is difficult to eradicate.

### What are the drivers?

Invasive aquatic species can disperse from where they were initially detected and increase in numbers.

Range expansion can occur through the waterways via natural dispersal or by human activity, e.g. incorrect disposal of aquarium and ornamental pond species, stocking of dams, and prohibited introductions to new areas. Invasive aquatic species distribution and abundance can change in response to climate, and changes in water flows and habitat availability.

### What is being done?

Invasive aquatic species are managed through environment and fisheries legislation, and biosecurity policies. Aquatic biosecurity activities include education, monitoring, regulating high-risk species, and developing response measures (e.g. eradication or containment) in the event a new aquatic invasive species is detected. At a local scale, control options may include removal, smothering and chemical treatment.

For further information see: [technical information](#)



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Government of South Australia