

CLLMM: Diadromous fish



Fish recruitment

SA trend and condition report card 2020

STATEWIDE



Trend
Getting better



Condition
Fair



Reliability
Good

Trend

Recruitment of diadromous fish species (congolli and common galaxias) is getting better, with variability between years.

Diadromous fish are those that move between the freshwater, estuarine and marine environments to complete their life cycles. The trend for diadromous fish was assessed by looking at the recruitment of congolli and common galaxias.

During the Millennium Drought congolli failed to meet recruitment targets in every year of sampling. Common galaxias failed to meet recruitment targets in all but one year.

Since the end of the drought, congolli exceeded recruitment targets in every year, while common galaxias exceeded recruitment targets in all years but 2016–17.

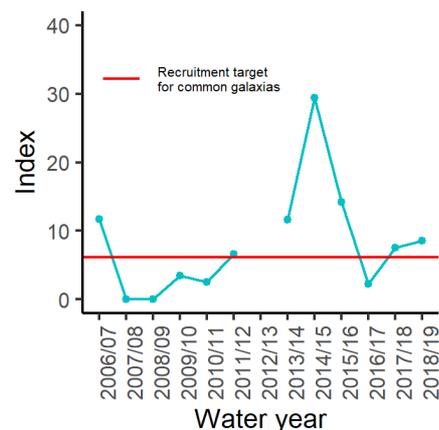
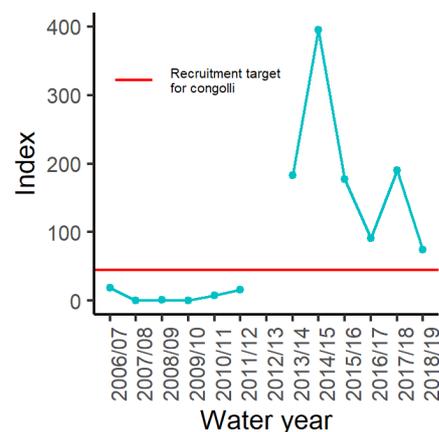
Condition

The condition of congolli and common galaxias is rated as fair based on recruitment index values.

The condition of congolli (top figure) and common galaxias (bottom figure) is assessed using a recruitment index. This is based on the upstream migration of fish less than one year old.

Recruitment of diadromous fish was negligible during the Millennium Drought due to a lack of freshwater inflows and resulting closure of the barrages and fishways. Increased freshwater flows since 2012 have improved system connectivity during critical migration periods, resulting in improved recruitment of diadromous fish.

Increased connectivity has improved the recruitment of diadromous fish.



Why are diadromous fish important?

Recruitment indices of diadromous fish reflect the level of connectivity between the freshwater environments of the River Murray, the estuarine environments of the Coorong and Murray estuary, and the Southern Ocean. The Coorong is the only estuarine habitat in the Murray–Darling Basin, and is therefore the only access point for diadromous fish species in the Basin.

What are the pressures?

The primary factor that influences diadromous fish movement and recruitment is the connection between freshwater, estuarine and marine environments. Connectivity is especially important in winter and early spring when adults migrate from freshwater to estuarine habitats to spawn. Water resource development throughout the Murray–Darling Basin has heavily reduced the flows that reach the estuary, reducing the levels of connection between these environments.

What is being done?

Maintaining connectivity between the River Murray and key freshwater, estuarine and marine environments within the Coorong, Lower Lakes and Murray Mouth (CLLMM) is critical for managing diadromous fish movement and recruitment. The delivery of water contributes to maintaining system connectivity by providing freshwater inflows, and ensuring that barrages and fishways remain open. Dredging of the Murray Mouth is also critical in maintaining connectivity to the marine environment, particularly in the absence of sufficient freshwater inflows.

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



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