

What is fish recruitment?

Fish are one of the most important social, economic and ecological resources in Gladstone Harbour. They play a multitude of roles in aquatic ecosystems including nutrient cycling and ecosystem regulation.

Fish recruitment is one of the key dynamic functions that affects fish populations. It reflects the annual number of juvenile fish entering the mature population.

2020 2021 2022 2023 2024

Fish recruitment improved from a (D) in 2023 to a (C) in 2024. Almost all of the zone scores increased or stayed the same.

A score of 0.50 indicates a season at the median reference level, with no increase or decrease from the long-term average. Fish recruitment received a score of 0.57.

In 2024, 4,866 fish were captured and released for this indicator.

How is it measured?

Fish recruitment surveys are conducted using cast nets to collect samples, covering the upper tidal limit and daily tidal influence. Data is collected from 26 sites across 12 harbour zones, across December, January, and February.

Scores in the report card are based on the abundance of Yellowfin and Pikey bream, though other fish and prawns are also collected.

An annually-updated statistical model, incorporating previous results, annual catch rates, and environmental variables, determines the recruitment scores.