



Australian Government

Australian Fisheries Management Authority

Redfish (*Centroberyx affinis*) Management Update

Updates since the 2015 Redfish Stock Rebuilding Strategy

May 2026

Securing Australia's fishing future

www.afma.gov.au

Contents

Introduction	3
Updates to Redfish Management Arrangements	4
<i>Closures</i>	5
<i>Danish seine mesh size</i>	6
<i>Total Allowable Catch (TAC)</i>	6
<i>Move-on Provision</i>	6
<i>Buyback</i>	6
<i>Electronic Monitoring</i>	7
Observed results.....	7
<i>Buybacks and effort</i>	7
<i>Catch</i>	8
<i>Catch data from South East Australian Marine Ecosystem Survey (SEA-MES) Voyages 1-4</i>	8

Version and date	Updates	Approver

Introduction

This document outlines management changes since the implementation of the *Redfish Stock Rebuilding Strategy 2016* (the Strategy) and should be read in conjunction with that Strategy. The objectives of the Strategy are:

- to rebuild Redfish in the area of the SESSF to the default limit reference point of 20 per cent of unfished biomass (BLIM) within a biologically reasonable timeframe, being approximately 27 years (one mean generation time plus 10 years)
- having reached BLIM, rebuild redfish to the maximum sustainable yield level of 40 per cent of unfished biomass (BMSY).

A review of the Strategy in 2021 by the South East Resource Assessment Group (SERAG) resulted in no amendments being recommended as there was no new available information to inform a change. In the following year, AFMA began to consult on a suite of measures including trawl closures and the Department of Agriculture, Fisheries and Forestry (DAFF) administering a structural adjustment package of the trawl fleet. The specific objective of these measures is to rebuild stock levels and/or reducing fishing pressure on depleted species, including Redfish. These arrangements were implemented in 2023 and are outlined below.

Management changes of relevance to Redfish since the 2016 Strategy was implemented include:

- A reduction in trawl licences via a buy-out;
- Large scale closures to otter trawl and Danish seine fishing;
- Increases to Danish seine minimum mesh size;
- Increases to target species Total Allowable Catches (TACs) not applied;
- A decision to introduce Electronic Monitoring in the Commonwealth Trawl Fishery by mid-2026;
- Decrease in redfish TAC; and
- Move-on provisions.

Measuring the performance of the Strategy is challenging. Retained catch of Redfish in recent years is very low and discard estimates are highly uncertain given the species is not encountered as much as it was in the past and existing levels of observer coverage, making it difficult to collect sufficient data to undertake a stock assessment. Management measures implemented as part of the Strategy and since, are expected to benefit the stock but have not yet had time to be realised. These issues are further confounded by climate modelling that indicates Redfish is climate impacted, with climate having a moderate influence on the biomass of the stock and is contributing to a lower biomass than would have occurred otherwise. While it is expected that this may have implications for the rebuilding objectives and associated timeframes, it is not yet clear what those impacts are.

Commercial and recreational fisheries operating off NSW also catch Redfish and the NSW Department of Primary Industries (NSW DPI) is currently consulting on a number of changes to management for depleted species, including minimum size limits and reduced catch limits for Redfish¹.

¹ [Rebuilding Programs for New South Wales Fish Stocks](#)

Redfish is currently being considered for listing under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) in the category of Critically Endangered.

Updates to Redfish Management Arrangements

Commencing on 1 May 2023, AFMA implemented additional management measures, through subordinate legislation and enforceable conditions on Statutory Fishing Rights (SFR), to reduce fishing mortality on a range of at-risk species. While Jackass Morwong was the focus of the action, AFMA and industry worked to ensure flow-on benefits to other species, including Redfish.

The primary changes include:

1. Large scale closures to otter trawl and Danish seine fishing to remove high risk fishing from areas of high abundance.
2. Increases to Danish seine minimum mesh size to increase escapement of juvenile fish.
3. Increases to target species' total allowable catches, in line with scientific advice, were not implemented so as to restrict any expansion in fishing footprint or effort outside closed areas that could result in bycatch of the at-risk species.

AFMA worked closely with industry, DAFF and the Fisheries Minister (Minister Watt) to secure additional appropriation (\$20 million) for buyback of trawl boat SFRs to reduce overall fishing effort.²

AFMA secured assistance from Commonwealth Scientific and Industrial Research Organisation (CSIRO) to undertake ecosystem model (using 'Atlantis') projections of the potential impacts of the measures 1-3 and the buy-back on a range of at-risk species, including Redfish.

Figure 1 illustrates projected biomass trends relative to 1980, with a forward projection to 2023. The black line shows the expected trajectory without further management intervention, the blue line reflects a projected recovery to about 50% of the 1980 level due to the 2023 buyback and closures, and the green line shows the potential increase to approximately 140% of the 1980 level if fishing effort was removed completely (complete fishery closure).

The 2020 redfish stock assessment³ (Bessell-Browne & Tuck, 2020) estimated that the relative spawning biomass was around 60% B_0 in 1980. Applying the modelled projections in Figure 1 to the stock assessment suggests that the buyback and closures would result in biomass building to about 30% B_0 by 2033.

The measures were estimated to result in a statistically significant increase in the abundance of redfish by 2033. Results from the first two fishing seasons show that fishing pressure has reduced significantly, such that this modelled outcome may be realised.

While the management measures, and modelled outcomes, provide a relative rebuilding outcome over a set period, as opposed to an absolute abundance increase, they can be considered in

² [Portfolio Budget Statements 2022-23 for the Agriculture, Water and the Environment Portfolio](#) (page 30)

³ [Bessell-Browne, P. and Tuck, G.N. \(2020\) Redfish \(*Centroberyx a. finis*\) stock assessment based on data up to 2019 – development of a preliminary base case.](#)

conjunction with the stock assessment to infer absolute biomass outcomes (as discussed in the context of figure 1).

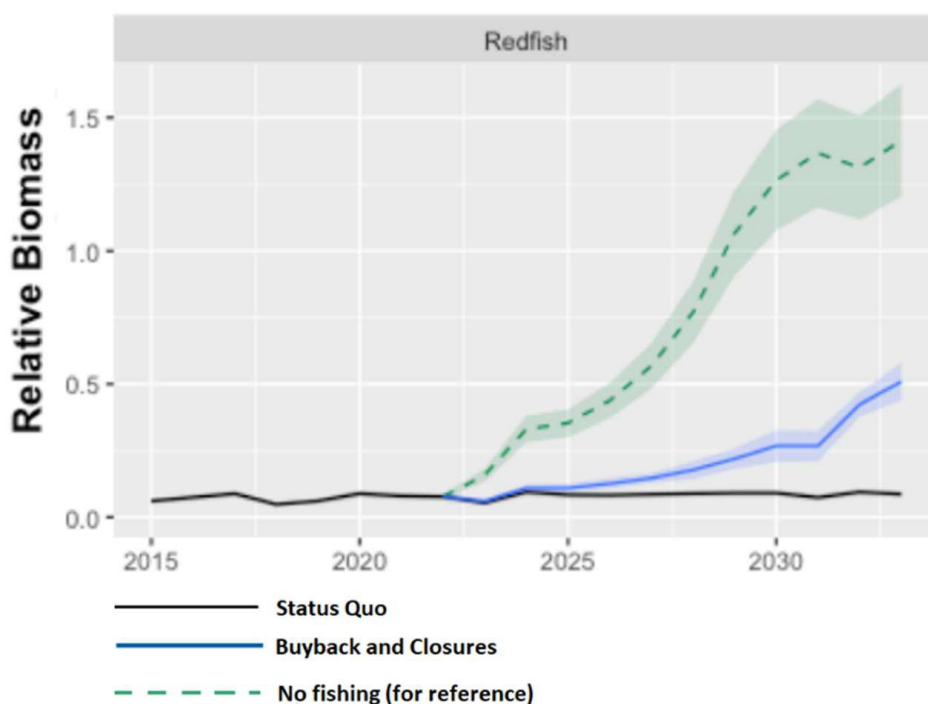


Figure 1. Atlantis projections of “Buyback and Closure” and “No fishing” scenarios for redfish

In August 2025, the AFMA Commission made the decision to mandate use of Electronic Monitoring (EM) in the Commonwealth Trawl Fishery from July 2026 as an independent monitoring and data collection tool. One the key aims of the program is to improve estimates of total mortality of depleted species.

Closures

In 2023, five additional closures were added to the *Fisheries Management (Southern and Eastern Scalefish and Shark Fishery and Small Pelagic Fishery Closures) Direction 2021*. These five eastern SESSF closures were identified as areas of high abundance of high-risk species. These closures (Schedule 40, 41, 42, and 44) are closed to all trawl methods of fishing, with Schedule 43, closed to Demersal otter Trawl.

Please refer to the *Fisheries Management (Southern and Eastern Scalefish and Shark Fishery and Small Pelagic Fishery Closures) Direction 2021* for up-to-date conditions of each of closures⁴.

⁴ [Federal Register of Legislation – Fisheries Management \(Southern and Eastern Scalefish and Shark Fishery and Small Pelagic Fishery Closures\) Direction 2021](#)

Maps of each closure are available in the [SESSF Management Arrangement Booklet](#), which is updated annually to reflect any changes or amendments.

Danish seine mesh size

In 2023 the Trawl Boat SFR gear limitations were updated for Danish seine trawl so that:

“not less than 38 mm mesh at any part of the net, or 80 mm in the codend when targeting flathead; minimum codend length of 50 meshes; only free-flowing lifting strops may be used; no less than 1:1 ration (a:b) between a) the stretched circumference of the posterior body of the net and b) the stretched entrance of the codend.”⁵

A minimum mesh size of 80 mm is required for Danish seine trawling when fishing in Schedule 43. This is to allow juvenile and smaller non-target species, such as Redfish, to escape the nets while fishing.

Total Allowable Catch (TAC)

In order to set Total Allowable Catches for each species in the SESSF, AFMA management and the relevant RAGs and MACs provide TAC advice based on the best available information. This information is provided to the AFMA Commission who determine the SESSF TACs for each season. As Redfish is below its limit reference point, the Recommended Biological Catch (RBC) is zero however the given the fishery is a mixed-species fishery, an incidental catch TAC has been set for Redfish since the Strategy was implemented.

The incidental TAC for Redfish was 100 tonnes when the Strategy was first implemented and was later reduced to 50 t in 2019, 30 t in 2022 and 5 t in 2026. The 5 t TAC was supported as a way to reduce fishing mortality while enabling some data collection through the ability to retain small amounts of byproduct.

TACs are legislated annually though determinations made by the AFMA Commission and any retained catch by operators must be covered with quota.

Move-on Provision

On 1 May 2026, in conjunction with the reduced TAC of 5 t, a move-on rule was implemented via SESSF Trawl Boat SFR conditions. If an operator encounters more than 50kg of Redfish in a shot, they are not allowed to fish within 3 nautical miles of that location for a 24 hour period.

Buyback

The Commonwealth Trawl Sector (CTS) has been subject to two Commonwealth-funded buyback programs administered by DAFF. The first (between 2004 and 2006), reduced the number of trawl boat SFRs from 188 to 59, and the second (in 2023) reduced trawl SFRs from 57 to 36 (noting two voluntary licence surrenders between 2006 and 2023). Ten of the 21 licences removed through the 2023 buyback were active prior to surrender.

⁵ [2025-26 Trawl Boat SFR conditions](#)
Securing Australia's fishing future

Electronic Monitoring

A 12-month trial of Electronic Monitoring (EM) was undertaken in the CTS during 2024 to determine if EM is a cost-effective alternative to scientific observers to meet the requirements of reliable data collection to support the management of the fishery, including monitoring of Endangered, Threatened and Protected (ETP) species interactions, seabird bycatch mitigation and quantifying discarded catch of target and bycatch species.

Following consultation with stakeholders and experience in other fisheries with EM, in August 2025 the AFMA Commission decided to mandate EM in the CTS by 1 July 2026.

Observed results

Buybacks and effort

The number of available trawl boat SFRs has been reduced by 70% since 2004. Around 20 fewer boats landed redfish after the first buyback (completed in 2006 – see Figure 2⁶) and around four fewer boats after the second buyback (completed in 2023). The current number of boats landing Redfish (i.e. 14) is 79% lower than the peak number (of 67) in the early 2000s. Fishing effort (as hours trawled) by these same vessels has dropped by 87% since the peak fishing effort in the early 2000s (maroon coloured line in Figure 3).

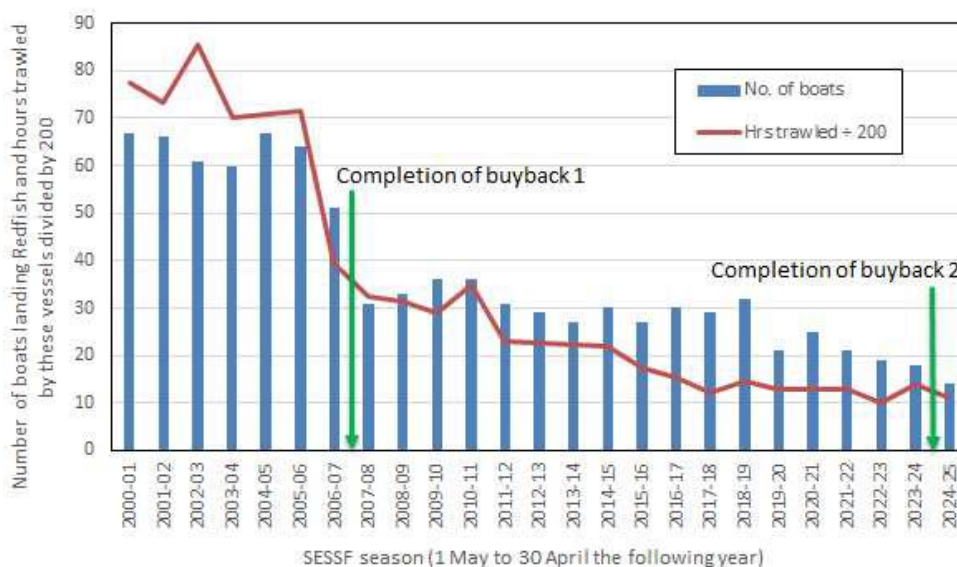


Figure 2. Number of Commonwealth trawl boats landing Redfish and the number of hours trawled by these vessels (divided by 200 for comparative purposes) since the start of the 2000-01 SESSF season. The timing of the two buybacks is shown for reference.

⁶ Note that buybacks are completed by financial year, two months after the start of SESSF season (1 May)
Securing Australia's fishing future www.afma.gov.au

Catch

The combined catch of redfish by the NSW and Commonwealth trawl fleets exceeded 2,000 tonnes (t) on several occasions between the late 1970s and early 1990s. Figure 3 shows the catch history (in calendar years) for these combined fleets (on a logarithmic scale) that was used in the 2020 stock assessment for redfish plus additional records since 2019. Catch estimates for 2020–2023 were taken from Althaus and Suttton, 2024. The estimates for 2024 are based on Commonwealth catch disposal record for Redfish and assumes catch of 5 t by the NSW fleet.

The current (combined) landed catch of redfish (circa 16 t) is approximately 130-fold less than the historical peak catches of around 2,100 t shown in Figure 3.

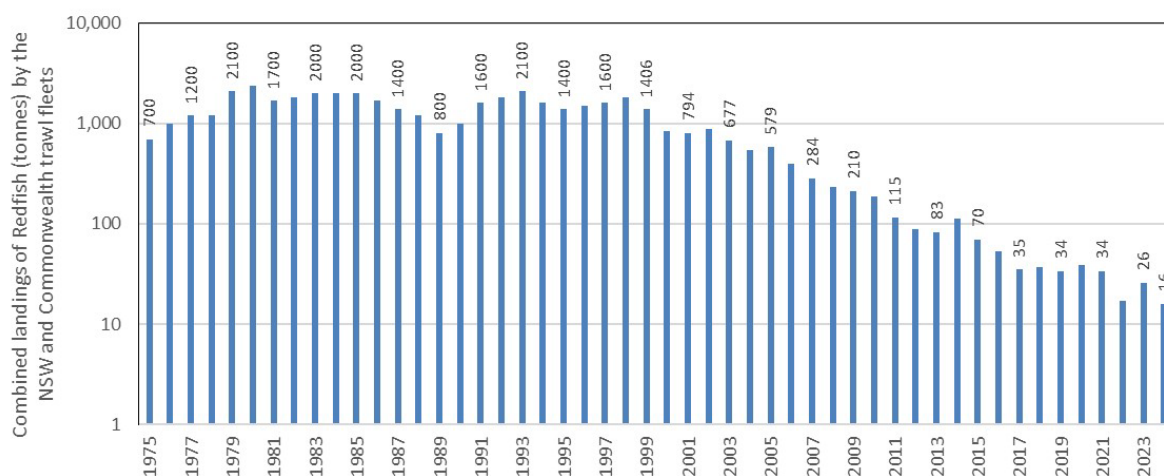


Figure 3. Combined catch of redfish by the NSW and Commonwealth trawl fleets by calendar year (logarithmic scale). Every second data label and year shown to highlight magnitude of reductions, which have been management driven for more than the past decade.

Catch data from South East Australian Marine Ecosystem Survey (SEA-MES) Voyages 1-4

The Southeast Australian Marine Ecosystem Survey (SEA-MES) is revisiting past bio-physical and ecosystem surveys of the South East continental shelf using the CSIRO RV *Investigator* to assess 30 years of change. It aims to disentangle the impacts of climate change and fisheries on the ecosystem. SEA-MES uses various biological sampling methods, primarily a semi-V-wing demersal trawl for fish and demersal fauna, including Redfish.

Preliminary data from voyages 1–4 show Redfish catch rates of 2.28 kg/h, with CPUE values under 20 kg/h—less than 10% of 1990s SEFES survey levels. Redfish were also found in the Bass Strait, outside SEFES areas. Sampling efforts were comparable for depths <300 m, with Redfish typically found at <250 m but at much lower abundance than historical baselines. Community composition has shifted, especially in the north, with southern sites showing more similarity to SEA-MES samples, suggesting ecosystem restructuring potentially driven by oceanographic changes.

Supporting this, BRAN2020 ocean model data (1993–2023) showed warming and increased variability around Tasmania, with elevated surface and bottom temperatures and more eddy

activity. While ecological impacts remain uncertain, these findings underscore the need for ongoing monitoring and research.



Australian Government

**Australian Fisheries
Management Authority**