



Blue warehou rebuilding strategy review – key points

Purpose

The Australian Fisheries Management Authority (AFMA) has undertaken a five-year review of the [Blue Warehou Rebuilding Strategy 2014](#) (the current Rebuilding Strategy) and is now seeking feedback from the public to help inform the development of a revised Rebuilding Strategy.

Background

The implementation of rebuilding strategies for overfished species/ stocks is specified under the [Commonwealth Fisheries Harvest Strategy Policy 2018](#) (HSP) and associated [Guidelines](#).

When a species/ stock is assessed as being below the designated limit reference point, AFMA directs that targeted fishing ceases and then in consultation with the AFMA Commission, industry and key stakeholders, develops a rebuilding strategy with the aim to rebuild the species/ stock back to above the limit reference point within a specified rebuilding timeframe. Once implemented, a rebuilding strategy is maintained until the species/ stock is assessed to be above the limit reference point with a reasonable level of certainty.

The ongoing implementation of a rebuilding strategy is required where a species/ stock has been listed as 'Conservation Dependent' under the [Environment Protection and Biodiversity Conservation Act 1999](#) (EPBC Act). If a species/ stock has been assessed as being above the limit reference point, but continues to be listed as conservation dependent, the rebuilding strategy must remain in place until such time as the listing category has been revised.

AFMA is required to implement and review management arrangements, including monitoring and data collection programs, to support future assessments and to monitor rebuilding to satisfy requirements of the EPBC Act.

Each year, AFMA, in consultation with the relevant Resource Assessment Group (RAG) and Management Advisory Committee (MAC), reviews progress against the rebuilding strategies with a particular focus on catch and effort data to ensure that targeted fishing is not occurring, and reviews other key fishery indicators to monitor the rebuilding of the stock. The review also informs whether any additional management or monitoring requirements are necessary.

Every five years, AFMA undertakes a formal strategic review of each rebuilding strategy. Following the five-year review, AFMA considers the outcomes and may develop a revised rebuilding strategy which is subject to public consultation and then endorsement by the AFMA Commission.

Following the review of the current Rebuilding Strategy, AFMA, in consultation with the relevant RAG and MAC, have proposed changes to be included in the revised Rebuilding Strategy. The revised Rebuilding Strategy will be implemented for the period 2021 to 2025.

Blue warehou

For key information about blue warehou, refer to the [AFMA website](#).

A rebuilding strategy for blue warehou was first developed and implemented in 2008 under the *Commonwealth Fisheries Harvest Strategy Policy 2007* (2007 HSP); which required formal rebuilding strategies for all species/ stocks assessed as being below their biomass limit reference point. The 2008 Rebuilding Strategy was designed to pursue the objectives of the *Fisheries Management Act 1991* and to be consistent with the 2007 HSP.

The development and implementation of a rebuilding strategy is also a condition of the Southern and Eastern Scalefish and Shark Fishery (SESSF) Wildlife Trade Operation accreditation under the EPBC Act.

The current Rebuilding Strategy continues the management arrangements first set out in the 2008 strategy, with the aim to rebuild the stock to its biomass limit reference point within a biologically reasonable timeframe. It also includes measures to prevent targeted fishing by setting an incidental total allowable Catch (TAC) to cover unavoidable catches, and monitoring and data collection programs to improve our knowledge of stock status.

Five-year review in 2019

In 2019, AFMA undertook a [five-year review](#) of the current Rebuilding Strategy with a focus on progress against the rebuilding objectives and consideration of any changes required.

AFMA implemented a new management measure in 2019 which requires operators to move a minimum of three nautical miles from the area if more than 200 kg of blue warehou (retained or discarded) is caught in a single shot, for a period of 24 hours. A review of fishery catch and effort data in 2019 showed that this move on provision had been adhered to by operators. This management measure will be included in the revised Rebuilding Strategy and will be subject to annual review.

Proposed changes

In 2019, AFMA sought input on the current Rebuilding Strategy from the South East RAG ([SERAG](#)), a summary of key points and how AFMA’s proposed response is provided in [Table 1](#).

Table 1. SERAG’s advice (2019) and AFMA’s response.

SERAG Feedback	AFMA Response
Maintain focus on AFMA observers for on board data collection, particularly for discard estimates.	<p>AFMA will continue to deploy observers in the SESSF in line with the Integrated Scientific Monitoring Program (ISMP) plan.</p> <p>Obtaining reliable discard estimates will be dependent on coverage, which is typically low due to avoidance behaviour and low catches.</p>
Continue to request Tasmanian recreational catch data.	AFMA, through the Commonwealth Scientific and Industrial Research Organisation (CSIRO), will continue to request Tasmanian recreational catch data and consider it as a line of evidence as part of the annual review of the Rebuilding Strategy.
Undertake an annual companion species analysis, incorporating a métier approach, to supplement existing targeting analyses and review of fishery indicators. Furthermore, the métier approach could be used to update estimates of unavoidable bycatch.	<p>A targeting analysis has been included in the 2020-21 Data Services contract with CSIRO. These analyses will be an ongoing component of that contract and will be included in the review component of the revised Rebuilding Strategy.</p> <p>A companion species (metier) analysis is being considered as a standard component of the Multi-species Harvest Strategy Project. The frequency, and how the outputs are used, will be considered as part of this process.</p>

<p>Investigate the Close-kin Mark-recapture (CKMR) methodology as an option for establishing an index of abundance.</p>	<p>A research proposal was submitted to the Fisheries Research and Development Corporation (FRDC) as part of the 2020/21 SESSF Research Plan.</p> <p>If approved, results from this research will not be available until after 2024.</p>
<p>Develop industry education programs to promote management arrangements, including reporting requirements and the move-on provision, and to promote the South East Trawl Industry Association (SETFIA) Code of Practice.</p>	<p>An industry education program has been included in the draft 2021 Commonwealth Trawl Sector Bycatch and Discarding Workplan. Topics will include reporting requirements, improved species identification and species-specific management arrangements.</p>
<p>More broadly, SERAG suggested AFMA need to consider potential ecosystem shifts that may lead to non-recovery of some stocks, and what the implications are for rebuilding timeframes.</p>	<p>A FRDC project investigating the use of dynamic reference points is currently underway. The project will consider options for implementing dynamic reference points in future harvest strategies to account for environmentally driven trends in productivity and recruitment.</p> <p>AFMA will also seek guidance from DAWE on how to address the failure of a stock to rebuild within the timeframes specified within the rebuilding strategy.</p>

Updating reporting requirements

AFMA is proposing to update the reporting requirements outlined under the current Rebuilding Strategy – Appendix B. Under the existing reporting regime for eastern and western zone catch triggers, operators are required to report landings greater than 250 kg to AFMA on a fortnightly basis until 60 per cent of the triggers are caught, then on a weekly basis once 80 per cent is caught, and then daily until the triggers are met.

These reporting requirements were introduced when paper logbooks were still being used, to ensure AFMA could monitor catches against the eastern and western catch triggers in a timely manner. The introduction of electronic logbooks now allows AFMA to monitor catches in real-time, and so a separate reporting framework is no longer required. AFMA proposes to remove this reporting requirement from the revised Rebuilding Strategy and update the information about catch triggers provided under Appendix B.

The annual reporting template at Appendix A of the current Rebuilding Strategy was developed to guide an annual review of available data and to assess the performance of the Rebuilding Strategy objectives. Given recent and proposed changes to management arrangements and reporting requirements, AFMA proposes to update the template with a revised set of considerations, including the addition of the move-on provision and updated targeting analyses. The structure of the template, including the order of questions, will be revised and incorporated within the main body of the document for clarity.

Monitoring and rebuilding timeframes

The current Rebuilding Strategy identifies a rebuilding timeframe of one mean generation time plus 10 years. Monitoring the species/ stock recovery against this timeframe depends on a reliable index of abundance.

Guided by the 2007 HSP, the Rebuilding Strategy adopted the biologically reasonable rebuilding timeframe to the limit reference point of approximately 16 years, from the date of the 2008 rebuilding strategy. This means the aim is to rebuild blue warehou to the limit reference point by or before 2024.

Under the revised Rebuilding Strategy, AFMA has identified key issues relating to establishing a reliable index of abundance for the stock, and meeting the specified rebuilding timeframe of 2024.

The previous stock assessment for blue warehou relies on Catch Per Unit of Effort (CPUE) as an index of abundance. However, avoidance behaviour by operators (consistent with the current rebuilding strategy objectives) and low catches mean CPUE has become increasingly unreliable. The patchy distribution and cohort-based schooling habits of blue warehou also makes CPUE an unreliable index of abundance.

In light of this issue, AFMA acknowledges the priority need to establish an alternative index of abundance and to develop other assessment methods (e.g. Close-Kin Mark-Recapture methodology and other research projects). Accordingly, this priority has been included in SESSF annual research plans and is anticipated to be a focus of the 2021-2025 of the SESSF Five-Year Strategic Research Plan (currently under development).

AFMA notes that there is currently no reliable data or information to improve our understanding of current stock status or to inform likely rebuilding timeframes. In the absence of information with which to revise the original 2024 rebuilding timeframe, AFMA proposes to retain this objective in the revised Rebuilding Strategy, and include contextual information around the lack of reliable data and the need to develop an alternative index of abundance.

Additionally, AFMA will consider the outcomes of research investigating other factors that may impact more broadly upon rebuilding species, including environmentally driven shifts in population dynamics, genetic drift and divergence, and how these may affect the ability of some species to rebuild.

In summary, the proposed changes in the revised Rebuilding Strategy will include:

- updates to the annual review process, including addition of a formal targeting analysis;
- removing the requirement for industry to report catches in excess of 250 kg;
- consideration of alternative approaches to establishing an alternative index of abundance; and
- consideration of potential ecosystem shifts that may lead to non-recovery of some stocks, and what the implications are for rebuilding timeframes.

Relevant documents

[Blue Warehou Stock Rebuilding Strategy 2014](#)

[Blue Warehou Stock Rebuilding Strategy 2014 - Five Year Review report 2019](#)