



Department of
Primary Industries and
Regional Development

West Coast Demersal Scalefish Resource

Understanding the science



West coast demersals – our favourite fish

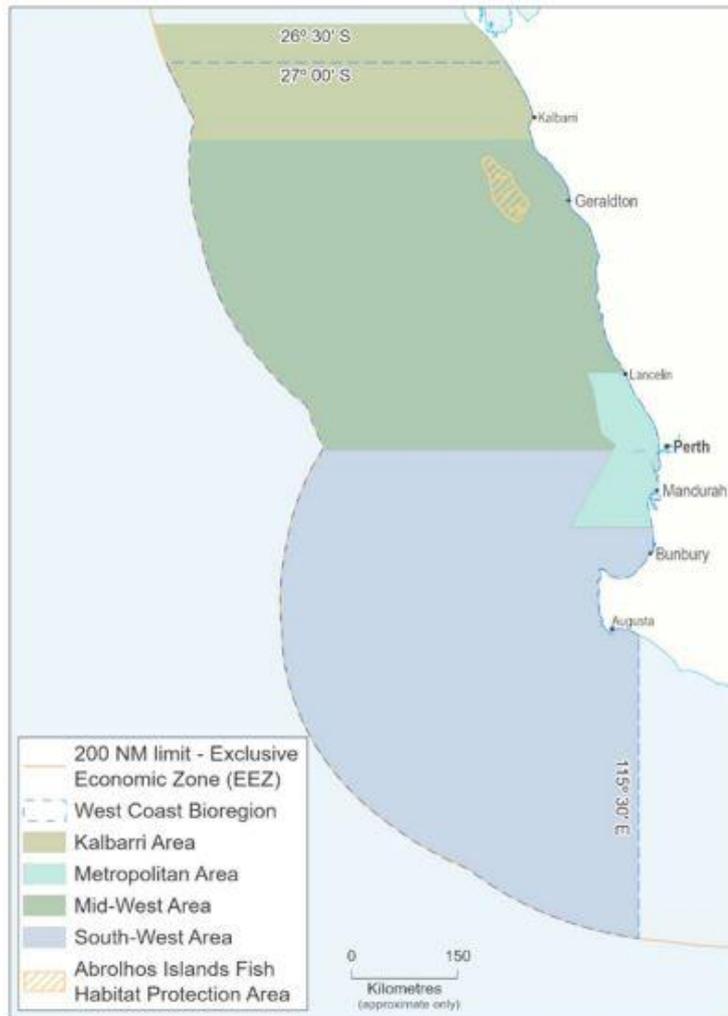


The West Coast Demersal Scalefish Resource includes over 100 species such as:

- WA dhufish;
- pink snapper; and
- baldchin groper.

It provides West Australians with great recreational fishing experiences and high-quality seafood.

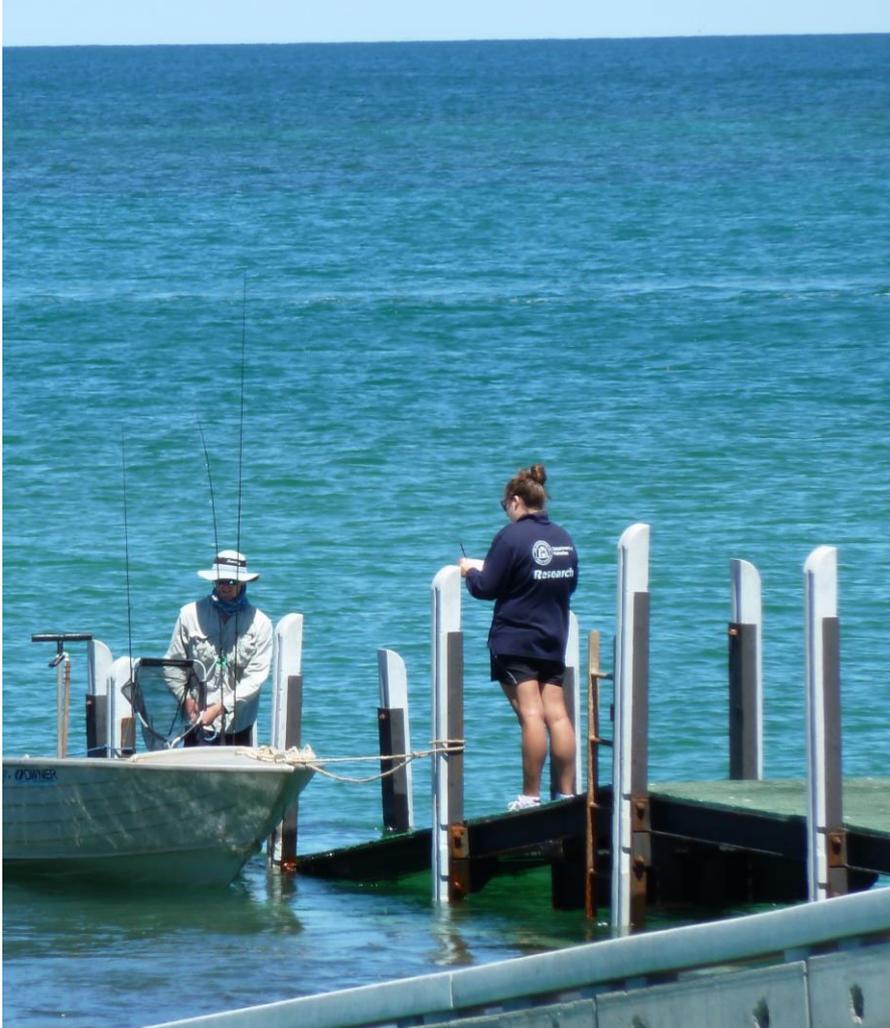
West coast demersals – area of the resource



The West Coast Demersal Scalefish Resource includes oceanic waters from north of Kalbarri to east of Augusta.

The area occupies four management areas: Kalbarri; Metropolitan; Mid-West and South-West for the purpose of monitoring and assessment.

Demersals under pressure



A 2007 stock assessment found there was overfishing in the 1990s and 2000s, so a 20-year recovery plan was implemented to reduce fishing pressure on the resource.

Initiating recovery



Management action was taken between 2007 and 2010 to reduce recreational and commercial catches by at least 50%.

Recreational and charter changes included:

- reduced bag limits
- dhufish boat limit
- two-month demersal closure

Commercial changes included:

- closure of metro area
- limited number of licenses
- limited hours fishing each year

Roadmap to recovery

A harvest strategy for the West Coast Demersal Scalefish Resource has been developed, to provide a roadmap to recovery.

It sets out clear objectives, milestones and management actions to recover the resource by 2030.



Recovery health checks



Stock assessments are undertaken every 3-5 years to provide a health check on progress against the recovery plan in the harvest strategy.

Four major stock assessments have been completed for this resource, with the most recent completed in 2021.

Indicator species

Dhufish and pink snapper are used in stock assessments to indicate the status of the resource as they are:

- the most targeted species by both recreational and commercial fishers;
- the most socially and economically important species;
- highly susceptible to overfishing;
- can live to over 40 years of age; and
- only have one or two years of good breeding success every decade.



The science – what information do we collect?

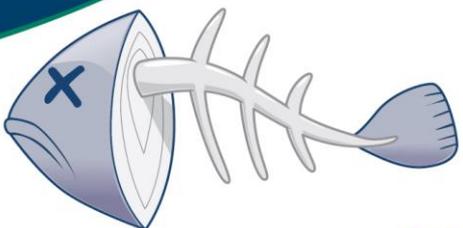
- Catch and effort information:
 - commercial and charter logbooks
 - recreational surveys
- Biological information from:
 - recreational, charter and commercial fish frames
 - research monitoring programs
 - research projects
- Fishing gear selectivity and efficiency information from research projects



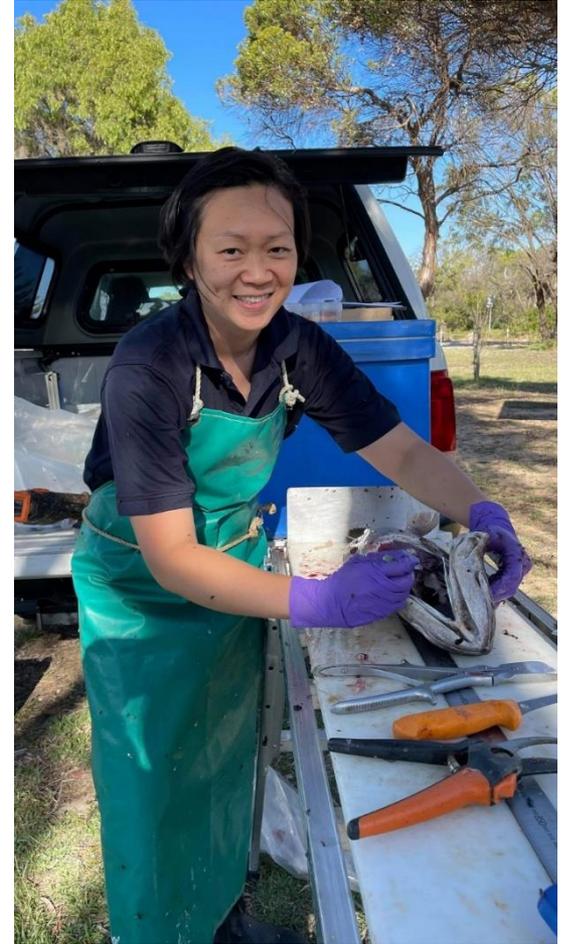
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*We're working for
Western Australia.*

**Send us your
skeletons**
and help ensure there are fish for the future



fish.wa.gov.au/frames



We extract and study otoliths (ear bones) to determine a fish's age.

The science – how we do it

1. Monitoring catch and post-release mortality trends from commercial, charter and recreational fisheries against catch limits.
2. Assessing the age structure of the population to evaluate current level of fishing pressure against internationally accepted standards.
3. Using population models to evaluate trends in spawning biomass against internationally accepted standards.

These provide a health check to answer these questions:

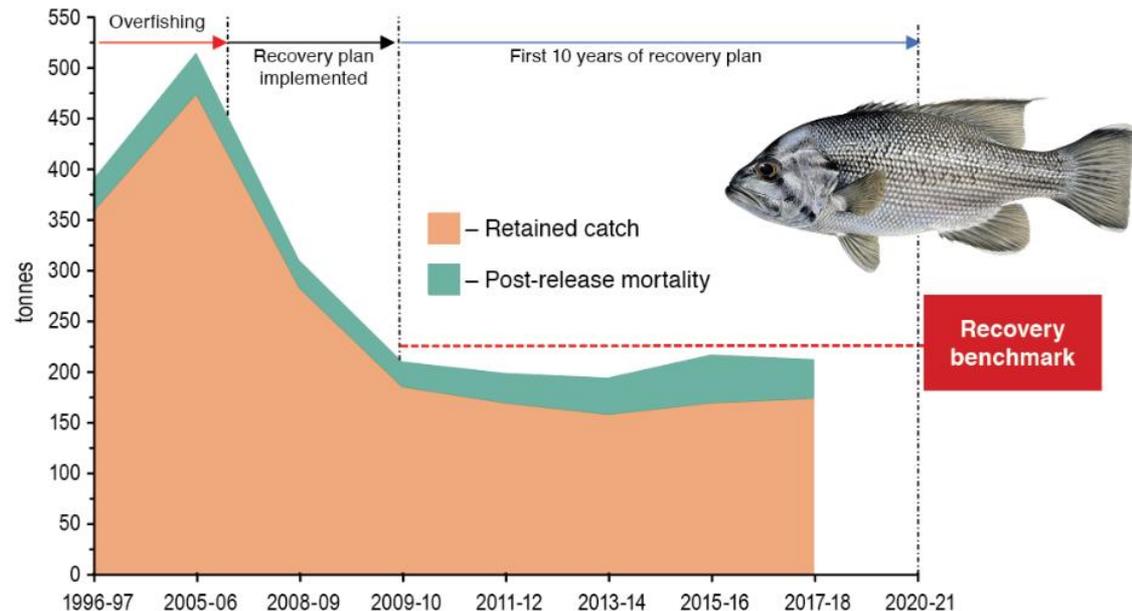
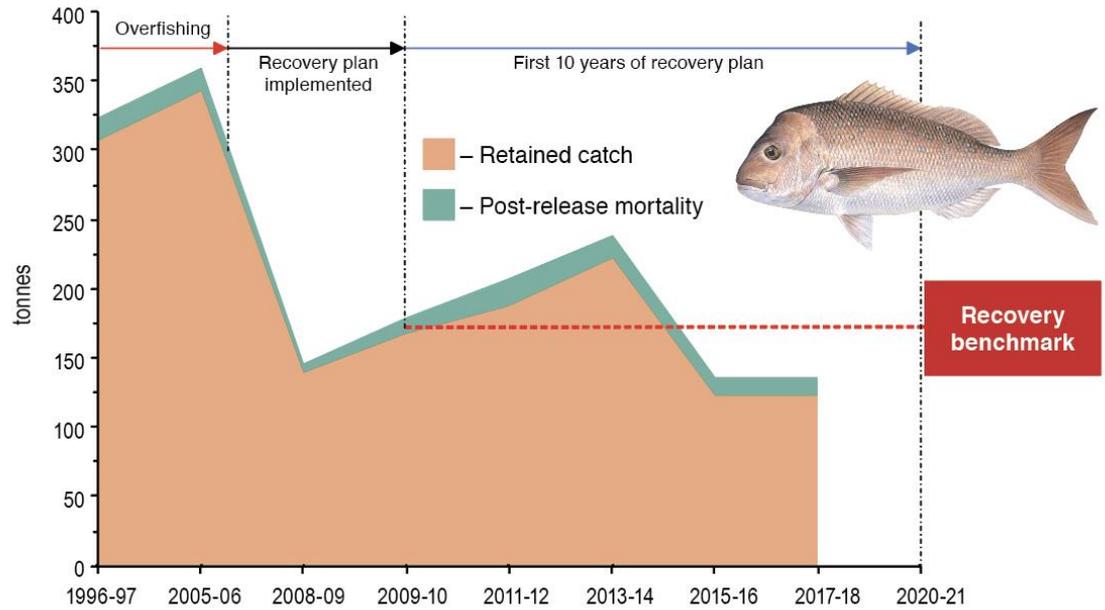
- Is fishing pressure at acceptable levels?
- Is the resource on track for recovery by 2030?
- Is management action required?



The science – have catches been managed effectively?

These graphs show combined estimates of retained catch (fish that are kept) and post-release mortality (those that die after being released) from recreational, charter and commercial fishers in the West Coast Bioregion, compared to the recovery benchmark shown in red.

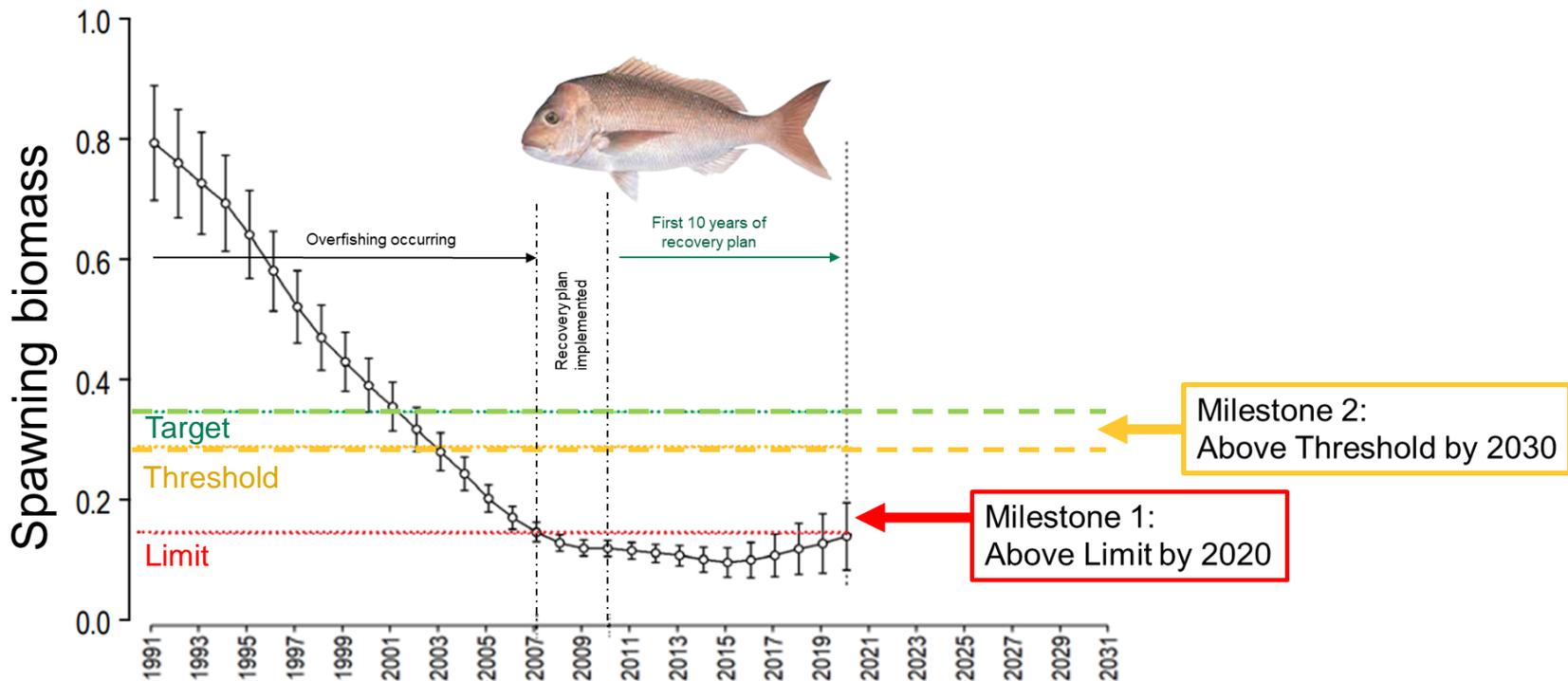
Management has maintained retained catch and post-release mortality from commercial, recreational and charter fishers below the recovery benchmark since additional action was taken in 2014/15.



The science – is recovery on track?

The graph below shows pink snapper spawning biomass from the West Coast Bioregion compared to reference levels and recovery milestones in the harvest strategy.

The 2021 science shows that while catches have been reduced and maintained below benchmarks, it wasn't enough of a reduction to recover the stock. Management has successfully halted the decline, however milestone 1 has not been met, and further action is required to recover the resource by 2030 to achieve milestone 2.



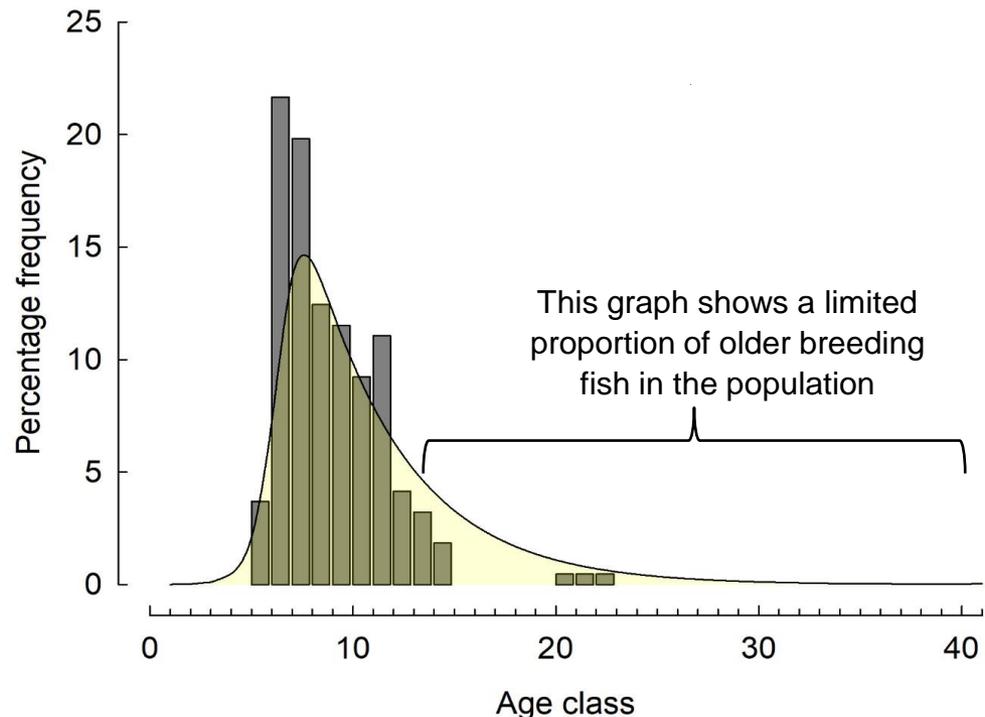
The science – importance of older fish

Older fish are vitally important to the population as they demonstrate fishing pressure is at levels that allow fish to contribute to recovery by spawning over multiple years.

There is still a limited proportion of dhufish and pink snapper above 15 years of age in the population.

This shows that fishing pressure is still too high.

The grey bars below show age distribution of dhufish in 2016/17 in the Mid-west/Kalbarri area, compared to a recovered/healthy age structure shown in yellow.



Next steps



The science shows that management changes are required to get the recovery back on track and the Minister for Fisheries has approved a 50 per cent reduction in total catch.

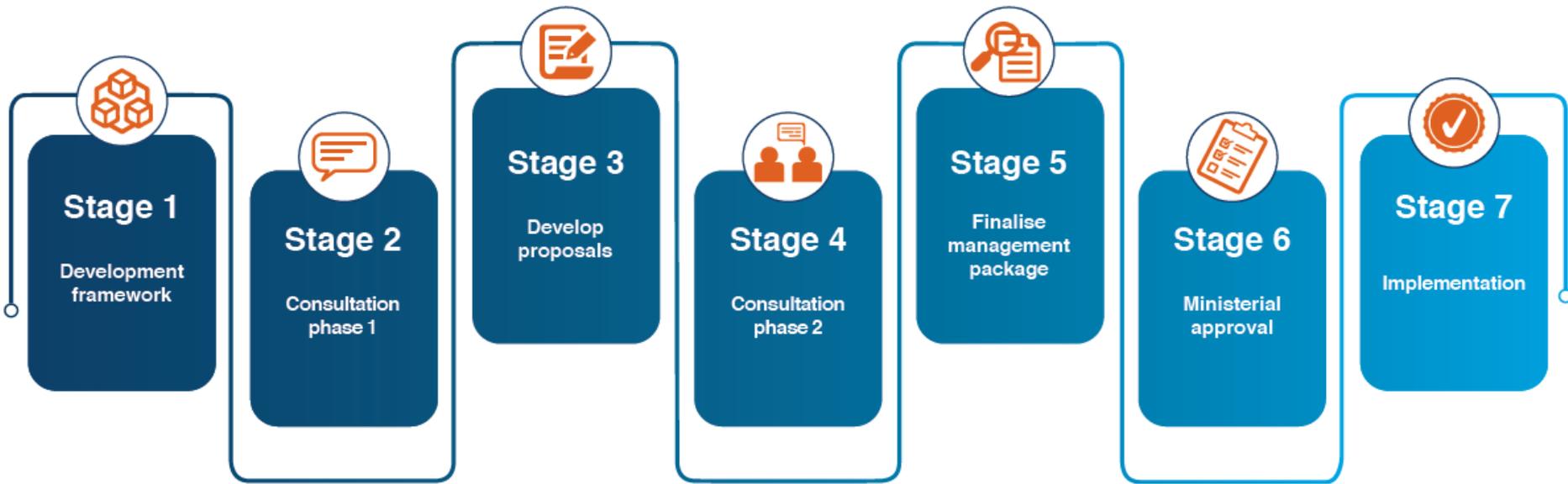
It is vitally important we continue to work together to enable the demersal scalefish stocks to recover.

We are working with peak bodies to consider all possible options and develop packages for consideration.

You will be able to put forward ideas and have your say on how we help our demersals recover.

Public consultation will commence in April 2022. See next page for the consultation timeline.

WCDSR sector engagement timeline 2022



For more information, visit

fish.wa.gov.au/demersal

Important disclaimer

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