

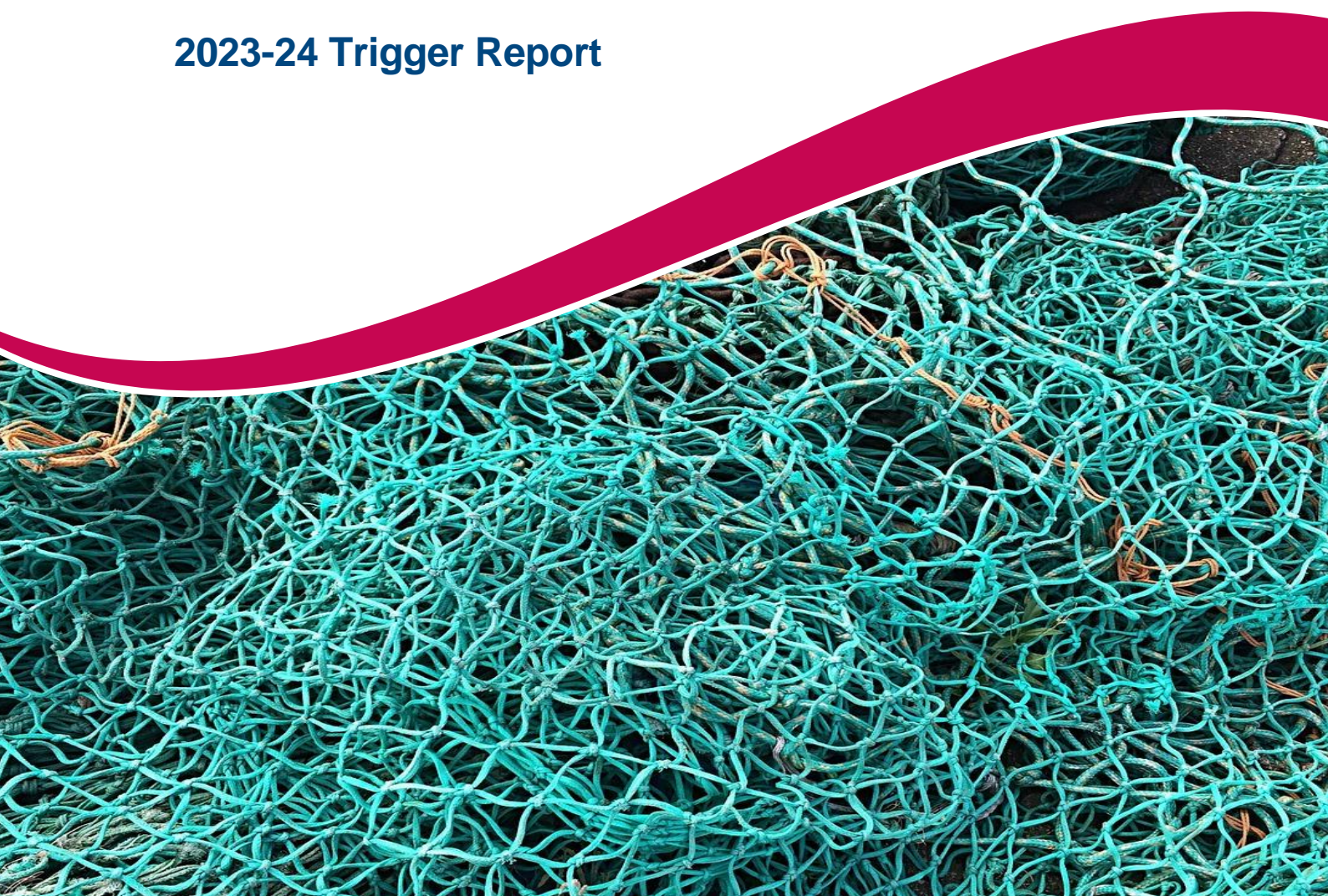


**Australian Government**

**Australian Fisheries Management Authority**

# **Western Trawl Fisheries**

**2023-24 Trigger Report**



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# 1. Purpose of the report

The Western Trawl Fisheries includes the North West Slope Trawl Fishery (NWSTF) and the Western Deepwater Trawl Fishery (WDTF), which are collectively managed under the same harvest strategy. This trigger report assesses the logbook catch and effort data for both fisheries against the trigger limits detailed in the *Harvest Strategy for the Western Deepwater Trawl Fishery and North West Slope Trawl Fishery*. The current harvest strategy was approved in May 2023, with the catch and CPUE triggers only applying from season 2023-24 (which commenced on 1 July 2024). Therefore, only the first year catch triggers (and associated management responses) are applicable, as triggers cannot be retrospectively applied to fishing seasons prior to the harvest strategy implementation.

The harvest strategy for the NWSTF and WDTF can be found on the AFMA website:

<https://www.afma.gov.au/sustainability-environment/harvest-strategies>.

## 2. North West Slope Trawl Fishery

The 2023-24 catch in the NWSTF was 85.9 tonnes, a slight increase on the 2022-23 season of 85.3 tonnes, a majority of which was Australian scampi (56.1 tonnes). There was a minor increase in 2023-24 effort in the NWSTF, to 814 tows, compared to 759 in 2022-33. The NWSTF Level 1 catch triggers and Level 2 CPUE triggers for key commercial species are detailed in Table 1 and 2 below.

**Note:** While the catch from previous seasons is included below for comparison, only the 2023-24 data is relevant to the assessment of triggers.

### Level 1 catch triggers

Table 1. Catch for NWSTF key commercial species over the past three fishing seasons

North West Slope Trawl Fishery				
Species/ Group	Catch trigger (t)	Catch 2021-22 (t)	Catch 2022-23 (t)	Catch 2023-24 (t)
Australian Scampi	45	28.5	43.9	56.1
Velvet Scampi	16	9.7	4.4	0
Boschma's Scampi	12	13.1	3.1	0
Scampi (all species)	88	54.1	52.9	56.5
Royal Red Prawn	16	3.8	4.3	2.9
Red Carid	6	5.98	5.7	5.1

North West Slope Trawl Fishery				
Pink Striped Prawn	4	1.5	4.2	<b>5.1</b>
Red Prawn	4	0.98	0	0.68
Giant Scarlet Prawn <sup>#</sup>	1	0.41	0.36	0.33
Prawns (all species)	25	8.7	9.6	16.2
Squids (all species)	13	5.7	8.0	9.0

<sup>#</sup> high risk species in 2007 ERA, values in **bold** indicate where level 1 trigger has been reached

The Level 1 catch triggers of 45 tonnes for Australian scampi and four tonnes for pink striped prawn were exceeded in the 2023-24 season, with 56.1 tonnes of Australian scampi and 5.1 tonnes of pink striped prawn caught.

## Level 2 CPUE triggers

Table 2. Limit CPUE (kg/tow) for NWSTF key commercial species compared to recent 3-year average

North West Slope Trawl Fishery					
Species/ Group	Limit CPUE (kg/tow)	3 Year AVG CPUE (kg/tow)	2021-22 CPUE (kg/tow)	2022-23 CPUE (kg/tow)	2023-24 CPUE (kg/tow)
Australian Scampi	26	55.8	39.0	57.9	68.9
Scampi (all species)	39	71.0	74.1	69.6	69.4

Reaching CPUE triggers is determined by comparing the average of the recent 3-year nominal CPUE<sup>1</sup> (total catch / species group targeted effort, number of tows) with the CPUE lower limits for each species. The recent 3-year average CPUE for Australian scampi was 55.8 kg/tow, well above the 26 kg/tow limit CPUE. The recent 3-year average CPUE for all scampi species was 71 kg/tow, well above the 39 kg/tow limit CPUE. As a result, no Level 2 CPUE triggers were exceeded in the NWSTF.

<sup>1</sup> Only in which fishing occurs



## Discussion

As required under the harvest strategy, AFMA has notified industry that Level 1 catch triggers have been exceeded for Australian scampi and pink striped prawn and noted the requirement to do additional analysis if they are exceeded again in the 2024/25 fishing season. Direct consultation with relevant operators is underway, seeking to understand the reason(s) for the catch increase. The outcome of this consultation will inform additional possible data collection requirements and whether further analysis is required. AFMA will monitor the catches of these species throughout the 2024-25 fishing season.

## 3. Western Deepwater Trawl Fishery

The 2023-24 total catch in the WDTF was 3.39 tonnes, with two shots undertaken across fishing season. This is an increase from the 2022-23 fishing season, where the fishery was inactive, highlighting the variable and opportunistic nature of fishing effort in the fishery. Tang's snapper was the only key commercial species caught in 2023-24, with 0.33 tonnes recorded, and a total of 1.3 tonnes of all snapper species caught. The WDTF Level 1 catch triggers and Level 2 CPUE triggers for key commercial species are detailed in Table 3 and 4 below.

### Level 1 catch triggers

Table 3. Catch for WDTF key commercial species over the past three fishing seasons

Western Deepwater Trawl Fishery				
Species/ Group	Catch trigger (t)	Catch 2021-22 (t)	Catch 2022-23 (t)	Catch 2023-24 (t)
Bugs (all species)	114	0	0	0
Scampi (all species)	8	0.08	0	0
Deepwater Flathead	33	0	0	0
Boarfish (all species)	4	0.08	0	0
Gemfish <sup>#</sup>	5	0	0	0
Mirror Dory <sup>#</sup>	5	0	0	0
Ruby Snapper	47	4.9	0	0
Tang's Snapper <sup>#</sup>	11	1.1	0	0.33
Snappers (all species)	69	7.5	0	1.26

# high risk species in 2007 ERA

## Level 2 CPUE triggers

**Table 4. Limit CPUE (kg/tow) for WDTF key commercial species compared to historical average CPUE calculated from previous three seasons where fishing effort was recorded**

Western Deepwater Trawl Fishery					
Species/Group	Limit CPUE (kg/tow)	3 Year AVG CPUE (kg/tow)	2020-21 CPUE (kg/tow)	2021-22 CPUE (kg/tow)	2023-24 CPUE (kg/tow)
Bugs (all species)	83	0	0	0	0
Ruby Snapper	57	91.9	106.7	169.0	0
Snappers (all species)	87	345.2	146.7	259.0	630.0

**Note:** 2022/23 not shown as no fishing effort occurred in this season

Reaching CPUE triggers is determined by comparing the average of the recent 3-year nominal CPUE<sup>2</sup> (total catch / species group targeted effort, number of tows) with the CPUE lower limits for each species. Only two shots were recorded in 2023-24, resulting in very high CPUE values for the snapper species group (the only key commercial species caught). As a result, the 3-year average CPUE values for all snapper species is 345 kg/tow, well above the limit CPUE of 87 kg/tow. As there was no ruby snapper catch in 2023-24, and no bug catches since 2019-20, the CPUE trigger for these species are not applicable. As a result, no Level 2 CPUE triggers were exceeded in the WDTF.

## Discussion

As neither Level 1 catch triggers or Level 2 CPUE triggers were exceeded in the WDTF during 2023-24, no further management actions are required.

## 4. ERA high-risk species

The harvest strategy for the NWSTF and WDTF also includes triggers for identified 'high-risk' bycatch or byproduct species, compiled from the highest level of Ecological Risk Assessment (ERA) undertaken in each fishery. The latest quantitative ERAs were last undertaken in 2007 for both the NWSTF (Wayte 2007b, AFMA 2010b,d) and the WDTF (Wayte 2007a, AFMA 2010a,c).. The NWSTF and WDTF were also part of a sustainability assessment for fishing effects (SAFE) undertaken in 2009 (Zhou et al. 2009), which identified no species at high risk based on the level of fishing intensity at the time of assessment. Across both fisheries, only three of the high-risk species

<sup>2</sup> Only in which fishing occurs

were caught in the 2023-24 season. In the WDTF, 0.33 tonnes of Tang's snapper and 0.8 tonnes of bigscale rubyfish was recorded, with 0.33 tonnes of scarlet prawn recorded in the NWSTF. The previous three seasons catch for ERA high-risk species are in Table 5 below.

**Table 5. Catch for ERA high-risk species in the NWSTF and WDTF over the past three fishing seasons**

<b>NWSTF and WDTF high-risk species</b>			
<b>Common name</b>	<b>Catch (t)</b>		
	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>
<b>NWSTF</b>			
<b>Scarlet prawn</b>	0.41	0.36	0.33
<b>WDTF</b>			
Platypus shark	0	0	0
Dusky shark	0	0	0
Brier shark	0	0	0
Bight ghost shark	0	0	0
School shark, Tope shark	0	0	0
Ornate angel shark	0.13	0	0
Green-eyed dogfish	0	0	0
Piked dogfish	0	0	0
Endeavour dogfish	0	0	0
Longspine chimaera	0	0	0
Whitefin chimaera	0	0	0
Australian Tusk	0	0	0
Chinaman/Leatherjacket	0	0	0
<b>Gemfish</b>	0	0	0
Jackass Morwong	0	0	0
<b>Mirror Dory</b>	0	0	0
Yellow-spotted boarfish	0	0	0
<b>Big-spined boarfish</b>	0.08	0	0
Yellowback bream	0	0	0

NWSTF and WDTF high-risk species			
<b>Tang's snapper</b>	1.12	0	0.33
Bigscale rubyfish	0	0	0.8
Champagne crab	0	0	0

Species in **bold** are managed as "Key Commercial Species"

## The triggers

*Level 1: Catch of 2 tonnes for any ERA Level 2 high-risk species.*

*Level 2: Catch of 4 tonnes for any ERA Level 2 high-risk species.*

There were no ERA Level 2 high-risk species where catch exceeded two tonnes in either fishery in the 2023-24 season.

## Discussion

As none of the ERA Level 2 high-risk species triggers were reached in the 2023-24 season, no further management actions are required at this time.



## References

AFMA (2010a). Residual Risk Assessment of the Level 2 Ecological Risk Assessment - Species Results. Report for the Western Deepwater Trawl Fishery. Australian Fisheries Management Authority January 2010, 15pp.

AFMA (2010b). Residual Risk Assessment of the Level 2 Ecological Risk Assessment - Species Results. Report for the North West Slope Trawl Fishery. Australian Fisheries Management Authority March 2010, 22pp.

AFMA (2010c). Ecological Risk Management Report for the Western Deepwater Trawl Fishery. Australian Fisheries Management Authority 15pp.

AFMA (2010d). Ecological Risk Management Report for the Northwest Slope Fishery. Australian Fisheries Management Authority 15pp.

Wayte, S., Dowdney, J., Williams, A. Fuller, M., Bulman, C., Sporcic, M., Smith, A. (2007a). Ecological Risk Assessment for the Effects of Fishing: Report for the Western Deepwater Trawl Fishery. Report for the Australian Fisheries Management Authority, Canberra.

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Zhou, S., Fuller, M., Smith, T. (2009). Rapid quantitative risk assessment for fish species in additional seven Commonwealth fisheries. Report for the Commonwealth Scientific and Industrial Research Organisation, Canberra