

Fish stock reviews for 1 October 2024

West Coast – Jack mackerel (JMA 7)

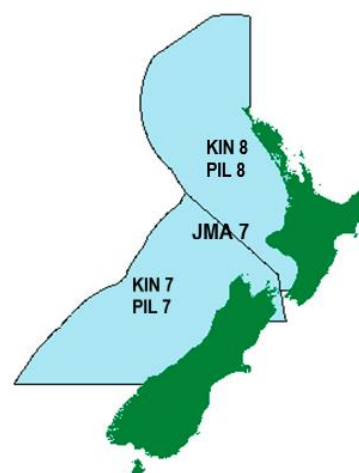


Proposal [online here](#).

1. Current total allowable catch (TAC) settings and proposed options (tonnes).

Stock	Option	TAC	TACC	Allowances		
				Customary Māori	Recreational	All other mortality caused by fishing
JMA 7	Option 1 (Status quo)	N/A	32,537 ¹	N/A	N/A	N/A
	Option 2	34,387	34,037 (↑1,500)	0	10	340
	Option 3	35,902	35,537 (↑3,000)	0	10	355

Estimated landings – 2022-23	
JMA 7 – Commercial	34 549 t
JMA 7 – Recreational ¹	2.6 t



2. What is the current status of this fish stock?

The Jack mackerel area 7 (JMA 7) fishery runs along the west coast of New Zealand. In relation to the management target², Fisheries NZ estimates the status of the JMA 7 fishery is ‘Very Likely (>90%) to be at or above the target’. The future projection of the fishery is ‘Unknown’³.

3. Is overfishing occurring?

It is ‘Unknown’ whether overfishing is occurring or if current catch levels or allowable catch setting with cause overfishing in the future⁴.

4. What is the primary fishing method used to catch jack mackerel in this area?

Jack mackerel in JMA 7 are primarily caught by targeted midwater trawling.

5. What are the associated species and habitats?

Between 2002 and 2019, Jack mackerel accounted for 78% of the catch in the trawl fishery. The remaining 22% comprised of mainly, barracouta, blue mackerel, and frostfish. Notable levels of spiny dogfish, kingfish, porcupine fish and sunfish discards⁵. Species that are dependent on Jack mackerel for prey include larger fishes, seabirds and marine mammals. Jack mackerel has been reported in the diet of gemfish and several shark species. Trawling is non-selective, catching target and non-target species in its path. Jack mackerel targeted trawls are sometimes fished on or near the seabed. The impact of fishing gear on the seafloor causes extensive, long-term damage to the seafloor. This impacts benthic productivity and function.

¹ Recreational harvest totals include recreational fishers estimates from National Panel Surveys, amateur charter vessel reported catch and recreational take from commercial vessels under s111 landings, where available.

² Management target is the level that a fish stock should be managed at or above to ensure sustainable use.

³ Fisheries Assessment Plenary – Volume 2: Horse mussel to Red crab. May 2024. Fisheries New Zealand. At [p.689]

⁴ At [p.689]

⁵ At [p.672]

6. What are the primary concerns of the New Zealand Sport Fishing Council & LegaSea for this review?

- a. None of the options proposed by Fisheries New Zealand (FNZ) are appropriate. Subject to further discussion prior to finalising a submission for JMA 7, preliminary recommendations for the Minister include:
 - i. Increase the TAC to 32 872 tonnes to account for an increase in the Māori customary and recreational allowances and Other Mortality settings;
 - ii. The allowance set aside for Māori customary interests is 5 tonnes;
 - iii. The allowance set aside for recreational interests is 10 tonnes to account for current catch;
 - iv. Increase Other Mortality to 320 tonnes, 10% of the current TACC;
 - v. Retain the current TACC setting of 32 537 t; and
 - vi. Rollout onboard camera monitoring on all Jack mackerel target vessels regardless of vessel size.
- b. If FNZ activate a rollout of cameras on JMA trawlers, the NZSFC may support an increase in total allowable commercial catch (TACC) in the future. With the condition that the next stock assessment estimates a stable biomass of Jack mackerel and the knowledge of fishing effect on associated species abundance increased and management action is taken where necessary.
- c. FNZ are proposing increases to the TACC based on a stock assessment in 2023 which concluded that there is an opportunity for increased utilisation. However, the stock assessment is based on commercial fisher catch per unit effort (CPUE) data which is only representative of where Jack mackerel trawl vessels are fishing and not the entirety of Jack mackerel habitat.
- d. There are three species of Jack mackerel caught on the west coast of New Zealand, however, only two species have been assessed. The third, *Trachurus murphyi* or Chilean Jack mackerel which was historically an important component of catch has not had a stock assessment and catches have been declining, it is unknown why abundance has decreased⁶.
- e. The [2020-21 Annual review report](#) for deepwater fisheries highlights that only 33% of tows were observed. The [onboard camera monitoring](#) rollout began in 2023 for trawl vessels under 32 m, therefore, excluding the JMA 7 target fishery as all vessels are greater than 46 m in length. Onboard camera monitoring must be activated on all trawl vessels regardless of vessel size.
- f. We note the [1 April 2024 MPI report](#) that highlights the change in fisher reporting for vessels operating cameras, compared with the period from 2018 until cameras were operating. That report notes 1) A 3.5 times increase in albatross interactions, 2) 6.8 times increase in dolphin captures, 3) 34% increase in the number of fish species reported in catch, and 4) a 46% increase in the volume of fish discards.
- g. Increasing the TACC of Jack mackerel in turn increases fishing pressure on species that are caught within the maxed trawl assemblage and potential effects on the seabed. FNZ have failed to acknowledge non-target (bycatch) species in their proposal document other than seabirds, marine mammals and kingfish, pilchard, barracouta, snapper, frofish and blue mackerel. An assessment of JMA 7 bycatch between 2002-2019 observed over 370 taxa (species and organism groupings)⁷ including corals and sponges.
- h. FNZ state in their proposal paper that “there are no sustainability concerns for any species that are taken as non-target catch” in the JMA target fishery⁸, however, the

⁶ Fisheries Assessment Plenary – Volume 2: Horse mussel to Red crab. May 2024. Fisheries New Zealand. At [p.682]

⁷ Non-target fish and invertebrate catch and discards in New Zealand jack mackerel trawl fisheries from 2002-03 to 2018-19. Fisheries NZ. At [p. 49-54]

⁸ Review of sustainability measures October 2024: JMA 7, KIN 7 & 8, PIL 7 & 8. Fisheries NZ. At [p. 21]

stock status of frostfish, red cod, redbait, barracouta, arrow squid, kahawai, spiny dogfish, Ray's bream and tarakihi are all unknown and contribute to a portion of the non-target catch (See Appendix).

- i. Jack mackerel are an important prey species for larger pelagic fish, gemfish, marine mammals and seabirds. FNZ highlights in their proposal paper that Option 1 which retains the current TACC setting acknowledges that importance of Jack mackerel within the marine food web⁹.
- j. Given the lack of information available on the effect of fishing for Jack mackerel on the wider ecosystem, the importance of Jack mackerel within the food web, and the Minister's statutory obligation to ***ensure sustainability***, the Minister must make a precautionary decision.

7. Who can you contact?

- a. Email submission to: FMSubmissions@mpi.govt.nz
- b. Email NZSFC fisheries team: FM@legasea.co.nz
- c. Submissions are due with Fisheries New Zealand by 29 July 2024.

⁹ At [p. 3]

Appendix - Commercial landings and stock status estimate¹⁰

Species and fish stock	Stock status	TACC (2022-23)	% TACC caught (22-23)
Barracouta - BAR 7 West coast NZ	Unknown	11 173 t	14%
Blue mackerel – EMA 7 - West coast NZ	Likely to be at or above management target	3350 t	98%
Frostfish – FRO 7 West coast & top of South Island	No available information to estimate status	2110 t	54%
Frostfish – FRO 8 South West Coast North Island	No available information to estimate status	900 t	72%
Frostfish – FRO 9 West coast North Island	No available information to estimate status	400 t	6%
Gemfish – SKI 7 West coast NZ	Unknown	1091 t ¹¹	99%
Jack mackerel - JMA 7 West coast NZ	Very likely to be at or above target	32 537 t	106%
Kingfish – KIN 7 West coast South Island	Very likely to be at or above target	44 t	122%
Kingfish – KIN 8 West coast North Island	Very likely to be at or above target	80 t	87%
Pilchard – PIL 7 West coast South Island	Insufficient information to estimate status	150 t	48 %
Pilchard – PIL 8 West coast North Island	Insufficient information to estimate status	65 t	94%
Ray's bream – RBM 1 All of New Zealand	No available information to estimate status	980 t	44%
Redbait – RBT 7 West coast NZ	No available information to estimate status	400 t ¹²	2%
Red cod – RCO 2 East Cape & south-west coast	About as likely as not to be at or above target	500 t	5%
Red cod – RCO 7 West coast South Island	Unknown	3126 t	2%
Spiny dogfish– SPD 7 West coast South Is.	Unknown	1902 t	30%
Spiny dogfish – SPD 8 West coast North Is.	Unknown	307 t	31%

¹⁰ Stock status estimates are noted as provided by Fisheries New Zealand in Volume 1-4 Fisheries Assessment Plenary

¹¹ Increased from 839 t in 2022.

¹² Reduced from 2841 t in 2022.