Fish stock reviews for 1 October 2024

West Coast – Pilchard (PIL 7 & 8)

Proposal online here.

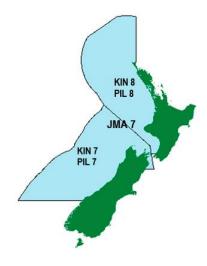




1. Current total allowable catch (TAC) settings and proposed options (tonnes).

	Option	TAC	TACC	Allowances		
Stock				Customary Māori	Recreational	All other mortality caused by fishing
PIL 7	Option 1 (Status quo)	165	150	5	10	0
	Option 2	99 (♦ 66)	80 (🗸 70)	5	10	4 (1 4)
PIL 8	Option 1	80	65	5	10	0
	(Status quo)	80				
	Option 2	157 (177)	135 (70)	5	10	7 (↑ 7)

Estimated landings – 2022-23				
PIL 7 – Commercial	72 t			
PIL 7 – Recreational	N/A			
PIL 8 – Commercial	62 t			
PIL 8 – Recreational	11 293 fish			



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

The current state of the pilchard fishery along the west coast of New Zealand is 'unknown'. There have been no stock assessments of any New Zealand pilchard fish stocks¹.

3. Is overfishing occurring?

It is not known whether overfishing is occurring as there have been no stock assessments of NZ pilchards.

4. What is the primary fishing method used to catch pilchard in these fisheries? Pilchards are caught as bycatch in the west coast Jack mackerel midwater trawl fishery².

5. What are the associated species and habitats?

Pilchards are caught as bycatch in the Jack mackerel fishery. Over 370 taxa (species & organism groupings), were identified in the Jack mackerel catch between 2002 and 2019. Species that prey on pilchards include larger fishes, seabirds and marine mammals.

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

- a. Subject to further discussion prior to finalising a submission, our preliminary recommended settings for PIL 7 are:
 - i. The TAC is set at 75 tonnes.
 - ii. Retain the allowance set aside for Māori customary interests at 5 tonnes.

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¹ Fisheries Assessment Plenary – Volume 2: Horse mussel to Red crab. May 2024. Fisheries New Zealand. At [p.1209]

² At [p.1204]

- iii. Retain the allowance set aside for recreational interests at 10 tonnes.
- iv. Increase the allowance set aside for Other Mortality to 5 tonnes.
- v. Decrease the TACC to 56 tonnes.
- b. Subject to further discussion prior to finalising a submission, our preliminary recommended settings for PIL 8 are:
 - i. The TAC is set at 107 tonnes.
 - ii. Retain the allowance set aside for Māori customary interests at 5 tonnes.
 - iii. Retain the allowance set aside for recreational interests at 10 tonnes.
 - iv. Increase the allowance set aside for Other Mortality to 8 tonnes.
 - v. Increase the TACC to 85 tonnes.
- c. We recommend setting the total allowable commercial catch (TACC) for PIL 7 & 8 at a level which is based on an average of catch over the last five years and setting Other Mortality to 10% of the TACC. We don't agree that the proposed 5% of the TACC for Other Mortality is appropriate for a large trawl vessel and further recommend that land-all catch must be applied to pilchard.
- d. The 2020-21 Annual review report for deepwater fisheries highlights that only 33% of tows were observed. PIL 7 & 8 are caught as bycatch species in the Jack mackerel midwater trawl fishery in JMA 7. The onboard camera monitoring rollout began in 2023 for trawl vessels under 32 m, therefore this excludes the JMA 7 target fishery as all these vessels are greater than 46 m in length. Onboard camera monitoring must be activated on all trawl vessels regardless of vessel size.
- e. When pilchard was introduced to the Quota Management System (QMS) in 2002 the TACCs were set based on predicted pilchard distribution, not catch history. FNZ is now proposing changes to the PIL 7 & 8 TACC to better reflect the distribution of catch
- f. The combined TACC for PIL 7 & 8 is 215 t. Commercial catch of pilchards has fluctuated since 2002, however, landings have only exceeded the combined TACC twice, once in 2002-03 by 3 t and in 2017-18 by 180 t. Excessive catches in the 2017-18 fishing correlate with a marine heatwave and high Jack mackerel catches which exceeded the TACC.
- g. Pilchards occupy a key trophic position in their ecosystem, they feed on microorganisms and are a favoured prey of larger fish, seabirds, and marine mammals. Along the west coast, species that may be dependent on pilchard for prey include, gannets, dolphins including Māui dolphin, pelagic fish (tuna, billfish), and whales. Humpback whales are known to migrate through Cook Strait around the entirety of New Zealand's coastline overlapping the distribution of pilchards³.
- h. Despite being a highly valuable component within the marine food web, pilchard stocks in New Zealand are data poor, there is presently no valid stock assessment information available.
- i. We acknowledge that a review of the TACC is necessary to align with the best available information. However, PIL 7 & 8 catch settings have not been reviewed since their introduction to the QMS in 2002. Pilchard stocks are highly variable and fluctuations in population size are generally considered to be environmentally driven and exacerbated by fishing intensity.
- j. Given the lack of information available on pilchard, their importance within the food web, and the Minister's statutory obligation to *ensure sustainability*, the Minister must make a precautionary decision.
- k. In order for the Minister to make a lawful decision, to provide for current and future generations' needs, and to avoid, remedy, or mitigate adverse effects on the marine environment, now is the time to adjust catch settings appropriately to better reflect

³ Pilchard (*Sardinops neopilchardus*) biology and fisheries in New Zealand, and a review of pilchard (*Sardinops, Sardina*) biology, fisheries, and research in the main world fisheries. L.J. Paul, P.R. Taylor, D.M. Parkinson. Ministry of Fisheries. 2001

historical catches whilst considering the direct and indirect effects of fishing on pilchards and the wider ecosystem.

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.

Appendix – Pilchard dependent species status

Dependent species list

This table highlights common species that are dependent on pilchards as a component in their diet. This is not a complete list. It is only a snapshot of dependent species found on the west coast of New Zealand.

Species	Conservation status / stock status				
Finfish					
Kingfish (KIN 7 & 8)	Above management target				
Snapper	Below management target ⁴				
Barracouta (BAR 7)	Unknown				
Striped marlin (south-west Pacific)	Unknown				
Marine mammals					
Humpback whale	Increasing (Least Concern) (IUCN Red List)				
Common dolphin	Not Threatened				
Maui dolphin	Threatened – Nationally Critical				
Seabirds					
Australasian gannet	Not Threatened				
Pacific albatross	At Risk – Naturally Uncommon				
Salvin's albatross	Threatened – Nationally Critical				
Westland petrel	At Risk – Naturally Uncommon				

⁴ Management target for snapper is exploitation rate. Being below the management target is considered to be sustainable.