

Review of Trevally 2 from 1 October 2023

A summary of issues for the New Zealand Sport Fishing Council

June 2023

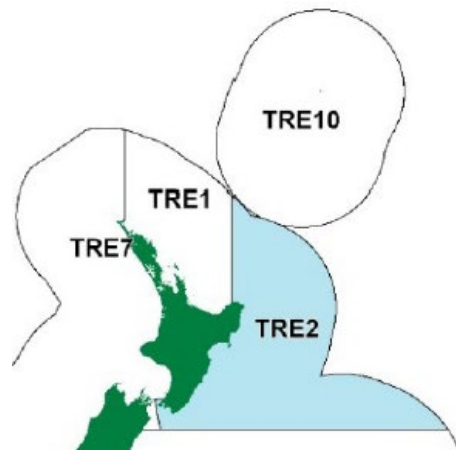
Fisheries New Zealand (**FNZ**) has released discussion documents proposing increases in a number of Total Allowable Catches with submissions due by 5pm on Monday 17 July 2023. We have prepared a summary of the issues and draft recommendations which can be passed on to interested people in your club. NZSFC is asking clubs and individuals for comments on the proposals.

If you or your club have feedback that can be used in the NZSFC submission, please provide this by 10 July. Please email Sydney Curtis at sydney@legasea.co.nz or Trish Rea at trish@legasea.co.nz. Individual and club submissions can also be made direct to FMSubmissions@mpi.govt.nz.

Trevally in TRE 2

Main Points of interest:

1. There is no accepted stock assessment for the whole Trevally 2 (**TRE 2**) stock.
2. There is an assessment for the Bay of Plenty that shows an increasing trend in trawl Catch Per Unit of Effort (**CPUE**) and biomass, and the FNZ Inshore Working Group note that there are similarities with the northern half of TRE 2.
3. Spatial patterns in CPUE and a single year of catch-at-age data indicate that trevally found in the northern portion of TRE 2 (including Hawke Bay) are part of the TRE 1 Bay of Plenty sub-stock. A model that included TRE 2 north in the Bay of Plenty stock assessment worked, but was not accepted by the Working Group.
4. The commercial catch in TRE 2 is about a fifth of that taken in TRE 1.
5. The TRE 2 Total Allowable Commercial Catch (**TACC**) has either been fully caught or overcaught in 65% of the fishing years since the introduction of trevally to the Quota Management System in 1986.
6. There was a proposal to increase the TACC and set allowances for non-commercial fishing in 2010. The Minister decided to retain the TACC of 241 tonnes and set allowances for recreational fishing interests of 100 t and Māori customary interests of 1 tonne.



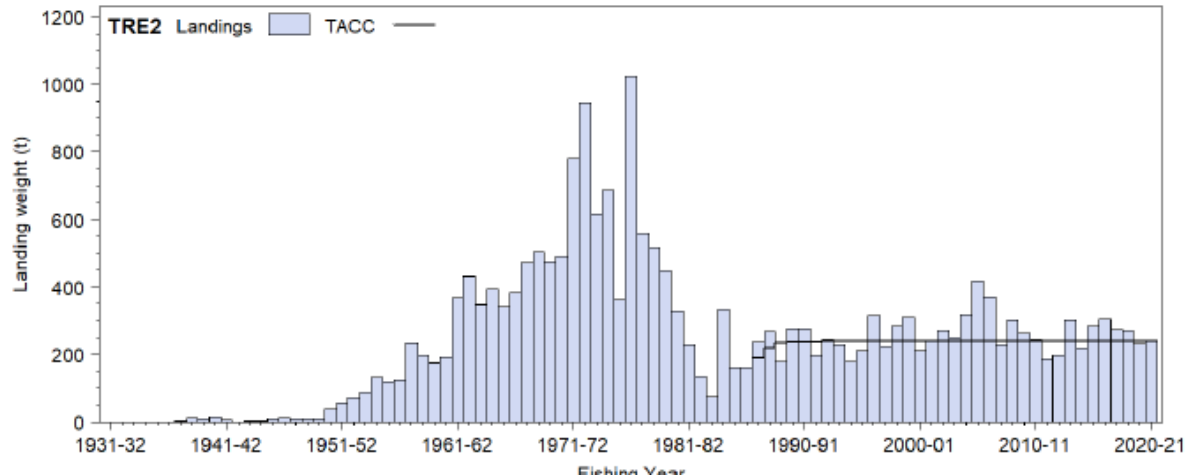


Figure 1 : TRE 2 landed and reported commercial catch history since 1931 and the TACC since 1986.

7. NZSFC are concerned that under-reported catch in the early years tends to underestimate current levels of depletion in trevally and many other stocks. There is no doubt that trawlers and net fishers were catching trevally before 1950 but it was discarded or under-reported because there was little market for it.
8. Fisheries NZ propose to increase the TAC so the allowance for other sources of fishing mortality can be increased to equate to 10% of the TACC in all options. This approach is supported by NZSC in trawl fisheries such as this.
9. Option 3 proposes a 38 t increase in the TACC. This is just above the 2022 landed commercial catch and is said to provide for increased utilisation. **NZSFC do not support over-catch of the TACC as a valid reason for TACC increases.** Option 2 is a 19 t increase in the TACC, half of Option 3 (Table 1).
10. No change is proposed for the allowance for customary and recreational fishing. The TRE 2 recreational harvest from the National Panel Survey in 2018 was 17 t. A new estimate will be available in 2024.

Table 1: Proposed management options (in tonnes) for TRE 2 from 1 October 2023.

Option	TAC	TACC	Allowances		
			Customary Māori	Recreational	All other mortality caused by fishing
Current settings	349	241	1	100	7
Option 1 (modified status quo)	366 (↑ 17 t)	241	1	100	24 (↑ 17 t)
Option 2	387 (↑ 38 t)	260 (↑ 19 t)	1	100	26 (↑ 19 t)
Option 3	408 (↑ 59 t)	279 (↑ 38 t)	1	100	28 (↑ 21 t)

Discussion

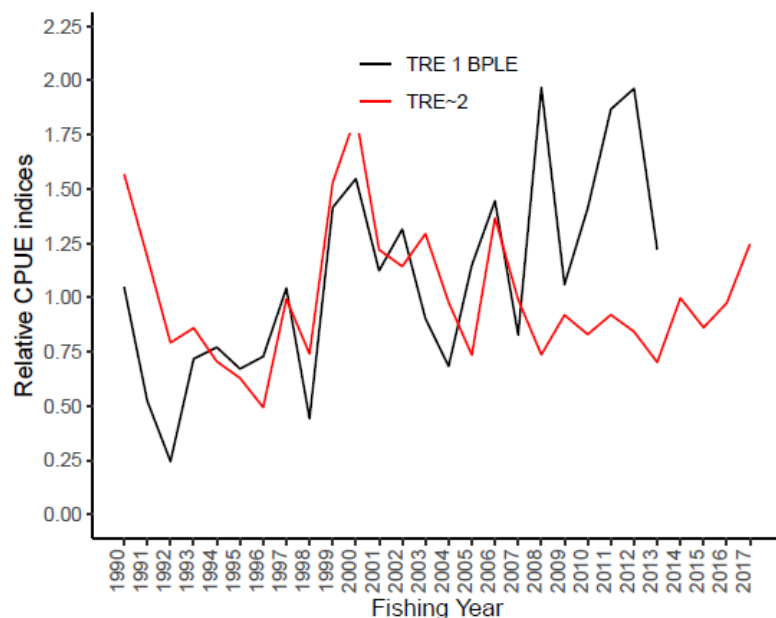
Most of the TACC increases that have been approved in FMA 2 have come about after the TACC has been over caught for a few years. In some cases, it is the entities with the most quota targeting a species so that there is insufficient ACE to cover the bycatch by other fishers. And at times it looks like a deliberate ploy to insist on an increased TACC – in snapper, gurnard and tarakihi – now it is the turn of trevally.

There may be a case of changes in sea temperatures and conditions that shift some fish further south. An increase in the TAC may be warranted where there is good supporting data. In this case, most of the evidence seems circumstantial, like the increase in the Bay of Plenty which might be part of the same stock as Hawke Bay north in TRE 2. **This just reinforces our view that catch on its own is not a reliable indicator of changes in actual fish abundance.**

The plot on the right has the TRE 2 standardised CPUE trend since 1990 (red). It goes up in the middle but otherwise is relatively flat.

The uptick in the last couple of years is the first time since 2007 that it rises above the long-term average.

Trawl CPUE in the Bay of Plenty shows some similarities but has a lower start and a higher finish, with an overall increasing trend.



Some caution is needed as the large fluctuations in abundance between years are not possible at a population level for fish that live in excess of 40 years.

Recommendations for submission:

1. **NZSFC support option 1** until there is more information on TAR 2 stock abundance.
2. **NZSFC support** the increase to 10% of the TACC, to allow for other mortality.
3. **Retain the non-commercial allowances** for Māori customary and recreational fishing interests, noting the next NPS survey estimates will be available in 2024.
4. **Question the CPUE and Bay of Plenty stock assessment** and their relevance to the Hawkes Bay fishery and southern portion of TRE 2.
5. Investigate and report trends in surveys of the recreational trevally catch per trip in FMA 2.