

Bob Gutsell
President
NZ Sport Fishing Council
PO Box 54242, The Marina
Half Moon Bay, Auckland 2144
secretary@nzsportfishing.org.nz



Sustainability Review 2019
Fisheries Management
Fisheries New Zealand
PO Box 2526
Wellington 6140.
FMSubmissions@mpi.govt.nz

1 July 2020

Submission: Review of TACs for kingfish in KIN 2, 3, 7 & 8

Submission summary

1. The New Zealand Sport Fishing Council's yellowtail kingfish policy (attached) is based on maintaining abundance at high levels to provide ecosystem services and high quality recreational fishing. We have promoted best practice fishing and handling through the LegaSea [FishCare](#) programme and a high proportion of catch by recreational and charter fishers is released.
2. The value to New Zealand of a world class sport fishery for kingfish far outweighs value that could be attained by fishing the stock down to 40% of the unfished biomass. There are no quantitative stock assessments for kingfish and while some CPUE analyses may track trends in availability or abundance, problems with historic under reporting and high proportions of immature fish in the catch remain. There is evidence of good recruitment to commercial and recreational fisheries in some areas including the South Island in response to favourable environmental conditions. The New Zealand Sport Fishing Council will support TAC reviews where appropriate and insist on continued use of live releases under schedule 6 provisions.

Recommendations

That the Minister decides the following:

3. Kingfish 2-
 - a) Increase the Total Allowable Catch (TAC) from 170 to 181
 - b) The TACC remains at 63 t to retain incentives to release kingfish alive.
 - c) The recreational allowance is increased to 79 t in-line with the latest survey estimate of 79.2 t to provide for high value recreational fisheries.
 - d) The allowance for customary catch be set at 21 t, with the ability to review as required.
 - e) The allowance for other sources of fishing related mortality be set at 18 t which is 10% of the TAC.

4. Kingfish 3-
 - a) To support option 1 to increase the TAC to 21 t.
 - b) The TACC increases to 9 t to retain incentives to release kingfish alive.
 - c) The recreational allowance remains at 6 t in-line with the latest survey estimate of 5.8 t to provide for high value recreational fisheries.
 - d) The allowance for customary catch remains at 4 t, with the ability to review as required.
 - e) The allowance for other sources of fishing related mortality be increased to 2 t which is 10% of the TAC.

5. Kingfish 7-
 - a) Increase the Total Allowable Catch (TAC) from 41 t to 98 t as there is no need for proportional over-allocation of allowances.
 - b) The TACC increases to 44 t which is 70% of the 2018-19 landed commercial catch and will retain incentives to release kingfish alive.
 - c) The recreational allowance increases to 40 t.
 - d) The allowance for customary catch increases by 100% to 4 t, with the ability to review as required.
 - e) The allowance for other sources of fishing related mortality be increased to 10 t which is 10% of the TAC.

6. Kingfish 8-
 - a) Increase the Total Allowable Catch (TAC) from 92 t to 169 t.
 - b) The TACC increases to 80 t which is 85 % of the 2018-19 landed commercial catch and will retain incentives to release kingfish alive.
 - c) The recreational allowance increases to 55 t in-line with the latest survey estimate of 55 t to provide for high value recreational fisheries.
 - d) The allowance for customary catch increases to 17 t, with the ability to review as required.
 - e) The allowance for other sources of fishing related mortality be increased to 17 t which is 10% of the TAC.

The submitters

7. The New Zealand Sport Fishing Council (NZSFC) appreciates the opportunity to submit on the proposals to review Total Allowable Catch (TAC), allowances and the Total Allowable Commercial Catch (TACC) for snapper and red gurnard in Fisheries Management Area 7, with submissions due 1 July 2020.

8. The New Zealand Sport Fishing Council is a recognised national sports organisation with over 36,200 affiliated members from 55 clubs nationwide. The Council has initiated LegaSea to generate widespread awareness and support for the need to restore abundance in our inshore marine environment. Also, to broaden NZSFC involvement in marine management advocacy, research, education and alignment on behalf of our members and LegaSea supporters. www.legasea.co.nz. Together we are '*the submitters*'.

9. The submitters are committed to ensuring that sustainability measures and environmental management controls are designed and implemented to achieve the Purpose and Principles of the Fisheries Act 1996, including "maintaining the potential of fisheries resources to meet the reasonably foreseeable needs of future generations..." [s8(2)(a) Fisheries Act 1996].

10. The submitters note the consultation time frame of 26 working days for this process. This time frame has allowed some consultation with local recreational interests, our affected clubs and

other representative organisations including the New Zealand Angling and Casting Association. This year the sustainability round includes 12 inshore species in 15 QMAs which has stretched our resources.

- Our representatives are available to discuss this submission in more detail if required. We look forward to positive outcomes from this review and would like to be kept informed of future developments. Our contact is Helen Pastor, secretary@nzsportfishing.org.nz.

The proposals

- Fisheries New Zealand is proposing to increase the TACs for yellowtail kingfish in four quota management areas (Table 1), following two years of analysis of available data from commercial and recreational fisheries.
- Fisheries New Zealand state “due to the value of kingfish to non-commercial fishers the goal of the overall management framework is to manage commercial catch to unavoidable bycatch levels only. This is achieved through a combination of low TACCs and high deemed value rates”. In addition commercial fishers are allowed to release live kingfish of legal size.
- Commercial landings of kingfish from KIN 2, 3, 7 & 8 have regularly exceeded the available ACE during recent years, particularly in the jack mackerel mid water trawl fishery centred off the southwest coast of the North Island (KIN 8).
- There is evidence that the abundance of kingfish has increased in all areas around New Zealand, with the largest increases on the west coast with commercial catch rising from a relatively low base. The proposals would set the kingfish TACCs around, or below current commercial catch levels. FNZ consider the options are unlikely to result in either an increase in commercial targeting kingfish, or an increase in the amount of commercial fishing effort targeting other species.
- Fisheries New Zealand is also “seeking the views of tangata whenua and stakeholders regarding the [sic] management target, and what alternative reference points should be used to guide the management of kingfish in KIN 2, 3, 7 & 8.”

Table 1: Proposed TACs, TACCs, and allowances for KIN 2, 3, 7 and 8. All figures in tonnes, with percentage changes from current settings provided in brackets.

Stock	Option	Total Allowable Catch	Total Allowable Commercial Catch	Allowances		
				Customary Māori	Recreational	Other sources of mortality to the stock caused by fishing
KIN 2	Option 1	189 ↑ (11%)	70 ↑ (11%)	21 ↑ (17%)	79 ↑ (22%)	19 ↓ (21%)
KIN 3	Option 1	21 ↑ (24%)	9 ↑ (50%)	4	6	2 ↑ (100%)
	Option 2	23 ↑ (35%)	11 ↑ (83%)	4	6	2 ↑ (100%)
KIN 7	Option 1	82 ↑ (100%)	30 ↑ (100%)	4 ↑ (100%)	40 ↑ (100%)	8 ↑ (100%)
	Option 2	122 ↑ (198%)	44 ↑ (193%)	6 ↑ (200%)	60 ↑ (200%)	12 ↑ (200%)
KIN 8	Option 1	167 ↑ (77%)	80 ↑ (77%)	17 ↑ (89%)	55 ↑ (77%)	16 ↑ (129%)

Background

17. There is evidence from the 2015 yellowtail kingfish aging study in KIN 1 of strong year classes of 5 and 6 year olds in East Northland and Bay of Plenty. On the west coast there was strong recruitment to the commercial fishery in 2017 and 2018, probably as 4 and 5 year olds, and these young fish turned up in the catch with the offshore jack mackerel schools (Figure 7).
18. There is also evidence of range expansion with kingfish numbers increasing all around the South Island. This was happening to some extent over the last 10 years but was probably accelerated by the warming of the Tasman Sea around 2016 and 2017. Figure 8 shows the change in kingfish catch rates by midwater trawl vessels over 8 years. The CPUE analysis only used data from trips with an MPI fisheries observer aboard (about 80% of all trips) on the large Ukrainian trawlers targeting Jack mackerel and hoki. The combined data from KIN 7 and 8 showed a marked increase in catch rates of kingfish since 2014. There are significant increases in the TACs proposed in KIN 7 and 8 this year. Live kingfish will continue to be released and commercial fishers have provided fish tags to fisheries observers to tag kingfish on release to look at movement, growth and possibly an indication of survival rate.

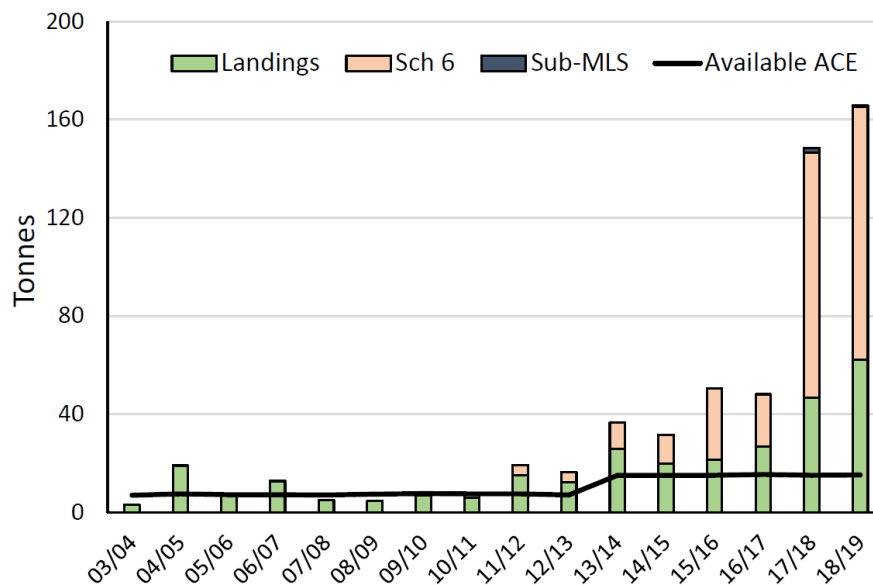


Figure 7: KIN 7 commercial catches since introduction to the QMS.
 Note that data on sub-MLS kingfish is only available post 2017/18.

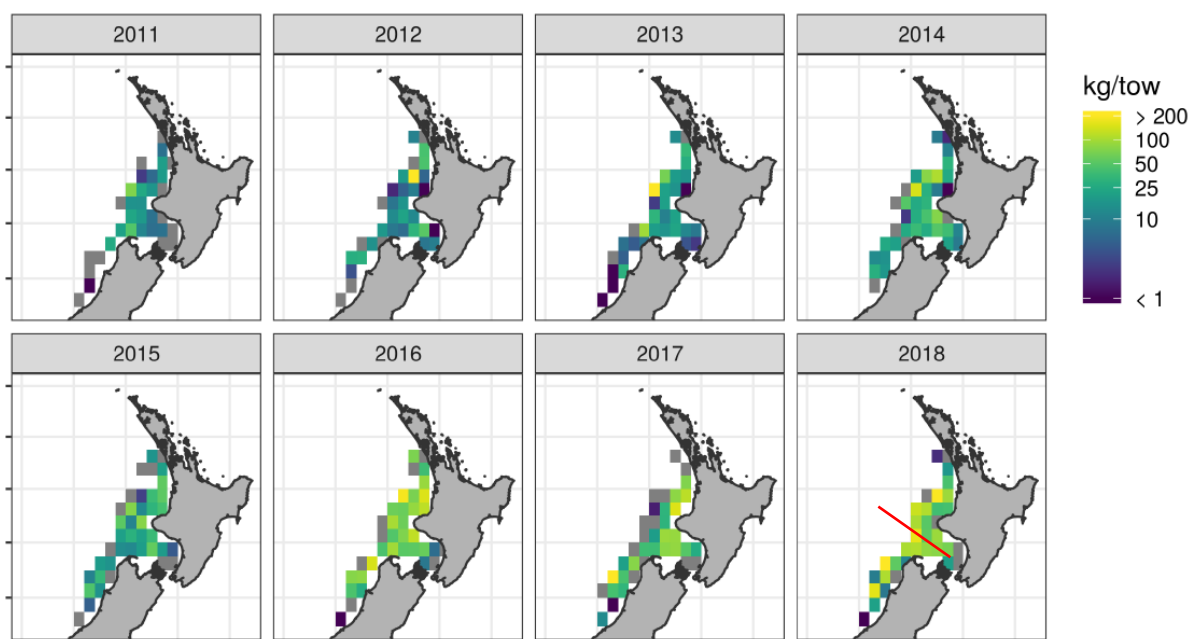


Figure 8: Catch rate for kingfish from mid water trawl vessels in kilos per tow averaged by year and area while targeting jack mackerel or hoki. Grey squares where there were too few tows to report. The red line in 2018 is the boundary between KIN 7 (south) and KIN 8 (north).

19. This discussion document is unusual in that only options for increased TACs are presented. Usually the status-quo is retained as an option for the Minister.
20. FNZ say “Kingfish landed fresh is a moderately high value species, and is usually sold as fillet or whole chilled. Frozen kingfish processed on board factory vessels is of a considerably lower value than that landed fresh.” This keeps the average port price low in KIN 7 and KIN 8 and the high deemed value means they will pay more for ACE to reduce their deemed value bill (Table 2).

Table 2: Average kingfish port price and ACE price for the last year (to June) and the current kingfish deemed value rates. The actual or estimated annual deemed value paid as quoted in the discussion document is below.

	KIN1	KIN2	KIN3	KIN7	KIN8
Average Port Price	\$ 5.19	\$ 4.82	\$ 4.13	\$ 1.82	\$ 2.93
Average ACE Price	\$ 2.74	\$ 2.59	\$ 5.58	\$ 11.15	\$ 10.26
KIN deemed value +20% over ACE	\$ 8.90	\$ 8.90	\$ 4.45	\$ 8.90	\$ 8.90
KIN deemed value >100% over ACE	\$ 17.80	\$ 17.80	\$ 8.90	\$ 17.80	\$ 17.80

21. Kingfish length at 50% maturity is 97 cm in females and 83 cm in males, so half of the fish are larger than this when they first mature. Most trawl caught kingfish are therefore immature and trawl CPUE is not a good indicator of trends in the spawning stock biomass. The west coast jack mackerel trawlers do catch some large kingfish based on data collected by fisheries observers.

The submission

22. The submitters have been concerned about the decline in yellowtail kingfish stocks for many years and are wary of increases in commercial utilisation as stocks rebuild. Kingfish are a popular and challenging target species for many recreational fishers. They form a valuable component of the charter boat business with clients coming from New Zealand, and until recently, from around the world to test their angling skills against these hard fighting fish. A structural change in the recreational charter boat fleet has seen far fewer large launches and many people chartering trailer boats. Kingfish is a major target species for these new operators. There is also growing demand for guided fly-fishing trips targeting kingfish in shallow water.
23. In 2014-15 recreational fishers paid for an economic survey of saltwater fishing through a New Zealand Marine Research Foundation project. The lead researcher was Southwick Associates from Florida, who estimated recreational fishing's contribution to the New Zealand economy and was able to split out the recreational kingfish fishery. While acknowledging the sample sizes were limited for species by species break downs, Southwick estimated total economic activity from kingfish related spending by recreational fishers was about \$134 million, GDP \$50 million and employment of 630 fulltime equivalents.
24. NZSFC has a yellowtail kingfish policy with a goal of maintaining New Zealand's world class recreational fishery for kingfish. The policy document adopted at the NZSFC AGM in 2015 is attached to this submission.
25. There is now general acceptance that kingfish stocks have increased, and schools have moved further south than usual. Data from various sources shows several periods of good recruitment over recent years.
26. The initial TACCs set for KIN 3, KIN 7 & KIN 8 were low and while the increases proposed look large, they are unlikely to affect abundance or the availability in areas popular with recreational fishers. In part this is because the proposals only cover current levels of landed catch.
27. The Submitters do not support the use of a proportional allocation model for increases to the TACC and allowances in KIN 2, KIN 7, and KIN 8. While the courts have confirmed that proportional allocation between fishing sectors is option for the Minister, he or she also has wide discretion when setting a TACC and allowances.
28. In the snapper 1 Appeal Court judgement Justice Tipping wrote:
"Having set the TAC the Minister in effect apportions it between the relevant interests. He must make such allowance as he thinks appropriate for the other interests before he fixes the TACC. That is how the legislation is structured. *We do not consider it implicit in the relevant section or in the scheme of the Act as a whole that once the ratio of recreational tonnage to commercial tonnage is fixed there can be no change in that ratio except on an increased biomass. The imprecision of the actual recreational catch is one good reason why strict proportionality would be near impossible to achieve. That makes it difficult to imply an obligation to achieve it.*"
29. FNZ is wrong to assert that "There is no available information on the spatial distribution of recreational kingfish catches within QMAs" or that because fishing effort is concentrated inshore that is where most kingfish are caught. Adult kingfish often school near offshore structures where there is good current flow, like Ranfurly Bank (KIN 2), D'Urville Island (KIN 7), Kapiti and Three Kings Islands (FMA 8). There are target fisheries offshore where large kingfish are caught, many of which are released. The amateur fishing charter vessel database has recorded over 150,000 kingfish caught since 2010-11, mostly with latitude and longitude. There is also general

spatial data collected from private fishers in the National Panel Surveys and the concurrent ramp surveys that collect fish size information.

30. NZSFC could support increases in these areas within the objectives and strategies of the kingfish policy, such as by-catch only fishing, no proportional allocation, describing the economic contribution of the recreational fishery, and no increase in the jack mackerel TACC.
31. We would not support the alternative to TACC increases mentioned in the Discussion Document, which was to reduce the deemed value, as they did in KIN 3 a few years ago.
32. The case for an increase in KIN 2 is weak. It seems that FNZ suggest increasing the allowance for recreational fishers and have tacked on a TACC increase based on a proportional allocation of the TAC. The submitters strongly oppose the proposed TACC increase in KIN 2 and the use of proportional allocation in this way.
33. The proportion of kingfish released alive in KIN 2 is much smaller than in other commercial trawl fisheries. It looks like less than 10% in most years (Figure 4). The best option to avoid exceeding the TACC or paying deemed values is to release more immature kingfish alive during the year.

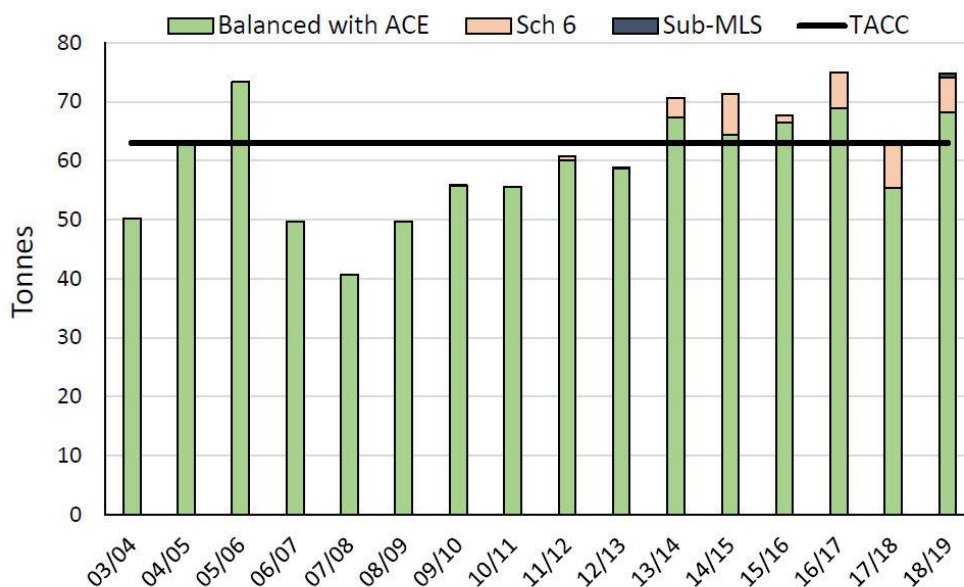


Figure 4: KIN 2 commercial catch since introduction to the QMS. Note that data on sub-MLS kingfish is only available post 2017/18.

34. The catch-at-age studies in 2014-15 did include FMA 2 kingfish from Ranfurly Bank with fish from other offshore locations in the Bay of Plenty. These provided indicators of the total mortality of the mature spawning fish which were reasonably encouraging. However, the KIN 2 commercial fisheries catch mainly small kingfish and abundance is determined by recruitment. The trawl catch rate was above average a few years ago but was lower in 2017-18 and 2018-19 (light blue line Figure 9). This is the opposite of the trend in the KIN 1 and KIN 8 trawl fisheries, but similar to the Bay of Plenty trawl CPUE.
35. The discussion document does not give a clear rationale for the increase in the allowance for customary catch. We assume that commercial fishers would have to label and report bins of fish for pataka kai customary use. If not, then this is a gap in the electronic reporting system. If tonnes of kingfish are landed by commercial fishers for Iwi customary use then this will also help commercial catch remain below the current TACC.

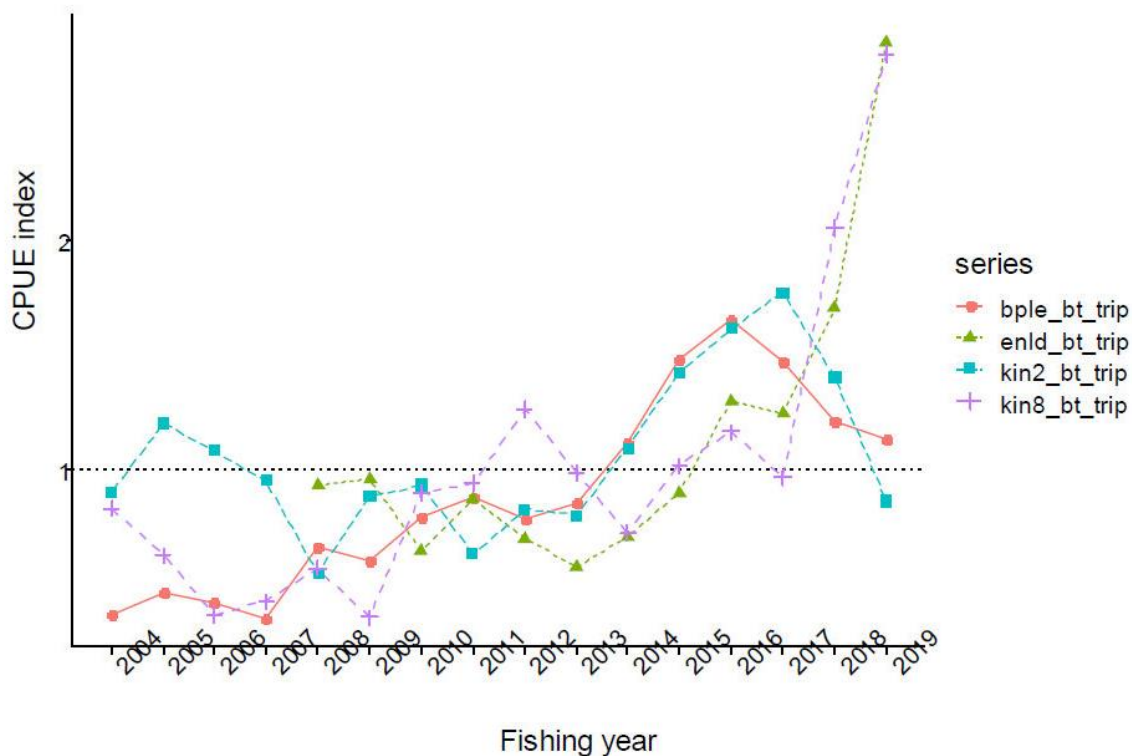


Figure 9: CPUE indices for immature kingfish from bottom trawl fisheries

36. The most robust information on kingfish catch rates, release rates and size frequency comes from the “midwater trawl” fleet fishing in KIN 7 and KIN 8. The same large Ukrainian trawlers (now New Zealand flagged) have fished in the same way in the same areas for many years and since 2004 there has been a high level of coverage by fisheries observers. The modelling of catch rates from observed trips only shows a large increase in CPUE and catch over the last 6 or 7 years. The length frequency data shows a strong year class of 50 cm to 60 cm kingfish being caught in 2014-15. These data also show that since then there have been very few small fish recorded in the catch. FNZ need to consider that the recent high level of recruitment may not continue.
37. There is also evidence that the catch rate of Jack mackerel in JMA 7 (FMA 7 & 8) has increased in recent years. While it is encouraging that the stocks are doing well the submitters would not support an increase in the JMA 7 TACC from the current level of 32,500 t. This is already the largest TACC for an “inshore” species and Jack mackerel are important forage species for birds, marine mammals and fish, including kingfish.
38. As set out in the NZSFC kingfish policy (below) the submitters support maintaining abundance at high levels to provide ecosystem services and high quality recreational fishing. This means that there are large (20 kg plus) kingfish available in a range of habitats, not just the most remote offshore locations. The value to New Zealand of a world class sport fishery for kingfish far outweighs value that could be attained by fishing the stock down to 40% of the unfished biomass. There are no quantitative stock assessments for kingfish, and the chance of developing a reliable stock assessment model without an abundance index of the spawning stock biomass are extremely slim. Some CPUE analyses may track trends in abundance over recent years but problems with under reporting and gear selectivity remain, especially when assumptions are made about periods with low CPUE (and reporting) being some sort of reference point.

KIN 2

39. The submitters ask the Minister to increase the TAC to 181 in KIN 2 and make a technical adjustment to the allowances to better reflect current utility:
- a) The TACC remains at 63 t to retain incentives to release kingfish alive.
 - b) The recreational allowance is increased to 79 t in-line with the latest survey estimate of 79.2 t to provide for high value recreational fisheries.
 - c) The allowance for customary catch be set at 21 t, with the ability to review as required.
 - d) The allowance for other sources of fishing related mortality be set at 18 t which is 10% of the TAC.

KIN 3

40. The submitters support option 1 to make allowance for current utilisation in KIN 3 and set the TAC at 21 t.
- a) The TACC increases to 9 t to retain incentives to release kingfish alive.
 - b) The recreational allowance remains at 6 t in-line with the latest survey estimate of 5.8 t to provide for high value recreational fisheries.
 - c) The allowance for customary catch remains at 4 t, with the ability to review as required.
 - d) The allowance for other sources of fishing related mortality be increased to 2 t which is 10% of the TAC.

KIN 7

41. The submitters support a mix of option 1 and option 2 proposals to increase allowances close to current utilisation in KIN 7 with a TAC of 98 t. There is no need for proportional over-allocation of allowances.
- a) The TACC increases to 44 t which is 70% of the 2018-19 landed commercial catch and will retain incentives to release kingfish alive.
 - b) The recreational allowance increases to 40 t.
 - c) The allowance for customary catch increases by 100% to 4 t, with the ability to review as required.
 - d) The allowance for other sources of fishing related mortality be increased to 10 t which is close to 10% of the TAC.

KIN 8

42. The submitters support increases in the TACC allowances close to current utilisation in KIN 8 with a TAC of 170 t. There is no need for proportional over-allocation of allowances.
- a) The TACC increases to 80 t which is 85 % of the 2018-19 landed commercial catch and will retain incentives to release kingfish alive.
 - b) The recreational allowance increases to 55 t in-line with the latest survey estimate of 55 t to provide for high value recreational fisheries.
 - c) The allowance for customary catch increases to 18 t, with the ability to review as required.
 - d) The allowance for other sources of fishing related mortality be increased to 17 t which is close to 10% of the TAC.

National Yellowtail Kingfish Policy

New Zealand Sport Fishing Council

July 2015



Goal

To maintain the world class recreational fishery for kingfish in New Zealand.

Objectives

1. Ensure there is an abundance of large kingfish around New Zealand to provide ecosystem services and high quality recreational fishing.
2. Total fishing mortality is maintained at sustainable levels, such that the fishing mortality rate is maintained below the natural mortality rate as estimated by catch curve analysis.
3. The economic, social and cultural importance of non-commercial fisheries for kingfish is described and recognised.

Strategy

1. Promote the intrinsic value of large kingfish as part of a healthy marine ecosystem.
2. Promote a high value sport fishery for kingfish as a priority for fisheries managers and decision makers.
3. Promote conservative fishing methods including catch and release by recreational fishers and charter operators.
4. Reduce release mortality by using best practice fishing methods, including the use of circle hooks when targeting kingfish with bait.
5. Kingfish are an important species in fishing tournaments. Measure and release should be encouraged.
6. Tagged kingfish should be measured, nose to tail fork, on release and recapture and capture location accurately recorded.
7. Promote a bycatch-only allowance for commercial fishing and the use of Schedule 6 live release to remain within the TACC.
8. Promote a ban on set nets on deep reefs and offshore pinnacles, regardless of fisher's stated target species.
9. The Ministry for Primary Industries must closely monitor and report annually kingfish catch by trawlers and purse seine vessels in the jack mackerel fisheries. Hot spots of kingfish catch need to be identified and protected by ensuring those vessels avoid these areas with the use of time/area closures, if necessary.