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25 June 2014

NZ Sport Fishing Council – LEGASEA submission on the review of sustainability and other management controls for blue moki 3 (MOK3)

Recommendations

- That no change to blue moki 3 catch limits be made at this time due to the absence of basic fishing mortality data.
- Prior to any catch limit increase the Ministry for Primary Industries must urgently undertake at-sea catch research to establish a more reliable estimate of blue moki 3 mortality and catch at age.

NZ Sport Fishing Council - LEGASEA

- 1. The New Zealand Sport Fishing Council and our outreach LegaSea (the submitters) appreciate the opportunity to submit on the review of sustainability and other management controls for blue moki 3 (MOK3). The Ministry for Primary Industries (MPI) released their Discussion Paper on 26 May with submissions due by 25 June 2014.
- 2. The submitters object to the Ministry's tight consultation timetable, giving only 21 working days to respond to the proposals for this blue moki 3 fishery that is important both socially and culturally. It is unreasonable to expect non-commercial interests to respond with adequate information to inform the Minister's decision in the time allowed, as required by ss 12 and 13 of the Fisheries Act.
- 3. NZSFC 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 Roz Nelson, secretary@nzsportfishing.org.nz.
- 4. The NZ Sport Fishing Council is a national sports organisation with over 32,000 affiliated members from 55 clubs nationwide.
- 5. The New Zealand Sport Fishing Council has initiated LegaSea to generate widespread support for the ongoing effort to protect and enhance the public's access to abundant fisheries in a healthy marine environment. Also, to broaden NZSFC involvement in marine management advocacy, research, education and working together on behalf of our members and LegaSea supporters. www.legasea.co.nz
- 6. We 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]

Executive summary

- 1. The increased catches of blue moki in MOK3 are the result primarily of the increase in reported targeting of spiny dogfish 3 (SPD3), increased availability of tarakihi (TAR) Annual Catch Entitlement (ACE) and the inevitable bycatch of MOK3.
- 2. It is irrational to respond to increased MOK3 catches without sufficient ACE to balance when this increasing catch results from fishers entering the fishery and using a stock such as spiny dogfish as a stated target species. Spiny dogfish 3 is a stock that is only 27% caught, catches have been steadily declining for a decade (80% caught in 2005) and SPD3 has inevitable bycatch of blue moki.
- 3. A rational response is to review all the mixed species and balance the Total Allowable Commercial Catches (TACCs) so that the most vulnerable of them to overfishing can be defended. MOK3 has a legal right to have catches restricted to ensure sustainability and the Minister, through the Ministry for Primary Industries (MPI), has a legal duty to act in such a manner.
- 4. The first attempt at this work must be to gather at-sea catch data. Discards are the Achilles heel of any management system relying on reported catch to assess stocks. The extent of sub-legal catch and discards of legal sized fish must be gathered before an elementary understanding of fishing mortality can be established. The initial fishing response to a lack of ACE for one species in a mixed species fishery is to discard at sea and avoid the deemed value consequences of a reported landing.
- 5. Perhaps there ought to be a moratorium on fishers entering the fishery on the spurious claim of targeting spiny dogfish (SPD), rig (SPO), or tarakihi (TAR) when it is common knowledge that insufficient ACE exists to balance the inevitable bycatch of blue moki.
- 6. The inseparable nature of MOK3 and MOK1 due to annual spawning migrations crossing Fisheries Management Area boundaries means the Ministry's proposal that considers the MOK3 TACC in isolation from the MOK1 ignores the fundamental stock dynamics. The mixed catch of fishers targeting MOK, SPD, SPO, TAR, and Hapuku/Bass (HPB) categorise all as 'associated species' for the purpose of s.9(a) of the Fisheries Act 1996. The effects of each TACC on the other species must be carefully weighed to ensure none are being overfished in the pursuit of others.
- 7. The NZSFC submits that no change to catch limits be made at this time due to the absence of even basic fishing mortality data. MPI must urgently undertake at-sea catch research to first establish a more reliable estimate of blue moki 3 (MOK3) mortality and catch at age.

Submission on MPI proposals

The need to act

- 8. The Ministry for Primary Industries (MPI) asserts the need to increase the blue moki 3 Total Allowable Commercial Catch arises from the TACC being over caught by 25%. TACCs being exceeded is now the common trigger for an increase in TACC, not any demonstrable increase in abundance.
- 9. Conversely, MPI make no attempt to apply the same principles, to adjust the TACC, when TACCs are regularly under-caught. Either the TACC is a fishing control or it is not. MPI's current application suggests TACCs are only adjusted upward, not downwards, when overfishing occurs without explanation.
- 10. ACE entitles commercial fishers to only take that proportion of the fishery, in that year. No more. All extra is largely beyond their legal rights and should not occur.
- 11. The sudden increase in the amount of deemed value charges suggest that changed fishing behaviour caused overcatch beyond the 120% threshold and invoked charges above the port price. This detail should be explicit in the Initial Position Paper (IPP) to inform comment on the basis for a TACC increase.

- 12. MPI note that increased catch is not necessarily a sign of greater abundance, and leaves the causes of overcatch unexplained. This alone should rule out any serious proposal to increase catch. Blindly increasing TACCs does not follow the intent, the purpose or principles of the Fisheries Act.
- 13. Clearly, the need to act is not because recreational interests are not being fulfilled. We submit MPI would be better turning their minds to restoring recreational interests, as provided for within the Act.

Management approach

- 14. MPI assert that MOK3 is managed under the National Finfish Plan, where it resides in Group 6. This group has only very general objectives of sustainable catch and mitigation of the effects of fishing. This is incorrect. MOK3 is managed under the Fisheries Act 1996 and is no different in that regard to any other stock subject to the quota management system (QMS).
- 15. The stock has been in the QMS for 28 years yet no information has been gathered except for reported landings. The dearth of data on MOK3, despite having 28 years to gather basic catch at-sea data, means the precautionary principle in s.10 must apply. This is not discretionary.
- 16. Action to meet the Purpose of the Act by setting catch limits to enable sustainable utilisation cannot be construed from the information available. There are no signals that current catch is sustainable, never mind any increases.
- 17. The deliberate minimising of management costs by not gathering fishery data also results in the necessity to set very conservative catch limits.
- 18. Although MPI state a desire to link the TACC to gathering better fishing data on MOK3, no suggestions are made and the notion simply lies on the table.
- 19. The IPP cautions that for low value stocks like MOK3 regular research projects, or even catch sampling, would not be "cost-effective".[12]. This suggests the only purpose in research is for the research results to provide value by way of increased TACCs beyond the research cost that is untrue. In a management system relying on output limits the Minister, through MPI, has an obligation to gather robust fishing mortality data and if ITQ shareholders want to see ACE generated from their shares then they need to invest in data gathering, otherwise the TACC can, and often should, be set at zero.
- 20. MPI suggest if there was interest in development options could be explored to "*transition MOK3 to a higher fishery plan group*", and develop "*suitable stock monitoring tools*". [63] This is a classic. Now the non-statutory Fisheries Plan becomes the limiting factor, not the tool to support the statutory management functions of the Fisheries Act.

Biological characteristics

- 21. New Zealand MOK1 and MOK3 are inseparably co-dependent due to the annual migration of the spawning stock beginning in late autumn. Catch in one area will immediately affect the other, even though most of MOK1 is beyond the range of spawning migrations and catch is concentrated. MPI note "that there is likely to be interdependence between FMAs and increased catches in FMA3 are likely to have an impact on other areas". [16] Considering increasing the TACC in MOK3 without assessing the effect on MOK1 threatens to simply move catching opportunity from one set of shareholders to another.
- 22. Blue moki rapidly grow to the Minimum Legal Size (MLS) of 40cm and then growth slows and they live long. Such species are vulnerable to overfishing.
- 23. There is no information regarding the discard rate for sub-legal moki caught by trawl or set net the two methods that could be expected to have significant sub-legal catch. Monitoring landed catch

without the discard rate data is pointless. Such a large MLS will drive high discard rates unless selectivity is excellent, yet there is no data or commentary on this.

Stock status

- 24. Biomass levels are unknown.
- 25. MPI assert that because landed catch has been mostly stable over the past 14 years that fishing pressure is low.[18] Landed catch is not fishing mortality and such assumptions are simply invalid.
- 26. Fishing intensity and stock status are unknown.

Commercial fishing

27. Blue moki is taken when targeting blue moki, tarakihi (TAR), rig (SPO), spiny dogfish (SPD) and hapuku-bass (HPB) in Area 3.



Figure 1: Catch (%) by method and target species.

- 28. Bycatch levels of blue moki 40cm or greater are low in the trawl fleet, but no data is available on catch due to the failure to undertake at-sea catch sampling.
- 29. Tarakihi (TAR), rig (SPO) and spiny dogfish (SPD) are the three main species with significant MOK3 bycatch. If TACC increases are granted to generate ACE to enable the catch mix to be balanced then we suggest MPI are on a road to nowhere.
- 30. TAR3 is 75% caught with 377 tonnes (t) uncaught. SPO3 is 77% caught with 138 t uncaught. SPD is 27% caught with 3492 t uncaught. The potential and inevitability for MOK3 to constrain the catch of rig, spiny dogfish and tarakihi is obvious.
- 31. MPI suggest "attempts to constrain blue moki catch to average levels could create further disincentives to report and land catch, making it difficult to identify trends or signals that there are opportunities or concerns arising in the fishery" [58].
- 32. If MPI are reluctant to allow MOK3 to constrain the catch of associated species then the blue moki TACC would need to increase one hundred fold to accommodate the TACCs that have never been caught, never been assessed, and never been reviewed since introduction to the QMS in 1986!
- 33. Talk of disincentives is merely an admission that the QMS fails to import the stewardship promised by the early economic commentators. Other jurisdictions in the English-speaking world have abandoned the fanciful notions of incentive based fishing rules; MPI is encouraged to do likewise, and join the enlightened world.

- 34. There is no detailed effort data included. Is aggregate effort increasing? Is temporal or spatial effort increasing or varying?
- 35. A port price of \$1.03 is incorrect; and if it was correct having deemed values of 75% of the port price rising to 170% is incoherent. Such mismatches drive dumping.
- 36. The sudden jump in deemed values paid for overcatch from \$4,000 to \$40,000 indicate that effort somewhere in the fishery has increased. Trawl catch is declining as a proportion of total catch. Set net targeting spiny dogfish is increasing.
- 37. Commercial users need to be more selective if they genuinely want to avoid catching blue moki. Providing TACC increases on a whim removes the need for industry to improve selectivity, a common weakness.
- 38. The data available to MPI for analysis is outdated.
- 39. The failure to monitor the blue moki 3 fishery raises the obvious question of, what is the species doing in the QMS?
- 40. How can the Minister be satisfied that MOK3 is being utilised sustainably to comply with s.17(1) of the Act when no data is gathered that would enable such a judgment to be made?
- 41. We submit that MPI proposing TACC increases while failing during the last 28 years to monitor the blue moki 3 fishery smacks of operational contempt for the QMS and the Fisheries Act that enables it.
- 42. A set net mesh of 114mm, the legal minimum, will entangle blue moki well below the MLS.
- 43. Industry reject in [69] a catch sampling programme due to \$250,000 cost, yet they will pay \$43,000 in deemed values and more in cost recovery levies, and reap the benefits of taking those fish, including keeping crew gainfully employed and businesses going. Implementation of such basic research programmes should not be at the discretion of ITQ shareholders. The Minister, through the Ministry, has an obligation to undertake the gathering of actual catch data for all stocks.
- 44. Failure to gather catch at-sea data reduces the usefulness of TACs and TACCs, even though these basic tools are the very backbone of the QMS. The failure to get these catch limits set correctly destroys the integrity of the QMS and raises serious questions about the credibility of fisheries management in New Zealand.
- 45. Clearly the adoption of an increase in the TACC for TAR3 in 2006 under an adaptive management programme has not resulted in increased TAR3 catches. The only significant outcome of the increased effort to catch TAR3 has been an increase in the bycatch of blue moki. Kaikoura commercial set netters warned of significant reductions in the size distribution of TAR3 and advised against the increase in TACC but their practical concerns were ignored in favour of Treasury-driven demands for higher returns. This is clearly a case where government driven demands for greater returns are having a destructive impact at multiple levels. The adaptive management programme is not being competently managed.
- 46. Failure to achieve increased catches is clearly an indication of a highly stressed fishery and ought to result in a significant reduction in the TACC (below original levels). That this has not happened demonstrates that the drivers are not the biological health of the ecosystem or fish stock, but short-term financial rewards.

Set netting



Figure 2: Catch rate (kg per day) by species and month.

- 47. MOK has a season spanning six months, with peak catches coinciding with the spawning aggregations annual migration to MOK1.
- 48. The September peak is indicative of last minute efforts to catch all available ACE. (Figure 2). Moki is clearly able to be targeted with set nets, and is a bycatch in almost all other fishing events.
- 49. The CPUE legend of Kg/day is incoherent. A day is not a unit of effort it's a unit of time. Without including net length details a time period of one day remains pointless.
- 50. There is nothing to suggest that the increase in MOK3 catch is due to anything other than increased fishing effort. The low TACC completion rate of spiny dogfish, rig and tarakihi is enabling fishing effort to continue, even though the inevitable blue moki catch cannot be balanced with ACE, reflecting a mismatch in mixed species TACCs.
- 51. There has been a recent increase in targeting spiny dogfish in October and November that has an inevitable bycatch of MOK3 for which ACE is not available, and the higher deemed value rate drives up aggregate deemed value payments for the year.
- 52. Rather than continue to provide TACC increases to enable whatever catch is occurring the Minister, through MPI, is duty-bound to first ensure sustainability.
- 53. It is usual for the species most vulnerable to overfishing within a mixed species fishery to have a TACC that leaves other species relatively more abundant. MOK3 appears to serve this role.
- 54. Determining target and bycatch species is a vexed matter. The actual target for the fisher is usually more than a single species, especially when using set nets over broken bottom features. Experience tells us that there is often a wide gulf between the species stated on the catch effort landing returns (CELR) and anticipated catch.
- 55. MPI would be better directed to assess at what reduced level of TACC for spiny dogfish, rig and tarakihi would limit catches of MOK3 to within the TACC. Otherwise the Minister begins a journey

without end or without statutory authority – granting increases in TACC to balance catch when there is no information as to the effects of any increase.



Figure 3: Days (%) by method and target species.



- 56. The percentage of moki in the set net catch when targeting other species off Kaikoura is quite small: 6% for sharks; 5% for Tarakihi; 4% for Hapuku/Bass. Sixty three percent of landed catch is blue moki when moki is one of the target species that day in the Kaikoura setnet fishery. This would suggest a very successful targeting practice. Given the extraordinary success from targeting blue moki with set nets why is the TACC being overcaught by 25%?
- 57. The industry has a choice as to how it uses ACE, as a target or to cover bycatch, but either way it is a binary choice; ACE can only cover a single landing event and fishers must choose.
 - Generating more ACE to compensate for poor fishing practice is rejected as a logical or durable response.
- 58. The increase in effort, ostensibly targeting spiny dogfish, but landing substantial quantities of blue moki, combine to dismiss any notion that increased catch of blue moki arises from anything other than increased fishing pressure.
 - This increased fishing pressure will be permanently enabled by making a low quality decision to increase the TACC.

Trawling

- 59. Blue moki is a bycatch in the inshore trawl fleet and accounts for about 15% of total MOK3 catch. Average landings increased from 1990 to 2005 and have declined since, with a sharp drop in the last year.
- 60. Increased landings more commonly respond to price signals or changes in relative abundance with associated species, rather than abundance of a single species. A far more detailed analysis of the market for blue moki and its changing character are necessary before understanding changes in trawl landings.

61. There appears to be no data on blue moki discards from trawling. The 40cm MLS combined with trawl selectivity biased toward small fish, would indicate a certainty that blue moki between 25cm and 40cm are routinely caught and discarded. The absence of this trawl data combined with the susceptibility of blue moki to overfishing rapidly increases the risk of any TACC increase in response to increased catch.

Recreational catch

- 62. Recreational catch estimates span the range from a few hundred kilos to 70 tonne. None of the estimates and the conditions attached serve as a robust guide for setting the recreational allowance.
- 63. The allowance for recreational fishing interests must, at the narrowest level, be a best estimate of what will be caught, and what should be caught to allow for those interests. When information is poor estimates must be weighted higher in the range to be reasonably sure the Total Allowable Catch (TAC) will not be exceeded.
- 64. The Supreme Court has clearly ruled that qualitative factors form an essential part of what makes up recreational interests, in particular, "people providing for their wellbeing, particularly their social wellbeing, is an important element of recreational interests¹". [54]. Given the daily bag limits, the popularity of blue moki, and the range of recreational harvest estimates, a reasonable allowance for recreational catch and interests in MOK3 would be in the order of 50 tonnes.
- 65. MPI acknowledge the 2008 set net closure "*is likely to have drastically diminished recreational harvest*"[65]. However, the Minister has a duty to enable us to provide for our social, economic and cultural wellbeing, and 'must' allow for our non-commercial interests.

Other sources of mortality

- 66. For MOK3 MPI propose a standard allowance of 10% for fishing related mortality.
- 67. Whether a 10% allowance for fishing related mortality is reasonable or not depends on the discard rate and the survivorship of discarded fish. No data on either parameter is included, making it impossible to set an allowance that is anything more than just as number it cannot even be categorised a guess.
- 68. The inability to account for all fishing induced mortality imperils the Total Allowable Catch (TAC). The TAC is the sole tool that 'ensures sustainability', a primary purpose of the Fisheries Act.
- 69. MPI acknowledge that blue moki has low productivity and is vulnerable because it is easily damaged in fishing gear. [46]. They also acknowledge that there are potentially high levels of unreported mortality and unseen mortality. [47].
- 70. If the Minister seeks to make a lawful allowance for fishing related mortality not included in reported landings, and if he seeks to avoid imperiling the TAC, then the standard default of 10% of the TACC (used in data rich fisheries such as SNA1) should be doubled to 20% for stocks such as MOK3 that have poor or no information.

Other considerations

- 71. The Ministry suggests a TACC increase will not translate into increased fishing effort or have any effect on associated species. [49]. Any increase is simply seen as moving existing catch from a category requiring deemed value charges be levied to the TACC.
- 72. This suggestion intersects with several QMS operational matters that give concern -

MOK 3 submission. New Zealand Sport Fishing Council - LegaSea. 25 June 2014.

¹ NEW Zealand RECREATIONAL FISHING COUNCIL INC AND ANOR v SANFORD LIMITED AND ORS SC 40/2008 [28 May 2009]

- Overcatching the TACC gives rise to higher TACCs. There is never a cast iron case available to set catch limits at exactly the 'correct' levels, but it is spurious to routinely respond to overcatch by suggesting greater abundance and the need for a TACC increase. As a default it should be assumed that if a TACC is limiting catch then it is serving its primary function. The extent of overcatch in MOK3 suggests less targeting is required if ACE is to be available to balance the increasing bycatch. Furthermore, the recent peak in September catches is unexplained.
- Understanding factors influencing catch. Before any process to review a TACC is triggered by overcatch a more thorough investigation should be mounted to fully understand the role that abundance, markets, catch methods, environmental impacts, and fish stock parameters, including associated and dependent species, are playing in increasing catches. A template for gathering basic data to inform on TACC levels must surely be the starting point – not just a low quality proposal for TACC increases.
- ➤ Unbalanced ACE holdings. We have seen in a number of fisheries the effect of unbalanced ACE holdings. Where, for example, a fisher with access to MOK3 ACE can target that fish during the season leaving little or no ACE in the market for other commercial fishers needing to cover genuine bycatch.
- Deemed value rates no reflection of the market. Table 1 below demonstrates that fishers carried over 2,814 kgs of MOK3 unused ACE from 2011-12 to 2012-13, even though the TACC was overcaught by 10,000 kgs. This suggests the deemed value rate no longer reflects the market price of blue moki 3.

Fishstock	ТАСС	Landings 2011-12	ACE carried over (kg)	ACE at end date 2011-12 (kg)	Landings 2012-13
MOK1	402,605	427,010	3,184	405,789	385,109
MOK3	127,206	137,389	2,814	130,020	158,930

Table 1: TACCs, landings and ACE for 2011-12 and 2012-13.

Management options

Table 1: Proposed TACs, TACCs and allowances for MOK 3

	Allowances						
Option	TAC (t)	TACC (t)	Customary Māori (t)	Recreational (t)	Other sources of fishing related mortality (t)		
Current	-	127	-	-	-		
Option 1	146	127	1	5	13		
Option 2	187	160	1	10	16		

- 73. The Ministry's option 1 contains a very small, 6 tonne allowance for non-commercial catch and interests. Commercial waste receives twice the non-commercial allowances despite blue moki being a sought-after and valuable non-commercial recreational and customary species.
- 74. MPI accept and state the range of recreational harvest estimates and then ignore them in favour of blindly accepting our catch and interests to be trivial. This is not acceptable and we submit that making initial allowances that trivialise the public's interaction and valuation of blue moki reads down the public's position from which it is very difficult to emerge.
- 75. Once a more reliable estimate reveals public catch of 50 tonnes the same hysteria that inflamed Snapper 1 is inevitable as the public are accused of overfishing and attract draconian responses from MPI.

- 76. For MOK3, any allowance for recreational interests under 50t risks eroding any stability sought by having MOK3 in the QMS.
- 77. It is noted that banning set nets within 4 miles of the coast in all of MOK3 largely eliminated the recreational fishery, which may have once been over 50 t. Confiscating this allowance and making it available to TACC shareholders fails to "allow for" our recreational fishing interests pursuant to s.21(1)(a)(ii) of the Fisheries Act 1996.
- 78. If set netting is unavailable then opportunity must be given to the public to embrace alternative capture methods. The plethora of undercaught TACCs would suggest MPI sees no urgency in removing uncaught allowances.
- 79. Option 2 contains a doubling of the recreational allowance. What principle or data supports the proposal that a 100% increase in the allowance is included for any reason other than to act as bait? It is an obvious implication that MPI are saying, "if you agree to commercial catches increasing by 33 tonnes then we will give you an extra 5 tonnes".
- 80. Is there any basis for proposals that set catch limits and allowances to generate a TACC on a whim? Suggestions like this confirm the lack of clear guidance when applying the Fisheries Act, and officials seem to just make it up as they go along to suit any particular circumstance.
- 81. This MPI blue moki 3 proposal contradicts the Supreme Court opinion that the amount of fish set aside to allow for recreational interests will be the best estimate of catch, having regard to the regulations that apply.
- 82. MPI classify a TACC increase from 127 to 160t (33t or 26%) as "moderate" [62]. That "moderate" increase is more than what they consider is the recreational interest in the whole of MOK3.
- 83. Moki is a sustenance species caught using traditional methods. Moki catch used to feed many local families. Since the set net ban these local families can now only watch as commercials fishers return to shore with boat loads of overcatch. The public rightly considers this a rort!
- 84. There have been several increases in commercial quota in the last few years in response to landings in excess of the TACC. For example, increases in kingfish area 8 (9 t), elephant fish area 5 (31.5 t), ghost shark areas 5 (24 t) and area 8 (13 t), gurnard area 3 (200 t) and area 7 (26 t), john dory area 7 (25 t), porae area 2 (11 t). MPI need to be careful that they are not providing the wrong incentives to commercial fishers, by rewarding them with extra quota as soon as their catch exceeds the TACC. After all, the setting of Total Allowable Catches is the primary tool that sustains our fisheries for future generations of New Zealanders; TACs are not a tool to be used selectively merely to enrich a select few private quota holding interests.