Hon Stuart Nash LLM, MMgt, MForSc

MP for Napier
Minister of Police
Minister of Fisheries
Minister of Revenue
Minister for Small Business

B20-0426

Tēnā koe

Changes to fisheries sustainability measures for 1 October 2020

I write to inform you of the decisions I have made to ensure New Zealand maintains sustainable fisheries for our cultural, social and economic wellbeing. I am pleased to say that for most fishstocks reviewed in this sustainability round, I have been able to increase catch limits, reflecting a generally healthy state across our fisheries. However, where sustainability is at risk, I have taken management action to ensure this risk is addressed and our fisheries are managed for the benefit of all New Zealanders.

Overall, decisions were made on the catch limits of 29 stocks and on the deemed value rates of 12 stocks, all with October fishing years. Attached to this letter are my decisions for these stocks, along with a brief rationale for each of the changes I have decided on.

In making my decisions, I have considered submissions received from tangata whenua and stakeholders on initial proposals, advice from Fisheries New Zealand, and relevant legislative provisions and my obligations under the Fisheries Act 1996 (the Act).

This year I have taken a particular interest in the allowance for other sources of mortality caused by fishing and the scale of uncertainty associated with this allowance. I note that several submitters commented on other sources of mortality in stock proposals, with some indicating that these are set too high. However, given the relative uncertainties, I consider it appropriate to take a cautious approach to the setting of the other sources of mortality allowance. I would also like to see better estimation of this allowance through improved at-sea monitoring in inshore fisheries and more analysis of the available data in deepwater fisheries. I am inclined to consider even larger allowances in future years if this is not achieved.

The recurrent issue of 28N rights was also raised in this round with two stocks (SKI 2 and SPO 3) having 28N rights associated with them. I understand that, Te Ohu Kaimoana, industry and Fisheries New Zealand are discussing possible options to resolve this, and I look forward to receiving advice to resolve this issue in the future.

The changes to sustainability measures and management controls outlined in this letter will come into effect at the start of the new fishing year on 1 October 2020. The Decision Document that informed my decisions is available on the Fisheries New Zealand website below:

https://www.fisheries.govt.nz/news-and-resources/consultations/review-of-sustainability-measures-for-1-october-2020/

+64 4 817 8712 Private Bag 18041, Parliament Buildings, Wellington 6160, New Zealand s.nash@ministers.govt.nz beehive.govt.nz

Several decisions were made for stocks with an October fishing year during April this year which will also come into effect on 1 October 2020. Detail of these decisions are summarised on the April webpage below:

https://www.fisheries.govt.nz/news-and-resources/consultations/review-of-sustainability-measures-for-1-april-2020/

Nāku iti noa, nā

Hon Stuart Nash
Minister of Fisheries

Summary of October 2020 Sustainability Measures

Stock(s)	Change	Rationale
Deepwater stocks		
Orange roughy - ORH 3B Chatham Rise, Sub-Antarctic	↑	The 2020 stock assessment has shown continued increase in biomass for orange roughy. This increase represents the third and final step of a three-year staged increase that began in 2018.
Scampi - SCI 1 Auckland East	↑	The 2019 stock assessment for SCI 1 indicates that stock biomass has been increasing since 2010 and is now very likely above target.
Black Cardinalfish - CDL 5 Southland **Rubyfish - RBY 4** Chatham Rise	↑	Best available information for CDL 5 and RBY 4 (recent catch information) suggests that increases to their TACs can be sustained.
Silver warehou - SWA 3 & 4 Chatham Rise, Southland, Sub-Antarctic	↑	Best available information, primarily catch per unit effort (CPUE) data, indicates a potential increase in abundance for SWA 3 and SWA 4.
Frostfish - FRO 3, 4, 7, 8 & 9 Chatham Rise, West Coast	↑ \ ↓	Adjustments to the TACs and TACCs of frostfish stocks will better reflect the distribution of the biological stocks.
Inshore stocks		
Gemfish - SKI 1 & 2 Auckland, Central East	↑	The 2020 CPUE analysis for these stocks indicates that abundance has increased and is likely to continue to rise over the next few years.
Sea perch - SPE 9 Auckland West **Pōrae - POR 1** Auckland East	↑	Best available information for SPE 9 and POR 1 (recent catch information) suggests that they could sustain small TAC increases.
Blue cod - BCO 5 Southland	↓	BCO 5 appears to be below the management target. A TAC reduction will help move the stock back towards the target.
Rig - SPO 2 Central East	↑	The most recent CPUE analysis (2019) for SPO 2 shows biomass has increased strongly since 2012 and suggests that an increase in TAC can be sustained.
Stargazer - STA 7 Challenger	↑	Recent trends in STA 7 biomass and catch suggest that a modest TAC increase can be applied without greatly increasing sustainability risks.
Snapper & Red gurnard - SNA 7 & GUR 7 Challenger	↑	A new SNA 7 assessment projects a continued increase for the stock under current harvest. Recent trawl survey and catch trends suggest a modest TAC increase is also warranted for GUR 7, in line with SNA 7.
Deepwater king clam - PZL 7 Challenger	↑	This fishery has high potential value and biomass surveys indicate the fishery could sustain an increase in the TAC.
ECSI multi-species - MOK 3, LEA 3, GUR 3, SPO 3 South East Coast	↑	Recent trawl survey and CPUE data suggest that abundance of these species has increased, warranting modest TAC increases.
Kingfish - KIN 2, 3, 7 & 8 Central East, West Coast, South & Sub-Antarctic	↑	Recent CPUE data and on-the-water experience indicates a nationwide increase in kingfish abundance. TACs and TACCs increased to better reflect recent catch levels.

Summary of deemed value changes

Stock(s)	Change and rationale
Squid - SQU 1T, SQU 6T, SQU 1J All New Zealand	Adjusted differential schedule to better reflect the characteristics of the fishery (high volume, high level of control over catches)
Bluenose - BNS 3 South East Coast, Chatham Rise	Decreased deemed value rates to reflect the landed price received by fishers
Pilchard - PIL 7 & 8 Challenger, Central West	Decreased deemed value rates to reflect the landed price received by fishers
Gemfish - SKI 1 Auckland East	Increased deemed value rates to increase the incentive for fishers to balance catch with Annual Catch Entitlement
Gemfish – SKI 2 Central East	Adjusted differential schedule as the current schedule is not appropriate for a stock taken primarily as bycatch
Gemfish – SKI 7 Challenger	Decreased deemed value rates as there are known to be no sustainability risks associated with catching in excess of Annual Catch Entitlement
Redbait - RBT 3 South East Coast	Adjusted differential schedule to increase the incentive for fishers to balance catch with Annual Catch Entitlement
Trevally – TRE 2 Central East	Adjusted differential schedule as the current schedule is not appropriate for a stock taken primarily as bycatch
Kingfish – KIN 7 Challenger	Decreased deemed value rates to reflect the landed price received by fishers

Orange roughy

ORH 3B – Chatham Rise & Sub-Antarctic fishery

I have decided to increase the TAC, allowance for all other mortality caused by fishing, and the TACC for the ORH 3B fishery as follows:

Option	TAC (t)	TACC (t)	East/South Chatham Rise TACC	Allowances (t)		
				Customary	Recreational	Other mortality
Old	7,116	6,772	4,775	5	0	339
New	8,355 ↑	7,967 ↑	5,970 ↑	5	0	383 ↑

In 2018 I made the decision to apply a 3-year staged increase to the TAC and TACC of ORH 3B in response to best available information which showed increasing stock biomass. The increases decided this year are consistent with this three-year phased process and align with information from the most recent stock assessment update for orange roughy.

The new TAC and TACC settings (and voluntary catch limit for the East and South Chatham Rise) are slightly higher than what I originally agreed in 2018. This is to address a misunderstanding in 2018 regarding the treatment of the allowance for other mortality caused by fishing within the Harvest Control Rule.

Overall, this TAC increase is relatively conservative compared to what the updated science says could be taken within the bounds of sustainability. It allows for a significant increase in commercial catch (18% rise) and subsequent export earnings ($15.2 million per annum) over the previous settings.

During consultation many submitters expressed concerns regarding the potential environmental impacts caused by bottom trawling for orange roughy. However, I note that any additional impact on the benthic environment in terms of trawl footprint, damage to corals and other sessile organisms, as well as non-target fish species as a result of increased effort, is likely to be small under the implemented increase.

Scampi

SCI 1 – Auckland East fishery

I have decided to increase the TAC, allowance for all other mortality caused by fishing, and the TACC for the SCI 1 fishery as follows:

Option	TAC (t)	TACC (t)	Allowances (t)		
			Customary	Recreational	Other mortality
Old	126	120	0	0	6
New	139 ↑	132 ↑	0	0	7 ↑

My decision to implement a modest increase to the TAC and TACC of SCI 1 as set out above aligns with the stock assessment indicating that the stock is very likely to be above the management target of 40% unfished biomass (B_0).

There was mixed support for this TAC increase from submitters, with some indicating preference for a greater increase, and others indicating they would prefer no increase or a decrease. I consider that the settings I have decided on reflect a more balanced approach, which will provide increased value from the fishery while limiting additional risks for increased bycatch and impacts on the benthos in this area. Environmental effects of this fishery are reviewed annually and will allow the impacts of these changes to continue to be closely monitored.

Black cardinalfish

CDL 5 – Southland fishery

I have decided to increase the TAC, introduce an allowance for all other mortality caused by fishing, and increase the TACC for the CDL 5 fishery as follows:

Option	TAC (t)	TACC (t)	Allowances (t)		
			Customary	Recreational	Other mortality
Old	22	22	0	0	0
New	34 ↑	33 ↑	0	0	1 ↑

Unpredictable large catches of CDL 5 have occurred several times in the last decade, prompting fishers to question whether the current TAC and TACC are appropriate for this stock. During consultation, Te Ohu Kaimoana and a range of submitters suggested that a considerably higher TACC (of up to 100 tonnes) is warranted in light of these large infrequent catches.

I consider that based on the best available data (catch information), increases to the TAC and TACC of CDL 5 are appropriate. However, given that the current status of CDL 5 is unknown and there is limited data available for estimating stock status or sustainability risk, I believe a cautious approach is needed. On this basis, I have decided to implement a moderate increase to the TACC that should buffer infrequent high catches and allow for increased utilisation, whilst acknowledging the uncertain stock status of CDL 5.

Rubyfish

RBY 4 – Chatham Rise fishery

I have decided to increase the TAC and TACC for the RBY 4 fishery as follows:

Option	TAC (t)	TACC (t)	Allowances (t)		
			Customary	Recreational	Other mortality
Old	19	18	0	0	1
New	25 ↑	24 ↑	0	0	1

Best available information for the RBY 4 fishery is catch data, which has shown the occasional occurrence of large catches over the last decade. Recent catch data suggests that a higher TAC is appropriate. However, given that RBY 4 is a low information stock, a cautious approach is needed.

The modest increase I have decided to implement to the TACC and TAC of RBY 4 should buffer infrequent unpredictable catches and allow for increased utilisation, whilst acknowledging the lack of information on this stock and its current status.

Silver warehou

SWA 3 & 4 – Chatham Rise, Southland, and Sub-Antarctic fisheries

I have decided to set TACs and all allowances for the SWA 3 and SWA 4 fisheries, and increase the TACCs as follows:

Stock	Option	TAC (t)	TACC (t)	Allowances (t)		
				Customary	Recreational	Other mortality
SWA 3	**Old**	N/A	3,280.3	N/A	N/A	N/A
	New	3,646 (new)	3,610 ↑	0 (new)	0 (new)	36 (new)
SWA 4	**Old**	N/A	4,089.901	N/A	N/A	N/A
	New	4,545 (new)	4,500 ↑	0 (new)	0 (new)	45 (new)

My decisions to increase the TACCs of both SWA 3 and SWA 4 reflect recent information indicating that both stocks have potentially increased in abundance. While fishing industry stakeholders noted during consultation that they felt these 10% TACC increases are unnecessarily conservative, it is my view that they best reflect the information currently available. Further increases may be considered in future if supported by additional research on these stocks.

Recreational and customary catch is highly unlikely for these stocks given the distance from shore and preferred depth of silver warehou, and so I have set customary and recreational allowances at zero for both stocks. To be consistent with other deepwater fishstocks, I have set allowances for other mortality caused by fishing at a level that equates to roughly 1% of the TACC for both stocks.

Frostfish

FRO 3 & 4 – South East Coast and Chatham Rise fisheries

I have decided to set an allowance for all other mortality caused by fishing for FRO 3 and FRO 4 fisheries, and redistribute their TACs and TACCs as follows:

Option		TAC (t)	TACC (t)	Allowances (t)		
				Customary	Recreational	Other mortality
FRO 3	Old	176	176	0	0	N/A
	New	82 ↓	80 ↓	0	0	2 (new)
FRO 4	Old	28	28	0	0	N/A
	New	126 ↑	124 ↑	0	0	2 (new)

Frostfish in FRO 3 and FRO 4 are considered to comprise a single biological stock and their TACs and TACCs are being changed to better reflect the distribution of stock abundance.

Catch of FRO 3 has decreased since 2004/05. This decrease and ongoing low level of FRO 3 catch is unlikely to be attributable solely to changes in fishing effort and indicates a likely decrease in abundance of frostfish on the western Chatham Rise.

Catch of FRO 4 has shown a different trend, with catch having greatly exceeded the TACC in two of the last five fishing years. This increase is believed to be in large part due to a resumption of fishing effort around the Chatham Islands by the pelagic trawl fleet since 2013/14, which had not fished in the area since the early 2000s. However, frostfish is not targeted, and the level of increased catch indicates it is likely more abundant in the area than previously thought.

Considering the above points, this TAC and TACC decrease for FRO 3 and increase for FRO 4 should better reflect abundance in each of these areas while maintaining the biological stock at a level that produces maximum sustainable yield.

FRO 7, 8 & 9 – West Coast fisheries

I have decided to set an allowance for all other mortality caused by fishing for FRO 7, FRO 8 and FRO 9 fisheries, and redistribute their TACs and TACCs as follows:

Stock	Option	TAC (t)	TACC (t)	Allowances (t)		
				Customary	Recreational	Other mortality
FRO 7	Old	2,625	2,623	1	1	N/A
	New	2,154 ↓	2,110 ↓	1	1	42 (new)
FRO 8	Old	649	649	0	0	N/A
	New	919 ↑	900 ↑	1 ↑	0	18 (new)
FRO 9	Old	140	138	1	1	N/A
	New	410 ↑	400 ↑	1	1	8 (new)

Frostfish in FRO 7, FRO 8 and FRO 9 are considered to comprise a single biological stock and their TACs and TACCs are being changed to better reflect the apparent distribution of stock abundance.

Although catch of FRO 7 has increased during the two most recent fishing years (catch was still well below TACC), catch and effort for FRO 7 over the last 15 years suggests it is appropriate to reduce the TAC and TACC, which were set based on fishing activity in the 1980s and 1990s.

Catch levels of FRO 8 and FRO 9 sustained since the early 2000s indicate that frostfish is likely more abundant in these areas than catch from the 1980s and 1990s may have indicated. I consider that the TAC and TACC increases I have decided on are in line with these trends and more accurately represent stock distributions while also remaining consistent with the broader objective of not increasing fishing pressure on the biological stock.

For FRO 8 the allowance for customary interests is being changed from zero to one tonne to be consistent with that for FRO 7 and FRO 9.

FRO 3, 4, 7, 8 & 9

I have decided to set an allowance for all other mortality caused by fishing for all five frostfish stocks at an amount that equates to approximately 2% of the associated TACC.

Gemfish

SKI 1 & 2 – Auckland and Central East fisheries

I have decided to increase the TAC, allowance for all other mortality caused by fishing, and the TACC for the SKI 1 and SKI 2 fisheries, and increase the allowance for recreational fishing for the SKI 1 fishery as follows:

Option		TAC (t)	TACC (t)	Allowances (t)		
				Customary	Recreational	Other mortality
SKI 1	Old	218	210	3	5	0
	New	307 ↑	252 ↑	3	27 ↑	25 ↑
SKI 2	Old	248	240	3	5	0
	New	325 ↑	288 ↑	3	5	29 ↑

An updated CPUE analysis for SKI 1 and SKI 2 in May 2020 suggested that abundance has increased for both stocks and is likely to continue rising over the next few years.

Industry stakeholders proposed larger increases to the TAC and TACC of these stocks. However, the increases I have decided on take account of the uncertainty in the SKI 1 and SKI 2 CPUE data and the fact that these stocks have been rebuilding from a historical low in the early 2000s.

I have decided to increase the other mortality allowances of both SKI 1 and SKI 2 to levels that better account for the uncertainty around this mortality for inshore trawl-

caught fish stocks. I have also decided to increase the recreational allowance for SKI 1 to 27 tonnes to make it more consistent with current levels of recreational catch (as indicated by recent National Panel Survey results).

I have decided to consider the introduction of a recreational bag limit for both SKI 1 and SKI 2 to ensure that recreational catch remains at a sustainable level. Further consultation will be required before I make any final decisions on a recreational bag limit for these stocks.

I also note that there are 46.8 tonnes of preferential allocation (28N) rights associated with SKI 2 and the increase in the TACC for this stock will result in a discharge of these rights.

Sea perch

SPE 9 – Auckland West fishery

I have decided to increase the TAC, allowance for all other mortality caused by fishing, and the TACC for the SPE 9 fishery as follows:

Option	TAC (t)	TACC (t)	Allowances (t)		
			Customary	Recreational	Other mortality
Old	8	6	1	1	0
New	13 ↑	10 ↑	1	1	1 ↑

The best available information on the status of SPE 9 comes from reported commercial landings, which have generally increased since 2010-11 and have consistently exceeded the TACC in the last five years. I recognise the limitations in using catch as an indicator for the status of the stock, but the best available information must be balanced with the level of risk.

The risks to the stock are reduced by the wide distribution of this species, large areas closed to trawling, and the lack of a target fishery for SPE 9. Considering this information, I have decided to implement a small increase to the TAC and TACC of SPE 9 that will allow for increased utilisation, while acknowledging the risks associated with lower levels of available information.

I have decided to increase the other mortality associated with fishing allowance in line with the TAC and TACC to better account for the uncertainty of this source of mortality for SPE 9.

Pōrae

POR 1 – Auckland East fishery

I have decided to increase the TAC, allowance for all other mortality caused by fishing, and the TACC for the POR 1 fishery as follows:

Option	TAC (t)	TACC (t)	Allowances (t)		
			Customary	Recreational	Other mortality
Old	75	62	3	6	4
New	85 ↑	68 ↑	3	6	8 ↑

The best available information for POR 1 comes from reported commercial landings, which support an increase to the TAC. I have decided to take a cautious approach and implement a small increase that allows for increased utilisation while recognising risks associated with low levels of information available.

This approach balances the submissions received during consultation, many of which noted a need for caution, given the lack of knowledge for the stock. I note that consultation on this stock showed a general lack of support for increasing the recreational allowance of POR 1. As such, I have decided to retain the recreational allowance at 6 tonnes.

In line with previous decisions for stocks which are largely caught in trawl fisheries, I have decided to increase the other mortality allowance of POR 1 to better account for the uncertainty of this source of mortality on the stock.

Blue cod

BCO 5 – Southland fishery

I have decided to decrease the TAC, allowance for recreational fishing, and TACC for the BCO 5 fishery, and increase the allowance for customary fishing as follows:

Option	TAC (t)	TACC (t)	Allowances (t)		
			Customary	Recreational	Other mortality
Old	1,452	1,239	2	191	20
New	925 ↓	800 ↓	20 ↑	85 ↓	20

Given the iconic status and importance of blue cod for all sectors in southern New Zealand, sustainable management of this fishery is of utmost importance.

The most recent stock assessment for blue cod, undertaken in 2019-20, concluded that BCO 5 was unlikely (<40%) to be at or above the management target of 40% B_0 and that overfishing was likely (>60%) to be occurring. While the stock is very unlikely to currently be below the soft or hard limit, a biomass projection derived from the stock assessment concluded that if catch continues at the current level (which is lower than the current TACC) biomass is likely to continue declining in future. This trend mirrored ongoing concerns from many fishers about the current state of the fishery.

Some steps have already been taken to address these concerns through the National Blue Cod Strategy (gear changes and changes to recreational fishing

rules). However, most submitters agreed with Fisheries New Zealand that a reduction to the TAC is needed to address sustainability concerns.

I have decided to take an intermediate approach between the two TAC reductions that were consulted on, by decreasing the TAC from 1,452 to 925 tonnes. This decision places weight on the uncertainty associated with the biomass projections and the need to reduce the sustainability risk. Within this TAC I have decided to reduce the recreational allowance and increase the customary allowance to reflect updated recreational catch estimates and customary catch reports.

Rig

SPO 2 – Central East fishery

I have decided to increase the TAC, allowance for all other mortality caused by fishing, and the TACC for the SPO 2 fishery as follows:

Option	TAC (t)	TACC (t)	Allowances (t)		
			Customary	Recreational	Other mortality
Old	130	108	5	10	7
New	146 ↑	119 ↑	5	10	12 ↑

The most recent CPUE analysis (2019) of SPO 2 shows that the relative abundance of rig has been above the management target and is estimated to have been on an increasing trend since 2012. This, coupled with relative fishing pressure being low, suggests that there exists potential for greater utilisation of rig in SPO 2.

I consider that a modest increase to the TAC and TACC to be appropriate. I also note that this option was supported by most submitters and should provide utilisation benefits without significantly impacting on the sustainability of the stock.

As with other inshore trawl caught fishstocks being reviewed this year, I have decided to increase the other mortality allowance of SPO 2 to better account for the uncertainty in this mortality.

Stargazer

STA 7 – South West Coast (Challenger) fishery

I have decided to increase the TAC, allowance for all other mortality caused by fishing, and the TACC for the STA 7 fishery as follows:

Option	TAC (t)	TACC (t)	Allowances (t)		
			Customary	Recreational	Other mortality
Old	1,181	1,122	1	4	54
New	1,271 ↑	1,208 ↑	1	4	58 ↑

The biomass of STA 7 has remained stable following two moderate increases to the TAC over the last decade and is estimated to be at or above the management target. West Coast fishers have also recently reported that abundance of stargazer is at a 25 year high with increased catches, particularly in shallower waters.

Modest increases to the TAC and TACC of STA 7 will provide utilisation benefits without impacting on the sustainability of the fishery.

I have set the other mortality allowance for STA 7 at 58 tonnes (equating to approximately 5% of the TACC) which acknowledges the feedback received during consultation that stargazer are robust compared with other inshore trawl caught stocks.

Snapper and Red gurnard

SNA 7 – South West Coast (Challenger) fishery

I have decided to increase the TAC and TACC for the SNA 7 fishery as follows:

Option	TAC (t)	TACC (t)	Allowances (t)		
			Customary	Recreational	Other mortality
Old	545	250	20	250	25
New	645 ↑	350 ↑	20	250	25

Snapper is an iconic species for the Nelson/Tasman region. A recent stock assessment and biomass projections suggest SNA 7 is at or above the management target and that there is a potential for more snapper to be taken, while still maintaining the stock at or above the target.

Fisheries New Zealand invited all sectors to participate and contribute to the development of management options for SNA 7 through a series of workshops as part of this year's review. A range of views and preferences were received from workshop participants as well as submitters during consultation. Most participants and submitters expressed support for an increase to the TAC and TACC of SNA 7 in response to the most recent stock assessment and biomass projections.

The TAC and TACC increases I have decided for SNA 7 will provide for increased utilisation. This stock will continue to be closely monitored through independent trawl surveys (I note that one is scheduled for next year) and regular stock assessments to ensure management settings are appropriate.

I have decided to retain the current customary and recreational allowances, as best available information suggests these are within a reasonable range of catch estimates for these sectors. I have also decided to retain the current other mortality allowance.

I note that strong concerns have been raised by Te Waka a Maui iwi forum and others about the uncertainty associated with estimating recreational catch in this

fishery, particularly in the context of rapidly increasing snapper abundance. A number of submitters expressed support for voluntary electronic reporting of recreational catch. I have asked Fisheries New Zealand to investigate options to more accurately and frequently estimate recreational catch for SNA 7 and other fisheries in the Top of the South. I am encouraged to see that workshop participants are interested in continuing to work together to explore innovative management opportunities for a rebuilt fishery and this will provide a good basis to discuss such matters as improving recreational catch reporting.

GUR 7 – South West Coast (Challenger) fishery

I have decided to increase the TAC, allowance for all other mortality caused by fishing and the TACC for the GUR 7 fishery as follows:

Option	TAC (t)	TACC (t)	Allowances (t)		
			Customary	Recreational	Other mortality
Old	1,176	1,073	15	38	50
New	1,294.65 ↑	1,180 ↑	15	38	61.65 ↑

Assessment indicates that the biomass of GUR 7 is very likely to be at or above the management target, and trawl survey indices for GUR 7 over the past five years indicate that the stock is experiencing consecutive years of good recruitment. Interdependencies between snapper and red gurnard in the Top of the South mixed trawl fishery also suggest that more red gurnard will be taken with an increase in snapper TAC.

I have decided to apply a modest increase to both the TAC and TACC of GUR 7 to allow for increased utilisation of this stock.

I have retained the current customary and recreational allowances as best available information suggests these are within a reasonable range of catch estimates for these sectors. I have increased the other mortality allowance in line with the increase in TACC and it equates to around 5% of TACC.

Deepwater king clam (geoduck)

PZL 7 – South West Coast (Challenger) fishery

I have decided to increase the TAC, allowance for all other mortality caused by fishing, customary allowance, recreational allowance and the TACC for the PZL 7 fishery as follows:

Option	TAC (t)	TACC (t)	Allowances (t)		
			Customary	Recreational	Other mortality
Old	30	23.1	0	0	6.7
New	114 ↑	80 ↑	1	1	32 ↑

A recent scientific survey estimated there to be 4331 tonnes of PZL 7 in an area of Golden Bay. Geoduck are known to be found throughout the wider management

area, this suggests that the overall biomass in PZL 7 is likely to be substantial and there is potential for further development in this fishery.

My decision to increase the TAC for PZL 7 takes into account that this is a developing fishery and the large biomass of geoduck, but also acknowledges that the long term effects of fishing on the stock and surrounding benthic environment are uncertain. For these reasons the additional catch provided for by my decision is to be taken only from within the survey area within Golden Bay, and ongoing surveys and monitoring of this area will be required.

I have decided that a significant allowance for other mortality from fishing is appropriate for this fishery, given there is considerable uncertainty around fishing mortality impacts. On this basis I have set the allowance at 32 tonnes, equivalent to 40% of the new TACC.

I have increased both customary and recreational allowances of PZL 7 to one tonne because best available information indicates that there is a small level of customary and recreational take of this stock.

ECSI multi-species

MOK 3 – South East Coast fishery

I have decided to increase the TAC, allowances for recreational catch and all other mortality caused by fishing, and the TACC for the MOK 3 fishery as follows:

Option	TAC (t)	TACC (t)	Allowances (t)		
			Customary	Recreational	Other mortality
Old	197	160	1	20	16
New	217 ↑	176 ↑	1	22 ↑	18 ↑

Since the mid-2000s there has been a general increase in abundance of the migrating adult component of the MOK 3 stock and landings have exceeded the TACC three years out of the last four. In the most recent assessment of blue moki in 2017, MOK 3 was considered very likely to be at or below its fishing mortality target, with overfishing very unlikely to be occurring.

This information suggests that larger catches of MOK 3 could be sustainably taken, however, a cautious approach is required given that blue moki have low productivity and biological characteristics that make them more vulnerable to effects of overfishing.

My decision to apply a small increase to the TAC and TACC of MOK 3 best reflects the available information. A two tonne increase to the other mortality allowance will keep this allowance proportionally in line with these changes. I have also increased the recreational allowance of MOK 3 by two tonnes to account for the recently higher

recreational catch of this stock.

LEA 3 – South East Coast fishery

I have decided to increase the TAC, allowance for all other mortality caused by fishing, and the TACC for the LEA 3 fishery as follows:

Option	TAC (t)	TACC (t)	Allowances (t)		
			Customary	Recreational	Other mortality
Old	140	130	1	2	7
New	164 ↑	140 ↑	1	2	21 ↑

The TACC of LEA 3 was last increased in 2013, and for five out of the last six years since then the TACC has been fully caught or overcaught. The most recent trawl survey shows that biomass indices for LEA 3 in some depth strata have increased since 2008, reflecting a likely increase in stock abundance.

This suggests that larger catches could be sustainably taken, but a cautious approach is required given uncertainty around the stock and its overall status. I have therefore decided to apply small increases to both the TAC and TACC.

There is some anecdotal information suggesting that leatherjacket is sometimes (illegally) returned to the sea due to the species being unmarketable or unwanted at certain times. Therefore, I have decided to apply a greater increase to the other mortality allowance for LEA 3 compared with other inshore trawl stocks (to around 15% of the TACC, rather than 10%) to better account for this.

GUR 3 – South East Coast fishery

I have decided to increase the TAC and TACC, and decrease the allowance for all other mortality caused by fishing for the GUR 3 fishery as follows:

Option	TAC (t)	TACC (t)	Allowances (t)		
			Customary	Recreational	Other mortality
Old	1,593	1,320	3	6	264
New	1,614 ↑	1,500 ↑	3	6	105 ↓

The TACC of GUR 3 has been consistently over caught for the past 12 years, despite being largely a bycatch of other target fisheries. Best available scientific information suggests GUR 3 is above the target biomass and could sustain a modest increase in utilisation.

I consider that a small increase to the TACC of GUR 3 best reflects this information as well as uncertainty in recent estimates for the stock biomass.

I note that there have been some changes in commercial fishing practices in the ECSI fishery that are likely to have contributed to a reduction in the level of

unintended fishing mortality for gurnard, including mesh sizes and changes in market preferences through increased domestic demand. I have decided to decrease the other mortality allowance (to a level that equates to around 7% of the TACC) to reflect these changes.

SPO 3 – South East Coast fishery

I have decided to increase the TAC, allowance for all other mortality caused by fishing, and TACC for the SPO 3 fishery, but decrease the allowance for recreational fishing as follows:

Option	TAC (t)	TACC (t)	Allowances (t)		
			Customary	Recreational	Other mortality
Old	710	600	20	60	30
New	766 ↑	660 ↑	20	20 ↓	66 ↑

Best available scientific information indicates that SPO 3 is at or above the management target and there appears to have been good recruitment in recent years. Commercial catch of SPO 3 has gradually increased over the past decade and has exceeded the TACC in the last two years. However, there has been increased targeting of rig in recent years, which has likely contributed to recently increased catches.

I have taken a cautious approach for SPO 3 that takes into account the best available information for the stock. A 10% increase in the TACC of SPO 3 takes into account that the stock could be near its target and overfishing is about as likely as not to be occurring.

I have decreased the recreational allowance of SPO 3 in line with information from the 2017/18 National Panel survey, which indicated that recreational catch of the stock is substantially lower than previously estimated and allowed for.

As with many other inshore trawl-caught stocks, I have decided to increase the other mortality allowance of SPO 3 to an amount that better reflects the uncertainty in this mortality.

I note that there is one tonne of preferential allocation (28N) rights associated with SPO 3 and the increase in TACC for this stock will result in a discharge of these rights.

Kingfish

KIN 2 – Central East fishery

I have decided to increase the TAC, the allowance for recreational fishing, and the TACC for the KIN 2 fishery, but decrease the allowance for all other mortality caused by fishing as follows:

Option	TAC (t)	TACC (t)	Allowances (t)		
			Customary	Recreational	Other mortality
Old	170	63	18	65	24
New	185 ↑	69 ↑	18	79 ↑	19 ↓

At present it remains unknown whether the biomass of KIN 2 is at, above, or below a level that will support the maximum sustainable yield (B_{MSY}). However, best available information indicates that fishing mortality is below the target for KIN 2, there has been high average recruitment of young kingfish since 2013, and the stock abundance is expected to increase in the short-term.

As the abundance of KIN 2 is expected to increase, I consider there to be no significant sustainability risk associated with a small increase to the TAC and TACC to better reflect actual catch.

To ensure that New Zealand continues to support world-class recreational kingfish fisheries, I consider it appropriate to manage commercial catches to unavoidable bycatch levels only. Therefore, I have set the TACC of KIN 2 around the level of current landings to retain the incentive for commercial fishers to avoid kingfish where possible and return all live kingfish to the sea (subject to Schedule 6 conditions and reporting requirements).

Similarly, a small increase to the recreational allowance will ensure that future recreational catches of KIN 2 are more appropriately accounted for given recent harvest estimates.

I have set the other sources of mortality caused by fishing lower at 19 tonnes, which equates to slightly above 10% of the TACC and recreational allowance combined. I consider that this more accurately reflects the uncertainty in this mortality for the KIN 2 fishery.

KIN 3 – South East Coast fishery

I have decided to increase the TAC, allowance for all other mortality caused by fishing, and the TACC for the KIN 3 fishery as follows:

Option	TAC (t)	TACC (t)	Allowances (t)		
			Customary	Recreational	Other mortality
Old	17	6	4	6	1
New	23 ↑	11 ↑	4	6	2 ↑

Best available information for KIN 3 comes from reported commercial landings and suggests there has been an increase in the abundance of kingfish in KIN 3, which appears to be the result of increased population size in northern regions and increasing water temperature encouraging range expansion. It is likely that this observed increase in abundance will continue to be reflected in increased kingfish bycatch by commercial fishers.

I consider a higher TAC and TACC for KIN 3 is more appropriate given the increased abundance and will benefit fishers who were unnecessarily constrained by the previous TACC.

I have set the other sources of mortality caused by fishing higher at 2 tonnes, which equates to 10% of the TACC and recreational allowance combined. I consider that this more accurately accounts for post-release mortality of both recreationally and commercially caught kingfish in KIN 3.

KIN 7 & 8 – West Coast fisheries

I have decided to increase the TACs, allowances for customary, recreational and all other mortality caused by fishing, and the TACCs for KIN 7 and KIN 8 as follows:

Option		TAC (t)	TACC (t)	Allowances (t)		
				Customary	Recreational	Other mortality
KIN 7	Old	41	15	2	20	4
	New	98 ↑	44 ↑	6 ↑	40 ↑	8 ↑
KIN 8	Old	92	45	9	31	7
	New	167 ↑	80 ↑	19 ↑	55 ↑	13 ↑

Kingfish in KIN 7 & 8 are considered to form part of the same biological stock. Recent CPUE data suggests that the abundance of kingfish has increased considerably over recent years. Such an increase in abundance has resulted in both recreational and commercial catches greatly exceeding the current management settings.

As the biomass of KIN 7 & 8 is expected to increase further at current catch levels, I consider there to be no sustainability risk associated with increasing the TAC, TACC and allowances to better reflect actual catch.

For KIN 7, I have decided to increase the recreational allowance to above the best estimate of recreational take to provide for the continuation of the increasing trend in recreational catches. For KIN 8, I have decided to set the recreational allowance at the best estimate of recreational take.

To ensure that New Zealand continues to support world-class recreational kingfish fisheries, I consider it appropriate to manage commercial catches to unavoidable bycatch levels only. Therefore, I have set the TACCs of KIN 7 & 8 below the level of current landings to retain the incentive for commercial fishers to avoid kingfish where possible and return all live kingfish to the sea (subject to Schedule 6 conditions and reporting requirements). I have also decided to decrease the deemed value rates of KIN 7 by 50% to better reflect the landed price received by fishers.

For both stocks, I have decided to increase the customary Māori allowance to account for increased amounts of kingfish taken under a pātaka arrangement to provide for customary use.

I have increased the other sources of mortality caused by fishing to 8 tonnes for KIN 7 and 13 tonnes for KIN 8, which equates to 10% of the TACC and recreational allowance combined for each stock. I consider that this more accurately accounts for post-release mortality of both recreationally and commercially caught kingfish.

Deemed value rates

I have decided to adjust the deemed value rates of twelve stocks. These adjustments are summarised in Table 1 below.

My decisions are consistent with the Deemed Value Guidelines and aim to ensure that fishers are incentivised to balance catch against Annual Catch Entitlement, whilst not incentivising misreporting.

Table 1: Old and new deemed value rates ($/kg) for selected stocks from 1 October 2020

		Current				Proposed			
Species	Stock	Interim $/kg	Annual $/kg	Annual at maximum excess $/kg	Differential	Interim $/kg	Annual $/kg	Annual at maximum excess $/kg	Differential
Arrow squid	**SQU 1J** **SQU 1T** **SQU 6T**	0.79	0.88	1.76	Standard	0.79	0.88	1.76	Special
Bluenose	**BNS 3**	3.60	4.00	10.00	Special	2.70	3.00	7.50	Special
	BNS 3[1]	1.26	1.40	11.00	Special	1.26	1.40	2.80	Special
Gemfish	**SKI 1**	1.35	1.50	3.00	Standard	1.58	1.75	3.50	Standard
	SKI 2	1.35	1.50	5.40	Special	1.35	1.50	3.00	Standard
	SKI 7	0.65	0.72	1.44	Standard	0.44	0.49	1.44	Special
Pilchard	**PIL 7**	0.41	0.45	0.45	Not applied	0.18	0.20	0.20	Not applied
	PIL 8	0.41	0.45	0.45		0.18	0.20	0.20	
Redbait	**RBT 3**	0.45	0.50	1.00	Standard	0.45	0.50	0.70	Special
Trevally	**TRE 2**	1.13	1.25	5.00	Special	1.13	1.25	2.50	Standard
Kingfish	**KIN 7**	8.00	8.90	17.80	Standard	4.00	4.45	8.90	Standard

[1] Different deemed value rates applicable to fish landed to a licenced fish receiver located on the Chatham Islands.