Tarakihi (TAR 1, 2, 3, 7, East Coast South Island and East Coast North Island)



A new stock assessment has provided estimates of the biomass of east coast tarakihi for the first time. This is the result of a number of years of work including recent catch sampling projects and detailed analysis of all the available data. The science proposes that tarakihi on the east coast of the North and South Island are part of the same biological stock and supports reviewing the management measures for multiple quota management areas (TAR 1, 2, 3 & 7) at the same time. The new stock assessment information also indicates that the east coast tarakihi stock is currently depleted and well below target. The information indicates that the stock has been below optimal levels since the 1970s, below the soft limit of 20% of the unfished biomass (*B*₀) since the early 2000s, and is currently estimated at 17% *B*₀. It is Fisheries New Zealand policy to implement a time-bound rebuilding plan if a fishery drops below 20% *B*₀.

Studies on the age and movement of tarakihi suggest that there are two main spawning areas for tarakihi, in the Canterbury Bight and off the East Cape of the North Island, from where juvenile tarakihi move progressively northwards up the eastern coasts on the North and South Islands. This results in larger more mature fish being observed in Hawke Bay, the Bay of Plenty, the Hauraki Gulf and east Northland, which is where commercial fishers principally target their fishing activities to catch tarakihi. Commercial fishers, particularly in the central and southern parts of the stock, are having trouble reconciling the scientific results with what they have recently seen in the fishery, including an increase in catch rates in some areas. However, the science suggests that because the species is long-lived, fishers that are fishing in areas where there are more young fish may not be seeing a full representation of the state of the wider stock.

Fisheries New Zealand proposes three options to rebuild the tarakihi stock in TAR 1, 2, 3 & 7, all of which are designed to rebuild the stock to a target of 40% *B*₀. The options differ in the time they take to rebuild the stock. The current settings are not considered an option because if current catch levels are maintained, the stock will not recover and may continue to decline. Options 1 and 3 are designed to rebuild the tarakihi stock to 40% *B*₀ at varying rates (10 and 20 years respectively) by implementing a single one-off reduction in the commercial catch in 2018/19. Option 2 provides an alternative way of achieving the rebuild over 10 years by implementing a 3-year phased reduction in commercial catch. Option 3 proposes a lower rate of rebuilding as a means of reducing the social and economic impacts of TACC reductions, and acknowledges the importance of ongoing access to tarakihi as part of the inshore mixed-species fishery as the stock rebuilds to the target.

The rebuilding strategy for TAR 1, 2, 3 & 7 includes updating of the stock assessment within the coming 3-4 years and every 5 years thereafter, with new catch at age data, commercial catch and CPUE (catch per unit effort) indices, and any other new relevant data. The rebuilding strategy will be reviewed over the agreed rebuilding period based on the outcomes of updated or new stock assessments.

The reduced catch limits in TAR 1 and TAR 7 should be applied to the specific areas within those QMAs (TAR 1 East and TAR 7 Cook Strait) to provide certainty that the reduction in fishing pressure will occur in the specific areas of the QMA where it is needed. The proposed area-based catch constraints under each of the options are shown in the table on the right below. Fisheries New Zealand seeks input and views from tangata whenua and stakeholders on practical measures to spread catch appropriately.

The recreational allowances proposed are based on the most recent estimates of recreational harvest. It is proposed to adjust the recreational allowances to ensure that they reflect the best estimates of harvest at current levels of TAR abundance. No change is proposed to customary allowances as the best available information suggests that the catch is within the current allowance. For TAR 7, the customary allowance is being set for the first time to reflect current levels of customary catch. Fisheries New Zealand proposes that the 10% for unreported commercial catch used in the stock assessment is added to the allowance for other sources of mortality caused by fishing to each of the options (currently 1.5%, 2%, and 5% of the TACC for TAR 1, 2, and 3 respectively).

Fisheries New Zealand has received a joint proposal from Fisheries Inshore New Zealand (FINZ) and Southern Inshore Fisheries Management Company Ltd that sets out industry's proposed Management Strategy for tarakihi. Industry's proposal can be found as an appendix to the Fisheries New Zealand proposals at the Fisheries New Zealand consultation webpage at: <u>http://www.fisheries.govt.nz/news-and-resources/consultations/?opened=1&cat=8</u>. Fisheries New Zealand also seeks the views of tangata whenua and stakeholders on the industry proposal.

TAR10		Option	Total Allowable Catch	Total Allowable Commercial Catch	Allowances		
TAR1 TAR8 TAR2 R7	Stock				Customary Māori	Recreational	All other mortality to the stock caused by fishing
		Current settings	2029	1447	73	487	22
	TAR 1	Option 1	1221 🗸	983 🗸 (32%)	73	110 🗸 (77%)	55个
		Option 2 (year 1)	1466 🗸	1205 🕹 (17%)	73	110 🕹 (77%)	78个
	(combined)	(year 2)	1307 🗸	1061 🕹 (27%)	73	110 🗸 (77%)	63个
		(year 3)	1181 🗸	946 🗸 (35%)	73	110 🗸 (77%)	52个
	\	Option 3	1384 🗸	1131 🔶 (22%)	73	110 🗸 (77%)	70个
TAR3		Current settings	2082	1796	100	150	36
	1	Option 1	1017 🗸	735 🕹 (59%)	100	73 🕹 (51%)	109个
	TAD 2	Option 2 (year 1)	1556 🗸	1225 🕹 (32%)	100	73 🕹 (51%)	158个
	IAR Z	(year 2)	1206 🗸	906 🗸 (50%)	100	73 🔶 (51%)	127 🛧
		(year 3)	926 🗸	652 🗸 (64%)	100	73 🔶 (51%)	101 🛧
		Option 3	1376 🗸	1061 🕹 (41%)	100	73 🕹 (51%)	106个
		Current settings	1503	1403	15	15	70
		Option 1	725 🗸	579 🕹 (59%)	15	3 🔶 (80%)	128 🛧
	TAD 2	Option 2 (year 1)	1150 🗸	965 🕹 (31%)	15	3 🔶 (80%)	167 🛧
	TAR 3	(year 2)	873 🗸	714 🗸 (49%)	15	3 🔶 (80%)	141 🛧
		(year 3)	653 🗸	514 🕹 (63%)	15	3 🖊 (80%)	121 🛧
		Option 3	998 🗸	837 🕹 (40%)	15	3 🔶 (80%)	143 🛧
		Current settings	1088	1088	-	•	•
		Option 1	986 🗸	952 🗸 (13%)	1 个	23 🛧	10 🛧
	TAR 7	Option 2 (year 1)	1067 🗸	1026 🕹 (6%)	1 🛧	23 🛧	17 🛧
	(combined)	(year 2)	1014 🗸	978 🕹 (10%)	1 🛧	23 🛧	12 🛧
		(year 3)	973 🗸	940 🗸 (14%)	1 🛧	23 🛧	9 🛧
		Option 3	1041 🗸	1002 🗸 (8%)	1 🛧	23 🛧	15 🛧

TAR5

Table 1: Proposed management settings in tonnes for TAR 1, 2, 3, & 7 from 1 October 2018, with the percentage change relative to the current settings in brackets.

Area-based catch					
constraint					
	East				
	sub-				
	area				
	TACC				
	Cook				
	Strait				
TAR 7	sub-				
	area				
	TACC				

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1	Year 1	Year 2	Year 3	Option 3	
333	555	410	295.7	481	
983	1205	1060	946	1131	
111	185	137	99	161	
952	1026	978	940	1002	