

Southern bluefin tuna (STN 1)

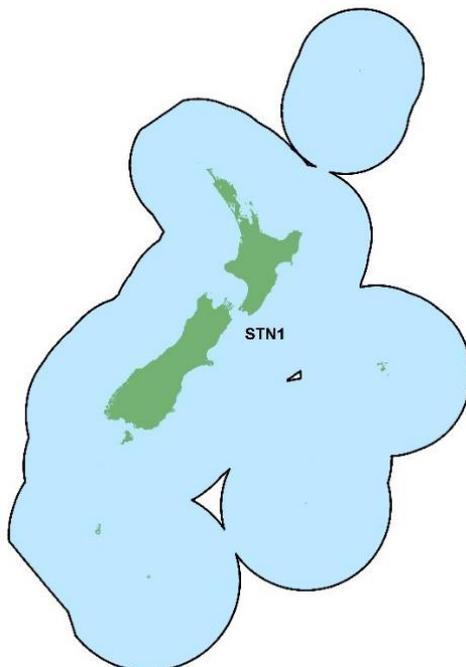


Figure 1: The Quota Management Area (QMA) for southern bluefin tuna (STN 1).

1. What is proposed?

74. The purpose of this discussion document is to seek feedback from tangata whenua and stakeholders on the future management of the southern bluefin tuna fishery in New Zealand. Fisheries New Zealand is asking tangata whenua and stakeholders to consider both changes to the Total Allowable Catch (TAC) and its allocations along with the use of management constraints in the recreational fishery.
75. Fisheries New Zealand is seeking feedback on allocation options that best reflect the decisions of the Commission for the Conservation of Southern Bluefin Tuna (CCSBT)¹ and the domestic interests of New Zealand.
76. Three options are evaluated as part of this discussion document (see table 1). All options considered include an 88 tonne increase in the TAC, which reflects the increase in New Zealand's national allocation that was determined by the CCSBT at the end of 2017.

¹ The Commission for the Conservation of Southern Bluefin Tuna (CCSBT) is an intergovernmental organisation responsible for the management of southern bluefin tuna throughout its distribution. The CCSBT's objective is to ensure, through appropriate management, the conservation and optimum utilisation of southern bluefin tuna. New Zealand is a founding member, and other members include; Australia, Japan, the European Union, the Fishing Entity of Taiwan, Indonesia, the Republic of Korea and South Africa.

Table 1: Proposed management settings in tonnes for STN 1 from 1 October 2018, with the percentage change relative to the current settings in brackets.

Option	Total Allowable Catch (TAC)	Total Allowable Commercial Catch (TACC)	Allowances		
			Customary Māori	Recreational	All other mortality to the stock caused by fishing
Current settings (as at 1 October 2017)	1000	971	1	8	20
Option 1 (2017/18 in-season settings)	1088 ↑ (9%)	1047 ↑ (8%)	1	20 ↑ (250%)	20
Option 2	1088 ↑ (9%)	1059 ↑ (9%)	1	8	20
Option 3	1088 ↑ (9%)	1027 ↑ (6%)	1	40 ↑ (500%)	20

77. Where the three options differ, is in their treatment of the recreational allowance. Option 1 mirrors the most recent allowance set as part of the 2017-18 in-season review with a 20 tonne recreational allowance. Option 2 has a recreational allowance of 8 tonnes, which is the recreational allowance that applied prior to the most recent in-season change. Finally, Option 3 proposes a 40 tonne recreational allowance which would reflect an expectation of significant growth in this sector.
78. In addition to the TAC changes being considered for 1 October 2018, Fisheries New Zealand is also seeking views from tangata whenua and stakeholders on future management measures to apply to the recreational sector in this fishery. There are currently no constraints applied to the recreational catch of this species, however, the recent increase in this catch has created a need for more stringent management going forward.
79. Based on earlier feedback from stakeholders, Fisheries New Zealand is proposing a phased implementation of recreational management measures. This approach reflects the uncertainty surrounding future levels of recreational catch and effort in this fishery. The recreational catch levels estimated in 2017 suggested a significant increase from previously estimated catch levels and it is difficult to determine whether these levels will be sustained (or grow even further) in the years to come. A phased implementation will allow Fisheries New Zealand to better understand the nature of this recreational fishery and apply measures suited to this dynamic situation.
80. The southern bluefin tuna recreational fishery is likely to reach its annual peak in June and July and it is not possible for Fisheries New Zealand to bring about regulatory changes that would affect this immediate season using normal regulatory processes. Discussions with recreational bodies have indicated that a number of voluntary measures are being trialled in the absence of regulation. Fisheries New Zealand supports these initiatives and is encouraged by the efforts of the recreational sector to demonstrate responsibility in its use of this rebuilding stock.

81. Prior to the start of the 2019 recreational southern bluefin tuna fishery, Fisheries New Zealand will be proposing the introduction of new constraints for the recreational sector. A number of options have already been discussed with Te Ohu Kaimoana and representatives from the recreational and commercial sectors, with many supporting the use of personal bag and/or boat limits for southern bluefin tuna. Others also indicated support for these measures as part of the 2017-18 in-season TAC review consultation process, which took place in January.
82. Fisheries New Zealand is now seeking further feedback on the use of boat and bag limits in this fishery. In particular, the use of a:
 - a) One southern bluefin tuna per person daily bag limit;
 - b) Two southern bluefin tuna per person daily bag limit;
 - c) Three southern bluefin tuna per boat daily limit; or
 - d) A combination of boat and bag limits.
83. The success of the current voluntary measures and potential future regulatory measures will determine whether more stringent measures are necessary in order to meet our international commitments towards this stock.

2. Why the need for change?

84. Southern bluefin tuna is a highly valued species currently subject to a regional rebuilding plan under the CCSBT. A recent increase in New Zealand's national allocation presents an opportunity to increase utilisation within the confines of the rebuilding strategy.
85. The CCSBT is the regional fisheries management organisation responsible for the management of southern bluefin tuna. New Zealand is a founding member of the CCSBT and is within the migratory range of this highly migratory species. The CCSBT sets the global total allowable catch (GTAC) for southern bluefin tuna in three year blocks, with the GTAC allocated to individual member countries.
86. In 2011, the CCSBT agreed that a science-based management procedure would be used to guide the setting of the GTAC for southern bluefin tuna. The management procedure is designed to recommend an appropriate global catch limit that will allow the spawning stock biomass to achieve the interim rebuilding target of 20% of unfished spawning stock biomass by 2035 (with 70% certainty).
87. For the three year block from 2018 to 2020, the CCSBT raised the GTAC by 3,000 tonnes to 17,647 tonnes. As a result of this, New Zealand's national allocation has increased by 88 tonnes to 1,088 tonnes per annum. Evaluations of the management procedure indicated that, even with such an increase, the target biomass level will be reached by 2035.
88. The GTAC is allocated to CCSBT members based on an agreed formula. Starting in 2018, members are required to account for all fishing mortality of southern bluefin tuna (including commercial fishing, customary fishing, recreational fishing, and other fishing-

related mortality) from within their national allocation. An unconstrained recreational sector would increase the risk of New Zealand being in breach of this obligation.

Table 1: Global Total Allowable Catch and New Zealand country allocation (in tonnes)

	2010	2011	2012	2013	2014	2015-2017	2018-2020
GTAC	9,449	9,449	10,449	10,949	12,449	14,647	17,647
New Zealand Allocation	570	570	800	830	910	1,000	1,088

89. In New Zealand, southern bluefin tuna is managed within the Quota Management System with a 1 October to 30 September fishing year. The Minister approved the use of an in-season increase in the 2017-18 fishing year to allow New Zealand to benefit in the first fishing year of the three year allocation block. The changes proposed as part of the 1 October 2018 sustainability round are required to adjust the final two years of the three year quota block.

3. Why are these options proposed?

3.1 SETTING AND VARYING THE TAC

90. As southern bluefin tuna is a highly migratory species, migrating over considerable distances and spending only part of its time in New Zealand waters, it is not possible to calculate the maximum sustainable yield (MSY) for the portion of the stock found within New Zealand fisheries waters. The national allocation for New Zealand is determined as part of an international agreement (section 14 (8)(b)(ii) of the Fisheries Act 1996 (the Act)). Section 14 of the Act provides for alternative TACs to be set for stocks specified in Schedule 3 (which includes southern bluefin tuna), if the Minister considers it appropriate to achieve the purpose of the Act.
91. A Harvest Strategy Standard was adopted for New Zealand fisheries in October 2008. The harvest strategy standard outlines classifications of stocks based on their status in relation to target and limit reference points. For highly migratory species (including southern bluefin tuna), the standard outlines that Fisheries New Zealand will generally rely on international organisations in which New Zealand participates to determine the status of the species in question – in this instance the CCSBT. Fisheries New Zealand is satisfied that the advice from the CCSBT’s Scientific Committee (including an independent panel) represents the best available information to inform management decisions.

3.2 SETTING ALLOWANCES AND THE TACC

92. Having set the TAC, the Minister must make allowances for Māori customary non-commercial fishing interests, recreational fishing interests, and all other mortality to the stock caused by fishing (s 20 & 21).

Allowance for Māori customary fishing

93. The customary allowance provides for catches of southern bluefin tuna that are governed by customary fishing regulations. There is no evidence to date that catches of southern bluefin tuna are made in this way. Most, if not all, non-commercial catches are taken subject to general provisions for amateur fishing (rather than under the customary fishing regulations). Based on these factors, Fisheries New Zealand is not proposing a review of the current customary fishing allowance within the options presented in this paper.
94. Fisheries New Zealand recognises that some of the constraints proposed to the recreational management of southern bluefin tuna may create an incentive to increase the use of customary fishing provisions and would welcome feedback on this potential shift in effort.

Allowance for recreational fishing

95. Prior to 2007, recreational catches of southern bluefin tuna are likely to have been rare because of the locations and seasons during which southern bluefin tuna are found in New Zealand waters (generally winter months and areas with little recreational fishing). However, recreational catches have been recorded in the months from February to September, and in the last few years, southern bluefin tuna is becoming a more targeted species for recreational fishers on both coasts.
96. Compulsory reporting for recreational charter vessel operators was introduced in November 2010 and only minimal amounts were reported prior to 2017. In 2015, 10 fish were reported caught, with an estimated total weight of 1050 kilograms. Only five of the ten fish caught were retained. In 2016, 37 fish were caught, with an estimated total weight of 1127 kilograms and 36 of them were retained.
97. In 2017, recreational catch was estimated at much higher levels than those previously seen in this fishery (see Figure 2). The increase in recreational effort directly targeting southern bluefin was likely due, in part, to the relative proximity of the fish to shore. The best available estimate of recreational catch suggested 24.3 tonnes in 2017. This estimate was primarily derived from North Island sport fishing club records which reported 266 landed southern bluefin tuna along with 13 releases. The overall estimate includes:
 - a. 19.4 tonnes from North Island club records;
 - b. 1.9 tonnes attributed to South Island amateur charter vessel catches, and
 - c. 3 tonnes estimated from unrecorded catches from the Bay of Plenty/East Cape

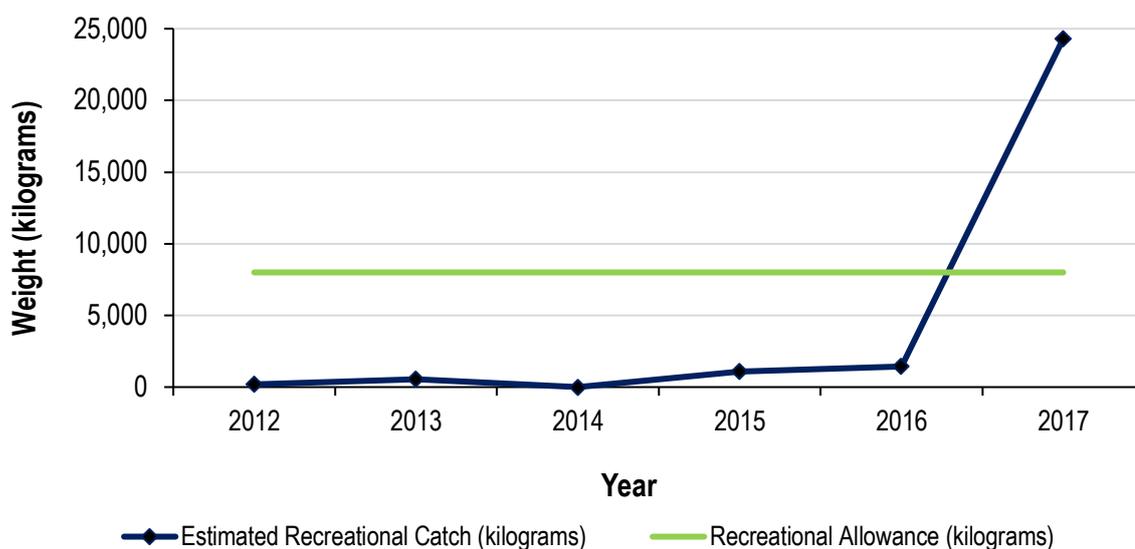


Figure 2: Estimated recreational catch vs. recreational allowance for STN 1 from 2012 to 2017.

98. This paper includes proposals to increase the recreational allowance under Options 1 and 3. Option 1 provides a 20 tonne recreational allowance which mirrors the most recent in-season decision from the Minister of Fisheries. Option 3 represents a further increase in the recreational allowance, raising it to 40 tonnes, and is reflective of the views expressed by a number of submitters as part of the in-season review consultation and other meetings held with the recreational sector. The Minister of Fisheries may ultimately choose an allowance not specifically defined in this paper.
99. There is considerable uncertainty about the likely level of recreational southern bluefin tuna catch in the 2018 season and beyond. Fisheries New Zealand has approved additional research aimed specifically at better understanding the level of recreational southern bluefin tuna catch in 2018, with targeted boat ramp interviews planned for Waihou Bay (where the recreational effort was focused in 2017). Fisheries New Zealand would also welcome further information from stakeholders on the current state of the recreational fishery. Of equal interest would be insight on the likely growth in interest and effort for this species in the years to come.

Allowances for other sources of mortality caused by fishing

100. The current allowance for all other fishing-related mortality is set at 20 tonnes. This allowance reflects estimated mortality from live releases along with any potential underreporting. Fisheries New Zealand does not have any new information that would suggest that a review of this allowance is necessary and has not proposed any changes as part of this paper.

TACC

101. All of the options proposed in this discussion document include an increase to the TACC. Option 2 presents the highest increase for the commercial sector, with the entire 88 tonne increase available to New Zealand being applied to the TACC.
102. New Zealand catch data shows most southern bluefin tuna are caught off the west coast of the South Island or the east coast of the North Island from April to July. Southern bluefin tuna catch has steadily increased in recent years, in part reflecting increases to the New Zealand national allocation over that time.

103. Since the introduction into the Quota Management System, the number of vessels in the fleet has declined, with 32 vessels operating in the fishery during the 2016-17 fishing year. The domestic fleet is primarily composed of smaller vessels, which operate on both the South Island west coast and the North Island east coast. Those vessels are typically at sea for only a few days, and land southern bluefin tuna both as a target, and as a bycatch of bigeye tuna.
104. For the 2016-17 fishing year, the New Zealand southern bluefin tuna fishery was allocated a TACC of 971 tonnes. Actual commercial catch was 913 tonnes.
105. Southern bluefin tuna is a valuable product, primarily sold for use as sashimi in the Japanese market. The New Zealand commercial southern bluefin tuna fishery provided export earnings of around \$10 million in 2017.²

3.3 EVALUATION OF OPTIONS

Option 1 (*Retaining in-season allocation decision*)

106. Option 1 would maintain the sector allocations that were set as part of the most recent in-season review as follows:
 - a) A customary allowance of 1 tonne;
 - b) A recreational allowance of 20 tonnes;
 - c) An allowance for other fishing mortality of 20 tonnes; and
 - d) A total allowable commercial catch of 1047 tonnes.

Impact

107. Retaining the levels set as part of the in-season review may limit the impact on the commercial sector, since effort levels would likely remain similar to those applied in the current season. However, concerns have been raised about the risk of the recreational catch exceeding the allowance and the potential implications that this will carry in terms of New Zealand's obligations under the CCSBT. Recreational representatives have also suggested that an allocation of 20 tonnes may hinder this sector's ability to reach its full development potential.

Cost

108. There are no direct financial costs associated with this option. There are, however, lower potential export revenues than in the alternative presented in Option 2.

Benefit

109. The benefits gained by the commercial sector will come in the form of potential additional export revenues. Based on the average value derived from 2017 export statistics, an increase of 76 tonnes to the commercial sector allowance could create an additional \$826,000 in export revenues. A 20 tonne recreational allowance could also encourage

² This figure is based on export data figures compiled by Statistics New Zealand.

increased economic activity related to amateur fishing operations in the East Cape / Waihou Bay region during what is otherwise the tourism offseason.

110. The increased recreational allowance would demonstrate a continued commitment to the CCSBT decision to account for all sources of mortality and recognise the growing importance of the recreational sector in the domestic fishery. It also allows for a higher level of recreational catch than that which has been seen in years prior to 2017.

Option 2

111. Option 2 proposes to make the additional 88 tonnes available to the commercial sector in its entirety, and would have the recreational allowance revert back to the level set prior to the most recent in-season review:

- a) Maintain a customary allowance of 1 tonne;
- b) Revert back to a recreational allowance of 8 tonnes;
- c) Maintain an allowance for other fishing mortality of 20 tonnes; and
- d) Increase the total allowable commercial catch to 1,059 tonnes.

Impact

112. This option would allow the commercial sector to benefit from the increases permitted under the stock rebuilding strategy adopted by the CCSBT. However, assigning the full increase to the commercial sector would not reflect the most recent information received from the recreational sector, which suggests increased catches in that fishery.
113. There are potential reputational risks to New Zealand in not recognising the increased recreational activity in this fishery within its domestic allocation mechanisms. Failing to recognise the increased recreational catch domestically also puts New Zealand at higher risk of exceeding its national allocation under CCSBT, which could lead to a reduction in TAC in future years.

Cost

114. While there are no direct financial costs associated with this option, the recreational fishery generates economic activity. The need to constrain the fishery to the level of the historical recreational allowance will have a cost.

Benefit

115. Benefits would be gained by the commercial sector primarily in the form of potential additional export revenues. Based on the average value derived from 2017 export statistics, an additional 88 tonnes allocation to the commercial sector could create an additional \$956,000 in export revenues.

Option 3

116. Under an increased TAC to 1088 tonnes, Option 3 proposes to increase both the TACC and recreational allowance:
- a) Maintain a customary allowance of 1 tonne;

- b) Increase the recreational allowance to 40 tonnes;
- c) Maintain an allowance for other fishing mortality of 20 tonnes; and
- d) Increase the total allowable commercial catch to 1027 tonnes.

Impact

117. This decision would allow both the commercial and recreational sectors to benefit from the country allocation increase granted at CCSBT. Unlike Option 2, this option includes a significant increase to the recreational sector allowance that reflects the high levels of catch seen by that sector in 2017 and allows for further development of that fishery.

Cost

118. There are no direct financial costs associated with this option. There are, however, lower potential export revenues associated with the increased allowance to the recreational sector.

Benefit

119. The benefits gained by the commercial sector will come in the form of additional export revenues. Based on the average value derived from 2017 export statistics, an increase of 56 tonnes to the commercial sector allowance could create an additional \$608,000 in export revenues. The increased recreational allowance would demonstrate a strong commitment to the CCSBT decision to fully account for all sources of mortality and recognise the growing importance of the recreational sector in the domestic fishery. It could also encourage increased economic activity related to amateur fishing operations in the East Cape / Waihou Bay region during what is otherwise the tourism offseason.

Discussion questions:

- **Which option(s) do you support? Why?**
- **If you do not support any of the options listed, what alternative should be considered? Why?**

4. Other Relevant Matters

4.1 RECREATIONAL MANAGEMENT

120. Fisheries New Zealand is also seeking feedback from tangata whenua and stakeholders on future management constraints for the southern bluefin tuna recreational fishery. Although beyond the scope of the in-season TAC review conducted earlier this year, a number of submitters recommended the introduction of recreational management constraints (such as bag limits) as part of that consultation process. Fisheries New Zealand has also held a workshop to specifically discuss the use of management tools in this fishery in order to discourage wasteful practices and limit the risk of New Zealand exceeding its national allocation under CCSBT. Participants of the Southern Bluefin Tuna Recreational Management working group included Te Ohu Kaimoana and representatives from the recreational and commercial sectors.

121. As described in the TAC setting portion of this paper, the recreational catch for this species has recently increased substantially. To date, there have been no constraints placed on this recreational fishery, with only limited levels of catch seen across multiple years. The events of the previous year, where high levels of effort were targeted directly at this species, have created a need for more active management of the recreational sector. Fisheries New Zealand recognises that any constraints will also need to consider the genuine desire expressed by some for this recreational fishery to expand.
122. During the recreational workshop held by Fisheries New Zealand, most stakeholders expressed preliminary support for a phased approach to recreational management which recognises the uncertainty surrounding future levels of catch and effort. In terms of the immediate 2018 recreational southern bluefin tuna season, voluntary measures will be applied through recreational sports fishing clubs and Fisheries New Zealand will increase its monitoring efforts to better estimate the likely level of recreational catch. Fisheries New Zealand proposes to introduce regulatory measures in 2019 to enhance the voluntary measures applied this year. Fisheries New Zealand will consider the need for further and more restrictive constraints in the context of the New Zealand CCSBT country allocation following the 2019 season.
123. Based on the feedback received to date, Fisheries New Zealand is consulting on the following options to be applied ahead of the 2019 season:
- a) One southern bluefin tuna per person daily bag limit;
 - b) Two southern bluefin tuna per person daily bag limit;
 - c) Three southern bluefin tuna per boat daily limit; or
 - d) A combination of boat and bag limits.
124. Information captured through surveys and analysis of recreational sports fishing clubs in 2017 suggests that the majority of trips targeting southern bluefin tuna resulted in a single capture – only 15 % of trips landed three or more southern bluefin tuna. Feedback from stakeholders has also indicated that the average recreational vessel targeting southern bluefin tuna will carry three fishers.

Discussion questions:

- **How will the recreational management constraints proposed here impact the development of the recreational fishery?**
- **Do you agree that these are the correct options to help constrain recreational catch in the short term? Why? If not, what alternatives should be considered?**
- **Which daily bag limit do you prefer? Why?**
- **Should a higher bag limit be considered? Why?**
- **Is a three southern bluefin tuna boat limit appropriate? Why?**

4.2 ENVIRONMENTAL INTERACTIONS

125. When making decisions under the Act, Section 9 requires the Minister to take into account the following environmental principles:
- Associated or dependent species be maintained at or above a level that ensures their long-term viability;
 - Biological diversity of the aquatic environment should be maintained; and
 - Habitat of particular significance for fisheries management should be protected.
126. The key environmental interactions associated with the New Zealand southern bluefin tuna fishery are discussed below with reference to the likely impacts of the proposed management options.

Marine Mammals

127. The surface longline fishery is known to interact with fur seals. The Department of Conservation classify the fur seal population as ‘Not Threatened – least concern’ and note that the New Zealand population has been increasing in recent years and is estimated at being over 200,000 fur seals.³ Based on observer information, most fur seals encountered in surface longline gear are able to be released alive⁴ and the increase in effort associated with Options 2 and 3 are not considered to give rise to concerns regarding increased fur seal interactions.

Fish bycatch

128. Fisheries New Zealand considers that the increases in effort at the levels proposed in this paper will not give rise to concerns related to fish bycatch. Most bycatch species are under caught if subject to a catch limit, or are species managed outside of the Quota Management System with no current sustainability concerns.

Seabirds

129. Seabird interactions with New Zealand’s commercial fisheries are managed under the framework of the ‘2013 National Plan of Action to Reduce the Incidental Captures of Seabirds in New Zealand Fisheries’ (NPOA Seabirds). The NPOA Seabirds established a risk-based approach to managing fishing interactions with seabirds. As a priority, management actions are targeted at the seabird species most at risk, but also aim to minimise captures of all seabird species to the extent practicable. The level of risk from commercial fishing to individual seabird species has been identified through a comprehensive hierarchical risk assessment⁵ that underpins the NPOA Seabirds.
130. Seabird interactions with vessels in the New Zealand southern bluefin tuna fishery generally occur at low, but significant rates for some species, and significant individual events do occur. Regulatory and non-regulatory management measures are in place to mitigate and manage interactions with seabirds. Mandatory measures include the requirement for either night setting or line weighting, in combination with the use of tori lines when setting. Non-regulatory management measures include initiatives by the

³ Accessible at: <http://www.doc.govt.nz/nature/native-animals/marine-mammals/seals/nz-fur-seal/>

⁴ 29 of the 31 fur seal interactions observed in the 2016-2017 fishing year resulted in live releases.

⁵ Accessible at: <http://www.mpi.govt.nz/dmsdocument/27531-aebr-191-assessment-of-the-risk-of-commercial-fisheries-to-nz-seabirds-2006-07-to-2014-15>

Department of Conservation's Protected Species Liaison Officer Programme, such as vessel-specific management plans that describe on-board practices that vessels follow to reduce the risk of seabird capture, and direct mentoring of vessel operators. Fisheries New Zealand considers that the risk to seabirds would not be significantly exacerbated under the proposed TAC options.

Habitats

131. There are no known habitats of particular significance for fisheries management to take into account when considering the New Zealand southern bluefin tuna stock.

4.3 INPUT AND PARTICIPATION OF TANGATA WHENUA

132. Information on the proposal to consult on STN 1 was provided to the Te Waka a Māui me Ōna Toka Iwi Forum, the Te Hiku o te Ika Fisheries Forum, the Mai I nga Kuri a Whareki ki Tihirau Iwi Fisheries Forum, and the Nga Hapu o te Uru Fisheries Forum.

Kaitiakitanga

133. Under Section 12(1)(b) the Minister must also have particular regard to kaitiakitanga before setting or varying a TAC. Under the Act, kaitiakitanga is the exercise of guardianship, and in relation to any fisheries resources, includes the ethic of stewardship based on the nature of the resources, as exercised by the appropriate tangata whenua in accordance with tikanga Māori.
134. Relevant Iwi or Forum Fish Plans provide a view of the objectives and outcomes iwi seek from the management of the fishery and can provide an indication of how iwi exercise kaitiakitanga over fisheries resources. Iwi views from Forum meetings and submissions received from iwi can also provide an indication.
135. Southern bluefin tuna is identified as a taonga species in the Te Waipounamu Iwi Fisheries Plan, the Mai i Nga Kuri a Whareki ki Tihirau Fisheries Forum Plan, and the Nga Hapu o te Uru Fisheries Plan.
136. Fisheries New Zealand considers that the management options presented in this consultation paper are in keeping with the objectives of these plans.

5. Further Information

Should you require further information, please see:

Fisheries Act (1996)

<http://www.legislation.govt.nz/act/public/1996/0088/latest/DLM394192.html>

Ministry for Primary Industries (MPI) Plenary document

Southern bluefin tuna (STN). Ministry for Primary Industries (2017). Fisheries Assessment Plenary, November 2017: Stock Assessments and Stock Status. Compiled by the Fisheries Science Group, Ministry for Primary Industries, Wellington, New Zealand, 500 p.