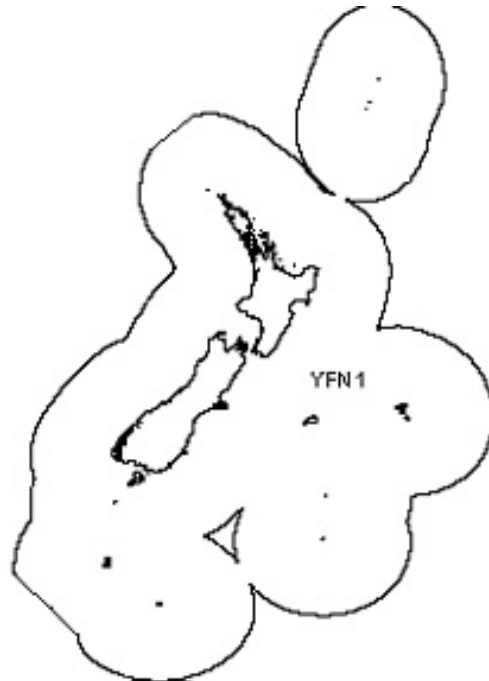


YELLOWFIN TUNA (YFN)

Introduction into the QMS

- 1 Yellowfin tuna has been gazetted for introduction into the QMS on 1 October 2004. The Quota Management Area for yellowfin tuna, shown in Figure 1, includes all New Zealand fisheries waters (FMAs 1-10). The fishing year for yellowfin tuna will be from 1 October to 30 September in the following year. The total allowable commercial catch (TACC) and annual catch entitlement (ACE) are to be expressed in terms of kilograms greenweight.

Figure 1: Quota Management Area for yellowfin tuna



Key issues to be considered

- 2 Key issues to be considered in relation to decisions on sustainability measures and other management controls for yellowfin tuna are as follows:
 - a) Yellowfin tuna is a highly migratory species and the yellowfin tuna found in New Zealand fisheries waters are part of a Pacific wide stock.
 - b) International assessments suggest that the yellowfin tuna in the equatorial Pacific is approaching an overfished state, in part because of the high proportions of juveniles caught in these waters.

- c) Yellowfin tuna is taken in New Zealand fisheries waters primarily as a bycatch of tuna longlining for other large tuna species, in particular bigeye tuna.
- d) There is some potential for expansion of the fishery for yellowfin tuna within New Zealand fisheries waters based on the levels of catch historically taken by foreign licensed fleets and the limited fishing to date by the domestic fleet within the Kermadec FMA.
- e) There are no estimates of non-commercial catch for yellowfin tuna.
- f) While yellowfin tuna is known as a prized gamefish species for the recreational sector it is not known as a species of particular significance for customary Māori fishing.
- g) There is potential for spatial conflict between commercial and non-commercial sectors.

List of management options

- 3 It is proposed to add yellowfin tuna to the Third Schedule and set a TAC pursuant to s 14 of the 1996 Act.
- 4 The proposed options for a TAC allowances, TACC and other management measures for yellowfin tuna are as follows:

Table 1: Proposed TAC, TACC, and allowances for yellowfin tuna, YFN 1 (tonnes).

Stock	TAC	Customary allowance	Recreational allowance	Other sources of mortality	TACC *
YFN 1	268	15	30	4	219
OR					
YFN 1 #	313	15	30	5	263

* TAC/TACC options based on best annual catch in the most recent five years plus 25% OR plus 50% with the addition of allowances.

MFish preferred option

- 5 It is further proposed to:
 - a) Amend reporting regulations to take account of the decision to set a single QMA for yellowfin tuna;
 - b) Set a deemed value of \$7.92 for yellowfin tuna; and
 - c) Apply differential deemed values.

TACS allowances and TACCs

TAC management strategy

- 6 Section 14 of the 1996 Act provides an exception to setting a TAC based on an assessment of MSY where the Minister is satisfied that the purpose of the Act would be better achieved by setting a TAC otherwise than in accordance with

s 13(2). It is not possible to estimate MSY for the part of the yellowfin tuna stock that is found within New Zealand fisheries waters.

- 7 It is proposed that TAC for yellowfin tuna is set pursuant to s 14 of the 1996 Act. While any TAC must be set in a way that ensures use of the stock is sustainable, there is no requirement under s 14 to take into account or be guided by the need to manage in accordance with MSY. A TAC set under s 14 of the Act must be set in a way that better achieves the purpose of the 1996 Act. MFish believes that a TAC set under the provisions of s 14 of the 1996 Act can better provide for utilisation (developing fisheries to enable people to provide for their social, economic and cultural wellbeing) for stocks whose range extends beyond the bounds of New Zealand fisheries waters while ensuring sustainability.
- 8 Further s 14 provides for an in-season review of the TAC to take advantage of available yield beyond any pre-determined target stock level.

Rationale for proposed TACs

- 9 In the absence of estimates of sustainable catch for yellowfin tuna a TAC is proposed that is based on estimates of current utilisation and an evaluation of the potential for expansion of the fishery. This evaluation provides a basis for assessing the sustainability of proposed catch limits.
- 10 The best annual reported catch of yellowfin tuna in recent years is 175 tonnes. Comment from fishers indicates that catches of yellowfin tuna may have been constrained as fishers spend a proportion of their time within a fishing year competing for southern bluefin tuna. The fishery for southern bluefin tuna is primarily in more southern waters where a bycatch of yellowfin tuna is less likely. The potential of the bigeye target fishery and associated bycatch of yellowfin tuna within New Zealand fisheries waters has not been fully explored. This is particularly the case in the Kermadec FMA where there has been little fishing by domestic vessels.
- 11 International assessments suggest that there are sustainability concerns in relation to fishing for this species in the equatorial Pacific region. New Zealand has an obligation to exercise reasonable restraint in the development of its fisheries arising from resolutions of the Preparatory Conference for the Commission for the Conservation of Highly Migratory Stocks in the Central and Western Pacific. In this context MFish does not consider that it is unreasonable to provide for expansion in the level of the yellowfin tuna fisheries within New Zealand coastal waters. The New Zealand catch of yellowfin tuna is less than 0.05% of the Pacific wide catch (compare 175 tonnes with 300-400 000 tonnes).
- 12 Policy guidelines suggest that the opportunity for development and the extent of utilisation provided for needs to be assessed on a stock-by-stock basis having regard to risk based on the following factors:
- 13 **Sustainability to the stock**, for yellowfin tuna is considered a moderate risk. Sustainability concerns relate to the equatorial Pacific and the New Zealand fishery is a small proportion of the catch for the stock as a whole (less than 0.05%).

- 14 **Biology of the stock and potential for local depletion**, while local depletion is indicated in the equatorial Pacific it is associated with intensive purse seine fishing effort. There is no local depletion apparent in more temperate regions of the Pacific.
- 15 **Impacts of fishing on the aquatic environment including bycatch**, for yellowfin tuna this is a factor of moderate risk. Yellowfin tuna is taken in conjunction with other large tuna species including southern bluefin tuna and any increase in catch creates some risk that southern bluefin tuna may be caught over and above the catch limit set for this species. The current yellowfin tuna fishery is as a bycatch of the bigeye tuna target fishery. A prospective catch limit is also proposed for bigeye tuna (50% over and above the best recent reported catch) and no mismatch is predicted with the catch limits proposed for yellowfin tuna.
- 16 There are unquantified risks to associated and dependent species associated with the method of tuna longlining which may require future consideration.
- 17 **Socio economic and cultural issues**, with regard to yellowfin tuna there are clear benefits from increased revenue to the fishery if an expansion in catch can be realised and sustained. There are, however, areas of the fishery (the eastern Bay of Plenty is the most prominent example) where there is likely to be an interaction between commercial and non-commercial fishing unless this is managed. This suggests that the risks associated with an expansion in catch are shared with the fishing interests of other sectors. This is a relevant consideration with respect to the potential for further development of the yellowfin fishery and may require inter-sectoral spatial agreements if further expansion in commercial fishing is to occur.
- 18 **Anecdotal information on abundance and size of likely habitat in the management area**, the Kermadec FMA is an area that has only be lightly fished for yellowfin tuna by domestic fishers. Anecdote and historical foreign licensed catch suggest this area provides expansion potential for the fishery.
- 19 On balance the risks associated with an increase in catch of yellowfin tuna are considered to be low to moderate and within manageable bounds. MFish therefore proposes to set a prospective TAC for yellowfin tuna. Two options (based on arbitrary increases over and above the best recent years reported catch) are proposed:
- Option 1: 265 tonnes
 - Option 2: 313 tonnes
- 20 The choice of options is dependent on the level of risk associated with the development of the fishery. MFish has not proposed options higher than a fifty percent increase on the best years catch until more is known about the distribution of yellowfin tuna in New Zealand fisheries waters and the potential interactions with other target and non-target species. However, MFish considers that the risks associated with the higher of the TAC options proposed are manageable and provide more opportunity for the development of what is considered to be an under-utilised fishery. The MFish initial preference is for a TAC of 313 tonnes.
- 21 MFish notes that there is provision under section 14 for an in season increase in TAC if the abundance of yellowfin tuna in any fishing year suggests that more may be taken.

Any in season increase is given effect through the creation of ACE pursuant to s 68 of the 1996 Act.

- 22 Further, the annual TAC and TACC are subject to review based on the performance of the fishery. If the TAC proves to be limiting the development of the fishery (eg, it is consistently fully caught) then there is an annual opportunity to consider proposals for a TAC increase.

Proposed allowances and TACC

Customary Māori and recreational allowances

- 23 There are no estimates of non-commercial catch of yellowfin tuna available. The surface schooling behaviour of this species makes yellowfin tuna the most accessible of the large tuna species to the non-commercial sector.
- 24 The availability of yellowfin to the recreational sector varies widely from year to year¹. In some years yellowfin is taken in significant numbers by the recreational sector in areas such as the eastern Bay of Plenty. An allowance of 30 tonnes for recreational fishing is therefore proposed.
- 25 Policy guidelines suggest that, in the absence of estimates of customary catch, an allowance for customary harvest based on a proportion of the recreational allowance should be made. Yellowfin tuna is known as a customary catch but is not known as a species of particular significance to Māori. An allowance for customary Māori fishing of 15 tonnes (50% of the recreational allowance) is therefore proposed.

Allowances for other sources of mortality

- 26 Observer information on the level of discarding and loss of yellowfin tuna is available from the 1990s. A loss of 0.1% and discarding of 10.1% of the catch were estimated for yellowfin tuna. A proportion of the fish were discarded as a result of damage (18%) but the primary reason for discarding was small size. In the absence of specific estimates for yellowfin tuna an allowance of 2% of the TACC is proposed for other sources of mortality for fish that are lost before landing on board the vessel.

TACCs

- 27 TACCs are proposed based on current utilisation increased to provide for development opportunity in the fishery. Options are an increase of 25% over and above the best annual reported commercial landings over the most recent five years (175 tonnes) or an increase of 50% over and above the best annual reported commercial landings.
- Option 1: 219 tonnes
 - Option 2: 263 tonnes
- 28 MFish assess that the level of risk associated with the higher TAC option proposed is manageable and the adoption of this option and associated TACC (263 tonnes) is the MFish preferred initial position because it provides more opportunity for utilisation

¹ Holdsworth J and Saul P. 2003. New Zealand billfish and gamefish tagging 2001-02. New Zealand Fisheries Assessment Report 2003/15

within an acceptable level of risk to sustainability of catches within New Zealand fisheries waters.

Other management measures

- 29 Other management measures proposed for yellowfin tuna at this time are to include yellowfin tuna on the Third Schedule of the 1996 Act by Order in Council, to make consequential amendment to reporting regulations and to set a deemed value.

Include yellowfin tuna on the Third Schedule

- 30 MFish proposes that yellowfin tuna be added to the Third Schedule of the 1996 Act.
- 31 Yellowfin tuna is a highly migratory species caught in New Zealand waters but part of a stock that includes the entire South Pacific. In this context it is not possible to estimate MSY for that part of the stock that is found within New Zealand fisheries waters. One of the criteria for inclusion of a stock on the Third Schedule is therefore satisfied.
- 32 Section 14 of the Act requires that species managed under s 14 be listed on the Third Schedule of the 1996 Act by Order in Council. Section 14 of the 1996 Act provides for the setting of an alternative TAC if the purpose of the Act is better achieved than by setting a TAC pursuant to s 13(2).

Consequential amendment to regulations

- 33 As a consequence of the introduction of yellowfin tuna into the QMS, MFish proposes to amend the Fisheries (Reporting) Regulations 2001 to ensure the effective and efficient operation of the QMS. Details of the proposed amendments are set out in a separate generic section of this document.

Deemed values and overfishing thresholds

- 34 A separate section of this document sets out generic information on the setting of interim and annual deemed values.
- 35 Despite the high value of yellowfin tuna, MFish considers that the best fit for this species is the category of all other stocks in part because it is taken primarily as a bycatch. The factor of the port price applied to all other species is 75%. The port price for yellowfin tuna is \$10.56. An annual deemed value of \$7.92 is therefore proposed. It is proposed that differential deemed values apply. Catches exceeding 20% of ACE would attract a proportionally higher deemed value.
- 36 MFish does not propose to set an overfishing threshold for yellowfin tuna, unless monitoring of catch against the TACC suggest that this is required in the future.

Statutory considerations

- 37 The management options presented for yellowfin tuna seek to better achieve the purpose of the 1996 Act (s 14) by providing opportunity for further unitisation (development) within what should be a sustainable catch of this species within New Zealand fisheries waters balanced against an obligation to exercise reasonable restraint in the development of the fishery.

- 38 The proposals are considered to be consistent with New Zealand's international obligations in relation to fishing and the provisions of the Treaty of Waitangi (Fisheries Claims) Settlement Act 1992 (s 5).
- 39 The fishery for yellowfin tuna is as a bycatch of targeting other more abundant tuna species such as bigeye and southern bluefin tuna. A wide range of fish species are taken as bycatch of surface longline fishing. Catch levels vary but many of these species are only rarely taken. The main fish bycatch species associated with the surface longline fishery within New Zealand fisheries waters are to be introduced into the QMS. The QMS will provide the mechanisms for sustainability actions as required.
- 40 There are however a suite of species that are unlikely to enter the QMS in the short term. Our knowledge of these species is limited. There is a risk that the tuna longline fishery will affect the long-term viability of these species. Tuna longline fisheries also occasionally catch fur seals, cetaceans and turtles within New Zealand fisheries waters. There are therefore potential impacts on associated and dependent species, biodiversity and protected species that will require monitoring and possibly future management action. The entry of yellowfin tuna into the QMS will improve our ability to address these issues by requiring the incorporation of new information as it comes to hand in the process of determining catch limits for the fishery (ss 9(a), (b), and (c)).
- 41 There are known effects of tuna longline fishing on the aquatic environment (seabirds) but steps have been and continue to be taken to mitigate these risks (refer Annex One (s 8(2)(b))).
- 42 Yellowfin tuna is not known to be a highly variable stock. The availability of yellowfin tuna within parts of New Zealand fisheries waters is known to vary on an annual basis. Other areas such as the Kermadec FMA are thought to contain yellowfin tuna that are semi-resident in the area (s 11(1)(c)).
- 43 Tuna longlining is not known to pose a risk to benthic habitat of particular significance to fisheries management. The pelagic habitat, however, and any associate risks of fishing are poorly understood (s 9(c)).
- 44 Before setting any sustainability measure, the Minister must have regard to any provisions of any regional policy statement, regional plan, or proposed regional plan under the Resource Management Act 1991, and any management strategy or management plan under the Conservation Act 1987 that applies to the coastal marine area and is considered to be relevant by the Minister. MFish is not aware of any provisions in any strategy or planning document under the Resource Management Act or Conservation Act that are relevant to the setting of sustainability measures for yellowfin tuna (ss 11(2)(a) and (b)).
- 45 Similarly, before setting any sustainability measure relevant to the Hauraki Gulf (eg, a TAC for the yellowfin tuna), the Minister must have regard to s 7 and s 8 of the Hauraki Gulf Marine Park Act 2000 Act. The Hauraki Gulf is defined in that Act to include all coastal waters and offshore islands from near Te Arai Point offshore to the Moko Hinau Islands, and south to Homunga Point (north of Waihi Beach). This Act's objectives are to protect and maintain the natural resources of the Hauraki Gulf as a matter of national importance. Yellowfin tuna may occur in parts of the Hauraki Gulf Marine Park. MFish considers that the setting of sustainability measures for yellowfin tuna will better meet the

purpose of the Act, and ensure that the range of values associated with the use of the yellowfin tuna resource are enhanced for the people and communities in the area (s 11(2)(c)).

- 46 Before setting any sustainability measure, the Minister must also take into account any conservation services or fisheries services, any relevant fisheries plan approved under the Act, and any decisions not to require conservation services or fisheries services. There are no relevant fisheries plans approved that would have any bearing on the setting of a TAC for yellowfin tuna. Conservation and fisheries services apply to tuna fisheries generally in order to assess and monitor the impacts of fishing on non target fish and non-fish species. There have been no decisions not to require fisheries or conservation services for yellowfin tuna (s 11(2A)).
- 47 The nature of the fishery and the interests of the respective fishing sectors have been considered in setting the TACC and allowances for recreational and customary interests and all other mortality to the stock caused by fishing. While mātaītai reserves exist within YFN 1 the values of the mātaītai will not be compromised as yellowfin tuna are part of an oceanic stock. No area has been closed or fishing method restricted for customary fishing purposes in YFN 1 that would affect the fishery. No restrictions have been placed on fishing in any area within the YFN 1 for recreational interests (ss 21(4) and (5)).
- 48 The information used to develop proposals for yellowfin tuna relies on overseas assessments of the stock (which are uncertain) and information from commercial catches, which is limited with respect to evaluating levels of sustainable harvest. MFish notes however that uncertainty in information is not a reason for postponing or failing to take any measure to achieve the purpose of the 1996 Act (s 10).

Preliminary recommendations

- 49 MFish recommends that the Minister:
- a) **Agrees** that the purpose of the 1996 Act is better achieved by setting a TAC for yellowfin tuna otherwise than in accordance with s 13(2)
 - b) **Agrees** to add yellowfin tuna to the Third Schedule and set a TAC pursuant to s 14 of the 1996 Act.
 - c) **Agrees** to set a TAC for yellowfin tuna of 313 tonnes and within this set:
 - i) A customary allowance of 15 tonnes;
 - ii) A recreational allowance of 30 tonnes;
 - iii) An allowance of 5 tonnes for other sources of fishing mortality; and
 - iv) A TACC of 263 tonnes.
 - d) **Agrees** to set a deemed value for yellowfin tuna of \$ 7.92 /kg

- e) **Agrees** that differential deemed values apply
- f) **Agrees** to consequential amendments to the Fisheries (Reporting) Regulations.

ANNEX ONE

Species information

Species biology

- 50 Yellowfin tuna (*Thunnus albacares*) is widespread in tropical and subtropical waters. It averages between 60-120 cm and can reach over 200 cm in length. Yellowfin tuna is a migratory oceanic species found in the northern waters of New Zealand on a seasonal basis, an exception is the Kermadec FMA in which yellowfin tuna are thought to be present year round.
- 51 Yellowfin tuna is listed as a highly migratory species in Annex 1 of UNCLOS and by reference in the Western and Central Pacific Fisheries Convention (WCPFC).
- 52 Participating countries in the Preparatory Conference establishing the Western and Central Pacific Fisheries Commission (Prepcon) have urged states to exercise reasonable restraint in respect of any increase in fishing effort and capacity with regard to the reported status of highly migratory stocks. As yet there are no specific international obligations with regard to management of yellowfin tuna.

Fisheries characteristics

Commercial catch

- 53 Yellowfin tuna is occasionally targeted in the New Zealand EEZ but is primarily taken as a bycatch in the troll and longline fishery for albacore and bigeye tuna in FMAs 1 and 9 (and historically FMA 10). Yellowfin are not targeted by purse seine in the New Zealand EEZ.
- 54 Domestic and foreign reported landings (tonnes) of yellowfin for all FMAs are shown in Table 1 below. Annual catches are variable with peak catches in 1986–87 (domestic and foreign landings combined) and in 1995–96 (domestic fleet only). The low reported landings from 1990 to 1993 are associated with the cessation of foreign-licensed fishing and the development of a domestic tuna longline fleet.
- 55 The most recent landings of yellowfin tuna have been low. These low years are associated with anecdote from the fishery suggesting a decline in availability in recent years. The declining catch of yellowfin tuna is however, also associated with a similar decline in reported landings of bigeye tuna for a similar period and may well be an artifact of a decrease in the target fishery or alternatively environmental factors affecting the distribution of both species in New Zealand fisheries waters.

Table 1. Reported landings (tonnes) of yellowfin tuna taken from New Zealand fisheries waters by foreign and domestic fleets

Fishing year	Foreign licensed		Domestic	Total
	Japan	Korea		
79-80	12.0			12.0
80-81	84.4	33.2		117.6
81-82	90.0	7.3		97.3
82-83	23.6	9.3		32.9
83-84	47.0	15.5		62.5
84-85	21.6	82.1		103.7
85-86	98.4	3.8		102.2
86-87	147.0	42.2	5.6	194.8
87-88	39.8	53.5	11.6	104.9
88-89	12.0	1.8	12.8	26.6
89-90	32.9		19	51.9
90-91	15.2		6.3	21.5
91-92	0.2		19.8	20.0
92-93	0.0		11.8	11.8
93-94	0.0		159.7	159.7
94-95	0.0		114.5	114.5
95-96	0.0		193.4	193.4
96-97	0.0		159.5	159.5
97-98*	0.0		105.3	105.3
98-99*	0.0		174.7	174.7
99-00*	0.0		100.6	100.6
00-01*	0.0		126.6	126.6
01-02*	0.0		61	61.0
02-03*	0.0		42.1	42.1

* LFRR totals for domestic catch

Recreational and customary catch

- 56 There are no estimates of non-commercial catch available.
- 57 Yellowfin tuna is a prized species among recreational anglers. It is highly sought after on a seasonal basis along the northeastern coast of the north island and is a species that is tagged and released by recreational anglers as part of the MFish/NZBGFC Gamefish Tagging Program. Overall (by the end of 2001-02 year) there have been eight yellowfin tuna recaptures from 876 releases from this programme².
- 58 Yellowfin is not known to be a species of particular significance for Māori customary fishing.

² Holdsworth J and Saul P. 2003. New Zealand billfish and gamefish tagging 2001-02. New Zealand Fisheries Assessment Report

Regulatory framework

- 59 The regulatory framework specific to yellowfin tuna includes specific reporting requirements for this species. Regulations apply to the method (minimum standards for seabird mitigation) and specific and general regulations apply if foreign owned fishing vessels are operated in the tuna longline fishery (Part 2 of the Fisheries (Commercial Fishing) Regulations 2000).

Fisheries assessment

- 60 The Precon has charged a scientific coordinating group with providing interim scientific advice on the status of Pacific tuna species. A working group (WGII) of the Precon has considered recent scientific advice on the stock status of yellowfin tuna and has reported the results as follows:

“While spatial patterns of exploitation remain uncertain, it appears some areas in the equatorial regions may be over-fished, and in these areas management actions may be required. While recognizing continuing uncertainties with the current yellowfin stock assessment, WG.II recommends that to reduce the risk of the yellowfin stock becoming over-fished further increases in fishing mortality (particularly on juvenile yellowfin) in the WCPO should be avoided.”

- 61 It is of note that the main concern with regard to stock status is focussed on equatorial regions of the central and western Pacific. However, any potential for expansion in the fishery for yellowfin tuna within New Zealand fisheries waters must be considered within the context of the requirement to exercise reasonable restraint.

Associated fisheries

- 62 Yellowfin tuna is primarily taken as a bycatch of tuna longline fishing in northern waters. Key associated fisheries are proposed for introduction into the QMS on 1 October 2004. The main target species of tuna longline fishing are bigeye tuna, southern bluefin tuna and albacore. Southern bluefin tuna and bigeye tuna are to be introduced into the QMS on 1 October 2004. Albacore will be proposed for introduction into the QMS on 1 October 2005.
- 63 Key bycatch species are swordfish, mako shark, blue shark, porbeagle shark, moonfish, Ray's bream and yellowfin tuna. These species are also to be introduced into the QMS on 1 October 2004.
- 64 There are, however, a suite of species that are unlikely to enter the QMS in the short term. Our knowledge of these species is limited. There is a risk that the tuna longline fishery will affect the long-term viability of these species. Tuna longline fisheries also occasionally catch fur seals, cetaceans and turtles within New Zealand fisheries waters. There are therefore potential impacts on associated and dependent species, biodiversity and protected species that will require monitoring and possibly future management action. The entry of yellowfin tuna into the QMS will improve our ability to address these issues by requiring the incorporation of any new information as it comes to hand in the process of determining catch limits for the fishery.

Environmental issues

- 65 Harvesting of tunas may have impact with regard to predator/prey interactions and trophic dynamics as tunas feed on a variety of fish and other marine species. Understanding of food web relationships is still at an early stage, but MFish considers that, if evidence emerges of impacts on biodiversity from harvesting of yellowfin tuna, this can be managed by setting a TAC within the QMS or alternative management measures based on international cooperation where appropriate.
- 66 There is also a non-fish bycatch associated with the surface longline fishery. Fishing vessels sometimes capture seabirds that are chasing baited hooks, and the seabirds drown as the lines sink. Seabirds are also caught in trawl and other fisheries, but longliners are considered to be the main threat to several vulnerable albatrosses and other seabird species. The risks of seabird capture vary geographically and by species. An active programme is underway to mitigate and monitor the capture of seabirds in surface longline fisheries.
- 67 MFish has established standard environmental controls on line and trawl target fisheries to mitigate the impact of these fishing methods on seabirds. These include prohibitions on net sonde monitor cables and compulsory reporting of bycatch of protected species. New Zealand surface longline vessels are required to use tori lines of a specified standard. Vessels are using a variety of practices to reduce seabird bycatch including the use of artificial baits and the practice of setting longlines at night.
- 68 MFish and the Department of Conservation are developing a National Plan of Action (NPOA) for Seabirds that is expected to include measures that will apply to all New Zealand fishing vessels.

Current and potential research

- 69 There is no current or proposed research for yellowfin tuna in New Zealand waters. New Zealand actively participates in the process to assess this species in the Central and Western Pacific and catch information from the New Zealand fishery is provided in support of this process as required.

Social cultural and economic factors

- 70 Yellowfin tuna form an important and valuable bycatch of tuna longline fisheries. While there is currently no information to suggest that a target fishery exists in New Zealand waters, expansion in the catch of yellowfin tuna in conjunction with the development of the bigeye target fishery will provide economic benefit to the nation.
- 71 There is a potential overlap in fishing areas for yellowfin tuna in some parts of the QMA between commercial and non-commercial fishers. Rules may be required to address spatial separation if conflicts arise as and when the fishery develops. Vehicles to provide these rules include fisheries plans, the dispute resolution procedures and the customary provisions of the 1996 Act.