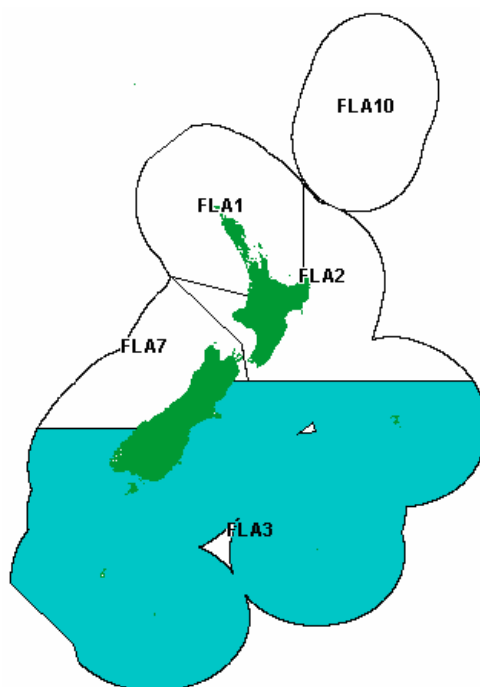


# FLATFISH (FLA 3) – PROPOSED IN-SEASON TAC INCREASE FOR THE 2008-09 FISHING YEAR

Figure 1: Quota Management Areas (QMA) for flatfish (FLA) stocks – FLA 3 is indicated by the shading



## Executive Summary

- 1 For the current fishing year (2008-09), some in the fishing industry report that some species in the FLA 3 stock complex<sup>1</sup> (particularly lemon sole, *Pelotretis flavilatus*, and New Zealand sole, *Peltorhamphus novaezeelandiae*) are more abundant than they are able to utilise with available annual catch entitlement (ACE). They have requested an in-season increase in the total allowable catch (TAC). The Minister of Fisheries (the Minister) has directed the Ministry of Fisheries (MFish) to provide advice in regard to their request.
- 2 This paper provides information for stakeholders about the options for an in-season increase in the TAC for FLA 3 for the 2008-09 fishing year, and associated options to create additional ACE. If increased, the TAC and ACE would revert to existing levels at the beginning of the 2009-10 fishing year on 1 October 2009.
- 3 The eight species that make up the FLA 3 stock complex are each listed in Schedule 2 of the Fisheries Act 1996 (the Act) as stocks whose abundance is highly variable. Under s13(7) of the Act, the Minister may, after considering information about the abundance during the current fishing year of a stock listed in Schedule 2, and after

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<sup>1</sup> FLA 3 is comprised of: yellow-belly flounder, *Rhombosolea leporina*; sand flounder, *Rhombosolea plebeia*; black flounder, *Rhombosolea retiaria*; greenback flounder, *Rhombosolea tapirina*; lemon sole, *Pelotretis flavilatus*; New Zealand sole, *Peltorhamphus novaezeelandiae*; brill, *Colostium guntheri*; and turbot, *Colostium nudipinnis*.

having regard to certain other matters, increase the TAC for the stock for that fishing year (an in-season increase).

- 4 Section 20(4) of the Act means that the total allowable commercial catch (TACC) cannot be increased in-season, but s68 allows for additional ACE to be allocated in-season, where the TAC is increased under s13(7). This is done by the Minister assessing whether he would, after considering the matters in s21(1),<sup>2</sup> have increased the TACC, but for s20(4). If so, the Minister must create additional ACE equivalent to the amount he would have increased the TACC (s68(1)). Any additional ACE will be allocated to existing quota owners.
- 5 MFish is undertaking work that will establish an appropriate assessment model for these stocks. This work will also determine the management strategy most appropriate for these stocks, including:
  - a) The right base level TAC
  - b) A monitoring programme, and
  - c) A decision rule for in-season increases to the TAC.
- 6 MFish had planned for the management strategy work to be completed in time for the 2009-10 fishing year and the data to help make these management decisions will not be available until late in this calendar year. Therefore, for the 2008-09 fishing year, the Minister must decide whether the utilisation benefits of an in-season increase warrant such an increase before the results of the management strategy work are available to guide his decision.
- 7 MFish has no more information about the status of stocks than when it provided advice to the then Minister in 2007. At that time, MFish considered that a TAC based on the average of the previous 15 years' catches would be sustainable. That is still MFish's advice, in the absence of new information. But, MFish had been waiting to review the TAC as part of the management strategy work (due to be completed in 2009-10).
- 8 Taking into account the statutory requirements for setting a TAC (s13), MFish proposes the Minister consider two options in regard to an in-season increase in the TAC:
  - a) no increase (the status quo, 1,617 tonnes, Option 1); or
  - b) an increase of 357 tonnes (to 1,974 tonnes, Option 2), including a decision under section 68 to increase the quantity of ACE in the 2008-09 fishing year by 350 tonnes (to 1,780 tonnes).
- 9 MFish's initial preferred option is Option 2, which is based largely on a 15 year average of commercial catches, over a recent period of relatively stable commercial catches of between 1,200 and 1,800 tonnes and including some peak years of higher catches. MFish considers this option to be low risk based on the available information.

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<sup>2</sup> Namely: Maori non-commercial fishing interests, recreational fishing interests, and all other fishing-related mortality

- 10 MFish now seeks stakeholder input on the options for an in-season increase in the TAC, and on the s68 assessment the Minister is obliged to make in regard to ACE. MFish also seeks information about social, cultural, and economic impacts of the options presented in this paper.

## The Issue

- 11 For the current fishing year (2008-09), anecdotal industry reports suggest that lemon sole and New Zealand sole are more abundant than commercial fishers are able to utilise within available ACE. Therefore, industry argue, there should be an in-season adjustment to the TAC. They say that stocks, particularly in the southern part of the fishery, are sufficiently abundant to justify such an increase and that it would not affect sustainability. They also argue that the current availability of ACE is having significant, negative, socio-economic impacts. Based on these reports, the Minister has directed MFish to provide advice in regard to industry's request for an in-season increase in the TAC for FLA 3.

## Summary of Options

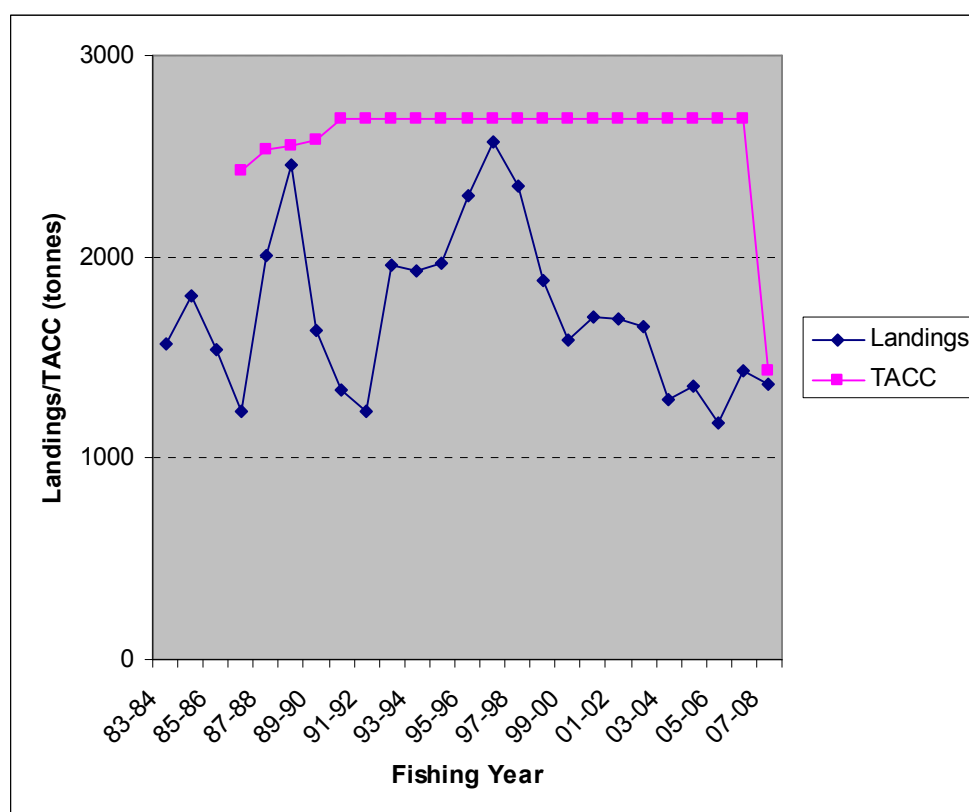
- 12 A Summary of Options is provided in Table 1, below, followed by a description of the key features of each option.

**Table 1: Summary of options**

	<b>Option 1</b>	<b>Option 2</b>
	<b>Status quo</b>	<b>Based on 15 yr average (1991-92 to 2005-06)</b>
TAC	1,617 tonnes	1,974 tonnes
Allowance for other sources of fishing-related mortality	32 tonnes	39 tonnes
Allowance for customary Māori interests	5	5
Allowance for recreational fishery interests	150	150
TACC	1,430 tonnes	1,430 tonnes
Additional ACE (s68)	Nil	350 tonnes

- 13 Figure 2 below illustrates historical landings and TACC for FLA 3.

Figure 2: FLA 3 historic landings and TACC



### Option 1 – Status Quo – TAC of 1,617 tonnes

- 14 Option 1 proposes a TAC of 1,617 tonnes. This is the current setting for the TAC, and the TACC (and associated ACE) and all allowances would remain at current settings. This TAC, set in 2007, was based on the average of the previous 5 year’s commercial catches.

### Option 2 – In-season increase in the TAC to 1,974 tonnes

- 15 This option increases the TAC to 1,974 tonnes for the remainder of the 2008-09 fishing year. It includes a proposed associated increase, under s68, of 350 tonnes in ACE for the 2008-09 fishing year. The increase in ACE is based on the 15 year average of commercial catches for the fishing years 1991-92 to 2005-06 of 1,780 tonnes. An increase in the allowance for other fishing-related mortality is proposed to 38 tonnes, but no changes to current allowances for recreational and customary non-commercial fishing interests are proposed.

## Rationale for Management Options

- 16 In 2007, concerns were expressed about the sustainability of FLA 3 catches and the attainability and sustainability of the then TACC. Anecdotal information at that time suggested that flatfish recruitment and abundance may have been declining (particularly for flounder species), and that intensive fishing effort may have been affecting sustainability. However, flatfish abundance is naturally variable and the decline in abundance may have been caused by environmental or climatic factors. Some recreational fishers considered that the abundance of the flounder component of

FLA 3 was so low they were effectively being denied access to the resource. A TAC had not been set at that time, and the TACC of 2,681 tonnes had never been caught.

- 17 The then Minister of Fisheries set a TAC for FLA 3 of 1,617 tonnes, with provision for allowances for customary fishing interests of 5 tonnes, recreational fishing interests of 150 tonnes, and for other fishing-related mortality of 32 tonnes. He set a TACC of 1,430 tonnes; a reduction of 1,251 tonnes from the previous TACC of 2,681 tonnes. Allowances were set based primarily on estimates of recreational, customary, and other sources of fishing-related mortality, rather than on the basis of proportionate allocation. The new TAC, TACC, and allowances came into effect on 1 October 2007, ie at the beginning of the 2007-08 fishing year. In 2007-08, catches in FLA 3 were within the TACC, with 95% of the 1,430 tonnes caught.
- 18 For the current fishing year (2008-09), some in the fishing industry anecdotally report that some species (lemon sole and New Zealand sole) in the FLA 3 stock complex are more abundant than they are able to utilise within the available ACE, arguing for an in-season increase in the TAC of 400 tonnes. They say that stocks, particularly in the southern part of the fishery, are sufficiently abundant to justify an increase and that it would not affect sustainability. MFish has no new scientific information about abundance in FLA 3 during the current fishing year.
- 19 MFish considers that an increase of 350 tonnes in the amount of ACE available to fishers (part of Option 2) would balance utilisation of the apparently abundant lemon and New Zealand soles with the sustainability of the other species in the FLA 3 complex. This figure is based on the 15 year average of commercial catches in FLA 3 of 1,780 tonnes, over a period of relatively stable commercial catches of between 1,200 and 1,800, and including some peak years of higher catches. This was one of the options considered by the previous Minister in regard to setting the TAC, TACC and allowances in 2007. MFish, at that time, believed such catch levels were sustainable. This is still MFish's position. But, MFish had been waiting to review the TAC as part of the management strategy work (due to be completed in 2009-10).
- 20 During the preparation of this paper, the Ministry invited comments from commercial fishers, asking for socio-economic information, in particular. The reported socio-economic impacts of the current TAC and level of ACE include:
  - Reduced incomes – one person reported a 28% reduction in turnover; another estimate put the reduction in income at 15-25%
  - Hardship for families and communities reliant on fishing
  - Large interim deemed values bills
  - Laying off staff or staff leaving in search of more profitable work – one reported laying off 20% of processing staff; another (smaller operator) reported laying off one or two staff
  - Tying up vessels or closing down for a period due to being unable to obtain ACE
  - Less work for processors and other businesses associated with the fishing industry (such as those involved with boat maintenance), and

- ACE price is expensive and/or ACE is unobtainable.
- 21 Some in the industry argue that the current availability of ACE is unnecessarily constraining utilisation of FLA 3, with ACE either allocated or committed for use later in the season. Some fishers report they are unable to obtain ACE for FLA 3, even though the fishing year is only about halfway through. They say this is also impacting their ability to utilise quota and ACE for FLA 3 bycatch species.
- 22 Other comments made by commercial fishers included:
- Stocks are thriving at present; one noting, “Older fishermen talk of never having such a good flat fishery for decades”
  - Abundance is variable, and there is a need to get the maximum out of the good years as a buffer against years when fish are less abundant
  - Fishers targeting what were flatfish fishery bycatch species, for which they have quota/ACE, are putting pressure on some areas and causing conflict in local communities; this is also affecting sustainability of flatfish in areas where the former bycatch species are now being targeted
  - Some fishers have changed to 125mm mesh, to help ensure that returns are maximised through catching more valuable, larger fish. There was a suggestion a larger mesh should be included in a “Code of Practice” or made mandatory as this provides some protection for smaller flatfish, and
  - Catches are currently better in the southern part of FLA 3 – south of the Waitaki River.
- 23 Landing data provide support for the anecdotal information about regional variation in abundance. They illustrate that there have been historically higher landings in the southern part of FLA 3 (mainly the Otago and Southland coastal areas), although the north-south distribution of catch has fluctuated from year-to-year. This may reflect the natural variability of flatfish stocks.

## **Assessment of Management Options**

### ***Option 1***

- 24 The current TAC was set by the former Minister of Fisheries on the basis of sustainability concerns, including concerns of recreational fishers about access to the FLA 3 resource (in particular, to flounder) and concerns of commercial fishers (in the northern part of FLA 3). The TAC was based on a 5 year average of commercial catches plus allowances for customary, commercial, and other sources of fishing-related mortality.
- 25 MFish is undertaking work that will establish an appropriate assessment model for these stocks. This work will also determine the management strategy most appropriate for these stocks, including:
- a) The right base level TAC

- b) A monitoring programme, and
  - c) A decision rule for in-season increases to the TAC.<sup>3</sup>
- 26 MFish had planned for the management strategy work to be completed in time for the 2010 fishing year, and the data to help make these management decisions will not be available until late in this calendar year. Therefore, for the 2008-09 fishing year, the Minister must decide whether the utilisation benefits of an in-season increase warrant such an increase before the results of the management strategy work are available to guide his decision.
- 27 This option has the greatest potential socio-economic impact on commercial fishers of the two options. Such impacts should, in future, be mitigated somewhat by the management strategy, which may be implemented during the 2009-10 fishing year (from 1 October 2009). This will help ensure maximum value continued to be obtained from the FLA 3 fishery. However, leaving the TAC at the present level for the current fishing year does not address the concerns raised by commercial stakeholders about utilisation being unnecessarily constrained at present.
- 28 Leaving the TAC at the current level for this fishing year provides the greatest protection to sustainability of all species within the FLA 3 complex. This may be important for some of the less abundant and, consequently, more vulnerable species within the FLA 3 stock complex. This option may also provide better for future utilisation by recreational and commercial stakeholders, as any rebuild in stocks is likely to occur faster under this option.
- 29 There is no new scientific information about the sustainability of the TAC at the current level.

## **Option 2**

- 30 MFish considers that an in-season increase in the TAC to 1,974 tonnes provides a balance between sustainability and utilisation. This option is based largely on a 15 year average of commercial catches over a recent period of relatively stable catches of between 1,200 and 1,800 tonnes (the fishing years 1991-92 to 2005-06). The 15 year timeframe includes some years of peak catches, and MFish considers it captures the cycle of abundance in FLA 3.
- 31 Under s13(7), the Minister may increase the TAC after considering information about the abundance during the current fishing year of FLA 3. MFish has no scientific information about the abundance of FLA 3 during the current (2008-09) fishing year. The only information available to the Minister is anecdotal information from industry that lemon sole and New Zealand sole are abundant.
- 32 There is no information about the abundance of the other six species in the FLA 3 stock complex, or the risks to them of an in-season increase in the TAC. However, increasing the TAC potentially negatively impacts some of the species in the FLA 3 stock complex, particularly the four flounder species. MFish considers this risk to be minimal as it understands industry is mainly targeting soles. New Zealand sole and

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<sup>3</sup> An MFish research project (INS2008/02) is currently looking at a mechanism to provide for an in-season increase in FLA 3.

lemon sole are caught further offshore than the flounder species, which tend to be found in shallower water, often around river mouths. Any risk that would be caused could be minimised by industry agreeing to avoid these areas.

- 33 MFish has no more information about the status of stocks or scientific information about the sustainability of the TAC at 1,974 tonnes than when it provided advice to the then Minister of Fisheries in 2007. However, MFish's advice in 2007 was that a TAC of 1,974 tonnes was sustainable. MFish continues to advise that this level is sustainable. Consequently, MFish considers an in-season increase the TAC to 1,974 is low risk. Any risk is minimised by the fact that this an in-season increase only, and the TAC will revert to 1,617 tonnes at the beginning of the 2009-10 fishing year. MFish considers that any risk is also balanced by the socio-economic benefits of increased utilisation during the current fishing year.
- 34 If current stock levels are below the level that can produce the maximum sustainable yield (MSY) (which is unknown), an in-season increase in the TAC to 1,974 tonnes will provide for a slower rebuild than the current TAC. The difference in the rate of rebuild which may be caused by an in-season increase in TAC is unknown.
- 35 In considering the way in which and rate at which FLA 3 is moved towards or above a level that can produce the MSY, the Minister must have regard to such social, cultural, and economic factors as he considers relevant (s13(3)). Relevant matters include socio-economic impacts on commercial fishers, as well as impacts on other fishers (recreational and customary) to meet their social and cultural needs from the fishery. Increasing the TAC to 1,974 tonnes (together with providing additional ACE of 350 tonnes) for the 2008-09 fishing year would help mitigate the economic impacts reported by commercial fishers. It would, for example, provide more ACE to cover what would otherwise be overcatch.
- 36 It is unknown what impact increasing the TAC and creating additional ACE would have on the ACE market. MFish seeks information on what the impact might be.
- 37 From 2009-10, the management strategy, which will include an appropriate base level TAC, are likely to be in place. In-season TAC increase decisions will also be guided by a decision rule.

### **TACC and Allowances**

- 38 Section 20(4) of the Act means that the TACC cannot be increased in-season, but s68 allows for additional ACE to be allocated in-season where the TAC is increased under s13(7). This is done by the Minister assessing whether he would, after considering the matters in s21(1),<sup>4</sup> have increased the TACC, but for s20(4). If so, the Minister must create additional ACE equivalent to the amount he would have increased the TACC (s68(1)). Any additional ACE will be allocated to existing quota owners.
- 39 The options for an in-season increase in ACE have been discussed above. This paper does not propose to alter allowances for the 2008-09 fishing year other than for fishing-related mortality, which is pro-rated to match the increased TAC. However,

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<sup>4</sup> Namely: Maori non-commercial fishing interests, recreational fishing interests, and all other fishing-related mortality

s68 requires the Minister to have regard to recreational and customary non-commercial interests in FLA 3 in determining how much additional ACE to allocate. MFish seeks input from stakeholders about whether the proposed allowances for recreational and customary are appropriate for the 2008-09 fishing year, and the impacts of an in-season increase in the TAC and ACE on recreational and customary stakeholders.

### **Other Management Controls**

- 40 An MFish research project (INS2008/02) is currently looking at a mechanism to provide for in-season increases in FLA 3. It is anticipated this project will deliver around October 2009, in time for possible implementation of the mechanism in the 2009-10 fishing year.
- 41 MFish considers that, in future, splitting FLA 3 stocks into the component species might provide more flexibility around both TAC setting and in season adjustment. This is because the sustainability of the TAC is currently influenced by the abundance of individual stocks. So, for example, lemon sole is currently abundant, but increasing the TAC to enable utilisation of this species may threaten the sustainability of other species in the FLA 3 stock complex. Splitting the stocks is outside the scope of this paper.

### **Statutory Considerations**

- 42 Flatfish species are listed in Schedule 2 of the Act as stocks whose abundance is highly variable. Therefore, under s13(7), the Minister may, after considering information about the abundance of FLA 3 during the current (2008-09) fishing year and having regard to the matters in s13(2), s13(2A), if applicable, and s13(3), increase the TAC for the 2008-09 fishing year.
- 43 MFish is planning to have monitoring in place from 2009-10 onwards to provide information about FLA 3 abundance during each fishing year. However, only anecdotal information is available about the abundance of FLA 3 stocks during the 2008-09 fishing year. In making his decision whether to agree to an in-season increase in FLA 3 TAC, the Minister will have to take into account the limitations of that information.
- 44 Under s13(2) of the Act, in setting a TAC the Minister have regard to the interdependence of stocks. He must also set a TAC that either:
- (a) Maintains the stock at or above a level that can produce the MSY (s13(2)(a));  
or
  - (b) Enables the level of any stock whose current level is below that which can produce the MSY to be altered in a way and at a rate that will result in the stock being restored to or above a level that can produce the MSY and within a period appropriate to the stock, having regard to the biological characteristics of the stock and any environmental conditions affecting the stock (s13(2)(b));  
or

- (c) Enables the level of any stock whose current level is above that which can produce the MSY to be altered in a way or at a rate that will result in the stock moving towards or above a level that can produce the MSY (s13(2)(c)).
- 45 Where the Minister considers that the current level of the stock or the level of the stock that can produce the MSY is not able to be reliably estimated using the best available information, s2A of the Act will apply to setting a TAC. This states that the Minister must-
- a) not use the absence of, or any uncertainty in, that information as a reason for postponing or failing to set a total allowable catch for the stock; and
  - b) have regard to the interdependence of stocks, the biological characteristics of the stock, and any environmental conditions affecting the stock; and
  - c) set a total allowable catch—
    - i) using the best available information; and
    - ii) that is not inconsistent with the objective of maintaining the stock at or above, or moving the stock towards or above, a level that can produce the maximum sustainable yield.
- 46 It is not known whether the current level of the FLA 3 stock is at or above the level that can produce the MSY or if the current TAC or any of the options in this paper will maintain the FLA 3 stock at or above a level which can produce the MSY. Estimates of current and reference biomass are not available for flatfish in FLA 3. Therefore, MFish considers that it is likely that s13(2A) will apply to the Minister's decision as to whether or not to increase the TAC for FLA 3 for the 2008-09 fishing year.
- 47 Section 13(2A)(b) requires the Minister to have regard to the interdependence of stocks. So, he will have to have regard to the fact that an in-season increase in the TAC for FLA 3 may have impacts for bycatch species, such as red gurnard and elephant fish. In 2007, sustainability concerns for bycatch stocks were one of the reasons for reducing the TAC. MFish notes that the TACs for red gurnard (GUR 3) and elephant fish (ELE 3 and ELE 5) are both being reviewed for the 2009-10 fishing year due to increased abundance. MFish considers there are unlikely to be sustainability concerns during the 2008-09 fishing year. However, increasing the TAC for FLA 3 could result in more overcatch in these two species during the current fishing year.
- 48 Section 13(2A)(b) also requires the Minister to consider the biological characteristics of FLA 3 species. Flatfish abundance is highly variable, and the species that make up the stock have different biological characteristics. Some species (soles) are fast-growing and short-lived, generally only surviving to 3-4 years of age, with very few reaching 5-6 years. Others, such as brill and turbot are longer lived, reaching a maximum age of 21 years and 16 years respectively.<sup>5</sup> Juvenile survival is highly variable, and adult mortality is high. But fecundity is high in FLA 3 species, for example from 0.2 million to over 1 million eggs in sand flounders.

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<sup>5</sup> Stevens DW, Francis MP, Shearer PJ, McPhee RP, Hickman RW, Tait M (2001) Age and growth of brill (*Colistium guntheri*) and turbot (*C. nudipinnis*) from the west coast South Island. Final research report for Ministry of Fisheries research project FAL2001/01. 35 p.

- 49 The variation in biological characteristics means that an in-season increase in the TAC for FLA 3 is likely to have different impacts on each of the eight different species that make up the FLA 3 stock complex – ie there will be more risk to the longer lived brill and turbot from an in-season increase and less risk to the shorter lived soles. The Minister will have to consider the different risks to different species in making a decision whether and to what level to increase the TAC for FLA 3 for the 2008-09 fishing year.
- 50 Section 13(2A)(b) requires the Minister to have regard to any environmental conditions affecting the stock. Abundance of flatfish stocks is highly variable, and for some species in the stock, this variability may relate to environmental conditions. Relevant environmental factors may vary randomly, and it can be expected that this will result in good and bad years in terms of abundance for most species in the FLA 3 stock complex. This, in turn, may affect the proportion that each species contributes to the catch on an annual basis. This variability in abundance is recognised by the inclusion of flatfish species on Schedule 2 of the Act.
- 51 If the Minister considers s13(2A) is applicable, in varying the TAC or deciding on an in-season increase, the Minister must have regard to the need to set a total allowable catch using the best available information (s13(2A)(c)(i)). Any in-season increase in TAC for FLA 3 must not be inconsistent with the objective of maintaining the stock at or above, or moving the stock towards or above, a level that can produce the MSY (s13(2A)(c)(ii)).
- 52 MFish considers that the anecdotal information from industry about abundance, together with socio-economic information, and information about the biological characteristics and natural variability of flatfish stocks, is the best available information during the current fishing year for FLA 3.
- 53 There is no evidence that either of the options is inconsistent with the objective of maintaining the stock at or above, or moving the stock towards or above, a level that can produce the MSY. However, the rate at which the FLA 3 stock will rebuild will be impacted by the level of the TAC.
- 54 In considering the way in which and rate at which FLA 3 is moved towards or above a level that can produce MSY, the Minister must have regard to such social, cultural, and economic factors as he or she considers relevant (s13(3)). The two options presented in this paper would each move the FLA 3 stock towards or above a level that can produce MSY at different rates (ie the lower the TAC, the faster the rate). Socio-economic information is discussed above in relation to each option. MFish invites further input from stakeholders on social, cultural and economic factors.
- 55 Section 68 of the Act says that where a TAC is increased under s13(7) and the Minister believes, after considering the matters referred to in s21(1) than he would have increased the TACC but for s20(4),<sup>6</sup> the Minister shall create additional ACE according to a formula set out in s68(20). The matters referred to in s21(1) are:
- a) Customary and recreational interests, and

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<sup>6</sup> Section 20(4) states, “Every total allowable commercial catch set or varied under this section shall have effect on and from the first day of the next fishing year for the quota management stock concerned.”

- b) all other fishing-related mortality.
- 56 MFish proposes to leave the customary and recreational allowances at the current settings, ie 5 tonne for customary and 150 tonnes for recreational. MFish has no information about recreational or customary take that would suggest that these allowances need to be increased. In regard to allowances for all other fishing-related mortality, a proportionate approach is proposed, in line with the TACC in each option. Option 2 includes a proposed additional ACE of 350 tonnes, under s68.

## Other Management Issues

- 57 It is unknown what the effects of an in-season increase in ACE for FLA 3 will be on fishers' compliance regarding bycatch species in this fishery.

## Appendices

### **Statutory Considerations**

- 58 The following statutory considerations have been taken into account when forming the management options for FLA 3:
- a) **Sections 5(a) and 5(b) – Application of international obligations and Treaty of Waitangi (Fisheries Claims) Settlement Act 1992:** This requires that the Minister shall act in a manner consistent with New Zealand's international obligations and the Treaty of Waitangi (Fisheries Claims) Settlement Act 1992. MFish is not aware of any specific international obligations relating to the FLA 3 fishery. The proposed options are consistent with the obligations relating to the Treaty of Waitangi (Fisheries Claims) Act 1992.
  - b) **Section 8 - Purpose:** The purpose of the Act is to provide for utilisation while ensuring sustainability. Utilisation is provided by way of setting allowances for commercial, recreational and customary fishers. The two management options acknowledge information about flatfish abundance is uncertain.
  - c) **Sections 9(a) and 9(b) – Environmental principles:** When setting or altering the TAC, associated or dependent species should be maintained above a level that ensures their long-term viability and biological diversity of the aquatic environment should be maintained. Associated or dependent species are any non-harvested species, such as seabirds or marine mammals. Hector's dolphins have previously been caught in commercial and non-commercial set nets and in commercial trawl nets. These activities are now controlled by various area and method restrictions under the Hector's Dolphin Threat Management Plan. Increasing the FLA 3 TAC is unlikely to result in any increased threat to Hector's Dolphin as lower headlines must be used inside 2 nautical miles to reduce the risk of capture. There is no evidence that increasing the FLA 3 TAC will significantly impact biological diversity.
  - d) **Section 9(c) - Environmental principles:** Close inshore areas can include important nursery areas. This is recognised by industry by a code of practice which agrees that they will avoid these areas.

- e) **Section 10 – Information principles:** Information relied upon in this paper includes the 2008 Plenary, preliminary information from research project FLA 2007/01 (which has yet to be assessed by the Fisheries Working Group), and anecdotal information. As there is consistency between the preliminary information and the anecdotal information, it is more likely to be reliable. MFish used recreational surveys in 1999-00 and 2000-01 as the basis of estimates of recreational catch in FLA 3. Limitations are acknowledged with the use of these surveys. But, in the absence of other information on recreational catches, the surveys are considered to provide the best available information on recreational catches. Overall, information is very limited, and much is unknown for FLA 3, including the current level of the stock, and the level of the stock in relation to the level that would produce MSY. Therefore, the Minister should be cautious in deciding whether and to what level to increase the TAC for the 2008-09 fishing year.
- f) **Section 11(1)(a) – Sustainability measures:** The potential effects of fishing on bycatch species has been discussed in this paper, including the potential for impacts to increase with increasing TAC. No other information has been considered about any effects of fishing on any stock or on the aquatic environment.
- g) **Section 11(1)(b) - Sustainability measures:** For this stock, controls are in place which include a TAC, TACC, and allowances, minimum size limits, a bag limit for recreational fishers, and deemed values.
- h) **Section 11(1)(c) - Sustainability measures:** Natural variability of the stock is a mandatory consideration when setting or altering a sustainability measure such as a TAC. Flatfish abundance is highly variable, and has been taken into account in formulating and analysing the options for the level of the TAC for the 2008-09 fishing year, including the periods over which to calculate average commercial catch.
- i) **Sections 11(2)(a) and 11(2)(b) - Sustainability measures:** There are no provisions applicable to the coastal marine area known to exist in any policy statement or plan under the Resource Management Act 1991, or any management strategy or plan under the Conservation Act 1987, that are relevant to the setting or varying of any sustainability measure for this stock.
- j) **Sections 11(2A)(a) and 11(2A)(c) - Sustainability measures:** Any relevant conservation services or fisheries services have been considered in this paper – research projects FLA2007/01 and INS2008/02. No decision has been made not to require conservation services or fisheries services in this fishery.
- k) **Section 11(2A)(b) - Sustainability measures:** There is no relevant fisheries plan that has been approved that requires consideration.
- l) **Section 13(3) - Total allowable catch:** The social, cultural and economic consequences for each option have been discussed in the body of this paper. While a number of reported socio-economic effects have been noted, the precise extent of those effects has not been quantified.
- m) **Section 13(8):** If there is an in-season increase in the TAC for FLA 3 under s13(7), the TAC shall revert to the TAC that applied to the FLA 3 stock at the beginning of the 2008-09 fishing year, ie 1 617 tonnes.

- n) **Sections 21(1)(a) and 21(1)(b); and 21(4)(i) and 21(4)(ii); and 21(5) – Matters to be taken into account in setting or varying any total allowable commercial catch:** This section is relevant to the Minister’s decision as to how much additional ACE to allocate (s68). The nature of the fishery and the interests of the respective fishing sectors have been considered in proposing the TAC, ACE and allowances for recreational and customary interests and all other mortality to the stock caused by fishing. Areas have been closed for customary fishing purposes in FLA 3, but the closures do not affect the flatfish fishery. There are currently four mātaimai reserves within FLA 3 (one, the Maitara River Mātaimai Reserve is a freshwater mātaimai reserve, and is not relevant to FLA 3). There is no commercial fishing in the internal waters of Fiordland.
- o) **Section 26 of the Fiordland (Te Moana o Atawhenua) Marine Management Act 2005:** This requires all persons (including management agencies) exercising powers or carrying out functions in the Fiordland Marine Area (which falls within FLA 3) to take into account the advice or recommendations provided by the Fiordland Marine Guardians (the Guardians). MFish understand that there is very little flatfish habitat in Fiordland. Nevertheless, MFish will seek comment on the options in this paper from the Guardians.