Ministry for Primary Industries Manatū Ahu Matua



Initial Position Paper on a proposed in-season increase for Flatfish (FLA 3)

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Growing and Protecting New Zealand

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Introduction

Figure 1: Quota Management Areas (QMAs) for flatfish (FLA) stocks. FLA 3 is indicated by shading.



- 1. The Ministry for Primary Industries (MPI) is seeking tangata whenua and stakeholder information and views in regard to flatfish in Quota Management Areas (QMAS) 3,4,5 and 6, all of which, combined, make up FLA 3, (see Figure 1) to inform:
 - options for an in-season increase in the total allowable catch (TAC), and
 - associated options for creating additional annual catch entitlement (ACE).
- MPI proposes the following options for the TAC, total allowable commercial catch (TACC), ACE, and associated allowances (Table 1):

			ACE	Allowances		
Option	TAC (t)	TACC (t)	(S68 in-season) (t)	Customary Maori (t)	Recreational (t)	Other sources of fishing related mortality (t)
Option 1 (Status	1617	1430	0	5	150	32
Option 2 (preferred option)	1921	1430	297	5	150	39

Table 1: Proposed TACs, TACCs and allowances for FLA 3

3. MPI's initial preferred option is Option 2 as it provides for an increase in economic productivity and enables economic growth within sustainable levels and is the output from the accepted management procedure.

Consultation

- 4. This Initial Position Paper (IPP) provides the Ministry for Primary Industries' (MPI's) initial views on options for an in-season increase in the total allowable catch (TAC), and associated options for creating additional annual catch entitlement (ACE) for Flatfish in area 3 (FLA 3).
- 5. MPI has developed this IPP for the purpose of consultation as required under the Fisheries Act 1996 (the Act). MPI emphasises the views and recommendations outlined in the paper are preliminary and are provided as a basis for consultation with stakeholders.
- 6. In April 2013, MPI will compile the Final Advice Paper (FAP) for the attached proposal. This document will summarise MPI's and stakeholder's views on the issues being reviewed, and provide final advice and recommendations to the Minister for Primary Industries. A copy of the FAP and the Minister's letter setting out his final decisions will be posted on the MPI website as soon as these become available. Hard copies will be available on request.
- 7. MPI welcomes written submissions on the proposals contained in the IPP. All written submissions must be received by MPI no later than 4pm on Tuesday, 22 April 2013.
- 8. Written submissions should be sent directly to:

Inshore Fisheries Management Ministry for Primary Industries P O Box 2526 Wellington 6011

or emailed to FMsubmissions@mpi.govt.nz

9. All submissions are subject to the Official Information Act and can be released, if requested, under the Act. If you have specific reasons for wanting to have your submission withheld, please set out your reasons in the submission. MPI will consider those reasons when making any assessment for the release of submissions if requested under the Official Information Act.

Context

NEED TO ACT

- 10. Flatfish are included on Schedule 2 of the Fisheries Act 1996 (the Act). Schedule 2 applies to stocks that have a high inter-annual variability. For any of these stocks, s13 (7) of the Act allows the Minister for Primary Industries¹ (the Minister) to increase the TAC within a fishing year. The Minister may do so only after considering information about stock abundance in the current fishing year and after having regard to the matters specified in subsections 13 (2), (2A) (if applicable) and (3) of the Act.
- In February/March 2013, MPI fisheries science presented the results of the assessment of abundance for the 2012/13 fishing year to the Southern Inshore Science Working Group (the Working Group). Based on this, the in–season management procedure concludes that a TAC increase of 297 tonnes could be made.
- 12. The in-season management procedure was developed by Bentley (in prep.) It uses a model that takes the catch per unit effort (CPUE) from the first three months of the fishing year to predict the end of year catch. The Working Group has previously reviewed and accepted this model as the appropriate management procedure.
- 13. An in-season increase would provide for increased utilisation from the fishery. MPI notes there is risk inherent in the accuracy of the procedure and potential risk to some species in the FLA 3 complex from an in-season increase. However, MPI considers an in-season increase to be low risk based on the available information.

MANAGEMENT APPROACH

- 14. Flatfishs stocks are managed within the draft National Fisheries Plan (the FinfishPlan) for Inshore Finfish. The Finfish Plan is an MPI policy document which came into operation from July 2011. It sets out management objectives for stocks including FLA 3. Within the Finfish Plan, stocks are grouped based on their characteristics of biological vulnerability and desirability to fishers. The management approach and objectives are tailored accordingly.
- 15. FLA 3 is a Group 2 stock within the Finfish Plan. Management objectives for Group 2 stocks include:
 - Maximise the overall social, economic and cultural benefits obtained from each stock by enabling annual yield to be maximised.
 - Maintain relative stock abundance at or above an established minimum reference level.

¹ The Minister for Primary Industries now exercises the powers and duties of the Minister of Fisheries under the Act

16. The management approach for Group 2 stocks, including the FLA 3 stock complex,² is designed to enable responsiveness to changing abundance levels. Listing on Schedule 2 provides for the opportunity to increase utilisation during periods of higher abundance, enabling greater benefits to be obtained without risking stock sustainability. The management approach for Group 2 ensures there is flexibility to support realisation of these opportunities. This flexibility is balanced by setting baseline catch and size limits that ensure stability and stock sustainability over the longer term.

BIOLOGICAL CHARACTERISTICS OF FLA 3

- 17. 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.³ 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.
- 18. 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 i.e. 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 to, and to what level, increase the TAC for FLA 3 for the 2012-13 fishing year.

Stock Status

- 19. In the 2007-08 fishing year, the TAC for FLA 3 was cut from 2,893 tonnes to 1,617 tonnes. The then Minister of Fisheries noted the annual variability of flatfish abundance and that FLA 3 is on Schedule 2 of the Act. He directed that research be undertaken to develop an in-season increase management procedure by which in-season adjustments could be made to the TAC.
- 20. It is not known whether the current level of the FLA 3 stock is at or above the level that can produce the maximum sustainable yield (MSY) or if the current TAC or any of the options in this

² FLA 3 comprises: yellow-belly flounder, *Rhombosolea leporina*; sand flounder, *Rhombosloea 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*.

³ 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.

^{4 •} Initial Position Paper on a proposed in-season increase for Flatfish (FLA 3)

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.

- 21. Managing FLA 3 as a stock complex means that determining MSY is complicated and possibly inappropriate. Until such time as flatfish species are managed as individual stocks, separated at the species level and with accepted stock assessments for each, managing FLA 3 to MSY is not possible. Since we have an agreed index of abundance that is informing the current decision, MPI does not consider that a review of MSY for FLA 3 is required before considering an inseason increase to the TAC.
- 22. CPUE indices are used to monitor FLA 3. These indices are thought to be reflective of abundance and are increasing for lemon sole and sand flounder, with New Zealand sole just below long term mean. There is no information about the abundance of the other individual species in the FLA 3 stock complex, or the specific risks to them of an in-season increase in the TAC.

FLA 3 Fishery

- 23. Much of the catch in FLA 3 is targeted (between 85% and 97%). Around 95% of targeted FLA 3 landings are taken by bottom trawl, 3% is taken by set net and less than 1% by Danish seine. The majority of trawling occurs on the open coast from Pegasus Bay south to Te Waewae Bay. Danish seining occurs almost exclusively off Lyttleton. Peak catches in the trawl fishery occur in spring to autumn for most of FLA 3.
- 24. Reported commercial landings from FLA 3 in recent years have been between about 1 100 and 1 700 tonnes, but historically have varied up to two-fold. Peaks of 2 573 tonnes and 2 458 tonnes occurred in 1996-97 and 1988-89, respectively.
- 25. Commercial fishers predominantly (over 80% since 2001) catch flatfish when they are target fishing for it. The main associated bycatch is usually comprised of large quantities of red cod and lesser amounts of barracouta, skate, elephant fish, giant stargazer, gurnard, spiny dogfish and tarakihi.
- 26. Flatfish is a minor bycatch of other targeted species, e.g. elephant fish, häpuku and bass, ling, red cod, red gurnard, rig, school shark, sea perch, and tarakihi. Flatfish is only a significant bycatch when fishing for red cod.
- 27. Anecdotal information from active fishers suggests that catches of lemon sole and sand flounder are better in the southern part of FLA 3 south of the Waitaki River. Commercial fishers have reported high abundance of yellowbelly founders in Lake Ellesmere. 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 yearto-year. This may reflect the natural seasonal variability of flatfish.

- 28. Anecdotal information is in-line with the most recent CPUE index for lemon sole, which is well above the long term mean, while sand flounder is near the long term mean, with New Zealand sole below it.
- 29. MPI has clarified the reporting obligations by individual flat fish species code in the Catch Effort section of forms used to monitor the health of the fisheries. This will assist with the functioning of the management procedure and help us to better assess the abundance of individual species within the complex.

Recreational

- 30. Flatfish is an important recreational fish species. Important recreational fisheries for sand, black and yellow-belly flounder occur in most estuaries, coastal lakes and coastal inlets throughout the South Island, including the east coast harbours and estuaries, shallow bays, and Lake Ellesmere. The main methods are set netting, drag netting, and spearing.
- 31. There is a minimum legal size for flatfish (except for sand flounders) of 25cm. For sand flounders, the minimum legal size is 23 cm. There is a minimum set net mesh size (100mm) for flatfish. The maximum daily bag limit is 30 in the FLA 3 area.
- 32. There is no current recreational catch estimate for FLA 3, but the recreational catches of FLA 3 are understood to be low compared to those of the commercial sector. MPI is carrying out research on recreational fisheries (a large-scale multi-species study, LSMS) to obtain better information about recreational harvest estimates. This should enable more accurate catch estimates to inform any recreational allowance setting in the future. The results of this survey are due soon.
- 33. In past reviews, some recreational fishers advised that they considered the abundance of some components of FLA 3 was low, especially around some southern estuaries, and as a consequence they were effectively being denied access to the resource. This issue has been compounded by the ban on recreational set nets for open water. The FMA 3 & 5 Recreational Fishing Forum members still maintain this is the case. Forum members have proposed that recreational fishers be permitted the use of powered recreational trawls to be able to access the deeper sole stocks.

Māori Customary

- 34. Customary catch data available for most of the FLA 3 quota management area (QMA) does not show any significant catch of FLA 3. The current assessment⁴ is that customary fishing is stable. Anecdotal information suggests that customary catch is occurring within the recreational daily bag limit of 30 flatfish. In meeting obligations to Maori, MPI is working together with the Te Waka a Māui me Ōna Toka Forum (TWAM) to improve customary reporting at all levels.
- 35. MPI proposes to leave the customary and recreational allowances at the current settings, i.e. 5 tonne for customary and 150 tonnes for recreational. MPI has no information about recreational or customary take that would suggest that these allowances need to be increased. MPI seeks stakeholders views on these allowances when in-season increases are considered.

OTHER SOURCES OF FISHING-RELATED MORTALITY

36. There are various potential other sources of fishing-related mortality of FLA 3, but MPI is not able to quantify these precisely. Sources may include discarding to avoid deemed value payments and cryptic mortality caused by the fishing method. The allowance for other sources of fishing related mortality is currently set at 2.25% of the TACC. MPI has no information to suggest this proportion should be changed.

Other Key Considerations

- 37. When making a decision concerning the TAC for a stock, the Minister must have regard to interdependence of stocks, the biological characteristics (discussed above) and any environmental conditions affecting the stock. MPI is unaware of any relevant environmental conditions affecting FLA 3.
- 38. Under the provisions of the Marine Mammals Protection Act 1978, Hector's dolphin is a threatened species due to their low abundance in both the North and South Island waters. Therefore, it is appropriate to consider the potential impact that an increase in the FLA 3 TAC may have on captures of Hector's dolphins. The Plenary report stated interactions with protected species are believed to be low. The set net and bottom trawl (when targeting flatfish) fisheries have been subject to a range of measures designed to reduce interactions of this fishery with endemic Hector's dolphins. MPI considers there will be no significant change as any additional fishing effort will be mostly be in the bottom trawl fishery which is considered low risk to dolphins.

⁴ See the Annual Review of Inshore Fisheries 2011/12

Proposed Response

39. MPI is consulting on the following management options for setting TACs and allowances, and providing for additional ACE under s 68 of the Act for FLA 3 (Table 2):

Table 2. Proposed	TAC	ACCS and	ACE S68	Allowances		
Option		TACC		Customary Maori (t)	Recreational (t)	Other sources of fishing related mortality (t)
		(t)	in-season (t)			
Option 1 (Status	1617	1430	0	5	150	32
Option 2 (preferred 192 option)	1921	1430	297	5	150	39

Table 2: Proposed TACs, TACCs and allowances for FLA 3

- 40. MPI considers that an in-season increase in the TAC to 1,921 tonnes provides the right balance between sustainability and utilisation. The proposed in-season increase is based on an accepted peer reviewed analysis of matching the start of season CPUE, for the first three months of the fishing year, against historical annual catch represented as a regression line. This procedure has about 90% certainty of predicting the end-of-season TACC.
- 41. MPI notes that the currently accepted management procedure approach for FLA3 includes the range of species within the stock complex. This provides for cost-effective use and management and a degree of flexibility for fishers as the abundance of different species within the complex varies at different times.
- 42. In view of the results of the in-season management procedure, MPI considers that both options proposed are consistent with the objective of maintaining the FLA 3 stock at or above the level that can produce the maximum sustainable yield in the short-term.

Option 1 (Status Quo)

- 43. Option 1 is the status quo and proposes no changes to the TAC, TACCs or allowances for customary Maori, recreational or other sources of fishing-related mortality and no additional ACE under s68.
- 44. Based on the available information (discussed above), this option presents a cautious approach to sustainability. CPUE analysis shows FLA 3 abundance is high and there is potential for higher utilisation over the short-term without impacting longer term sustainability.
- 45. Option 1 does not provide for any increased utilisation in the fishery.

Option 2

- 46. Option 2 proposes:
 - The TAC be increased from 1617 to 1921 t;
 - Additional ACE (under s 68) be provided of 297 t, increasing total ACE for the 2012/13 year from 1430 t to 1727t (an approximately 21% increase);
 - The allowance for other sources of fishing-related mortality be increased from 32 t to 39 t (2.25% of the 2012/3 ACE, consistent with its current setting relative to the TACC), and
 - No changes to customary Maori or recreational allowances.
- 47. Option 2 proposes additional ACE be provided under s 68(1) of the Act. The best available information suggests that catches at current levels would be unlikely to cause the stock to decline. MPI considers this risk is low and Option 2 provides for some increased utilisation.
- 48. Section 68(1) says that if a TAC is increased under s 13(7), the Minister must, under ss 21(1) consider Maori customary non-commercial fishing interests, recreational interests and other fishing-related mortality and create additional ACE that equals the amount by which he would have increased the TACC, but for s 20(4). Any additional ACE will be allocated to existing quota owners.
- 49. It is not proposed to alter allowances for the 2012-13 fishing year other than for fishing-related mortality, which is pro-rated to match the increased TAC. MPI seeks input from stakeholders about whether the proposed allowances for recreational and customary are appropriate for the 2012-13 fishing year, and the impacts of an in-season increase in the TAC and ACE on recreational and customary stakeholders.
- 50. Based on the 2011/2012 port price of \$2.88/kg, Option 2 would generate an additional \$855,360 of revenue compared to Option 1 (the status quo).
- If increased, the TAC would revert to existing levels at the close of the 2012-13 fishing year on 30 September 2013 (s 13(8) of the Act). ACE for 2013/14 will be based on the TACC at 1 October 2013. This paper does not propose changes to the TACC.

Other Management Measures

52. When the in-season management procedure was introduced it was to run for five years and then be reviewed. This review is due in 2014.

FUTURE CONSIDERATIONS

53. Flatfish is part of a mixed fisheries stock complex. Under the Finfish Plan, MPI has committed to developing a strategy for managing mixed fisheries. As part of this, MPI will investigate approaches that better reflect the operation of mixed fisheries (for example, TAC setting approaches that support sustainable utilisation of all species in the mixed fishery).

INITIAL CONSULTATION

54. During March 2013, MPI had preliminary discussions with tangata whenua and some stakeholder representatives. MPI sought views on the stock specific options and asked for general views on FLA 3 as part of the National Inshore Fisheries planning process.

Conclusions

- 55. The best available information suggests that current abundance is high and there may be opportunity for increased utilisation from FLA 3, at least in the short-term and that Option 2 would provide this.
- 56. MPI is seeking information and views from tangata whenua, fishery stakeholders and other interested parties to inform the review of in-season catch limits for FLA 3.
- 57. It is important to note that the Minister has broad discretion in exercising his powers of decisionmaking. He will make his own independent assessment of the information presented to him by both MPI and stakeholders before making a final decision.