

BRIEFING FOR PRIMARY PRODUCTION SELECT COMMITTEE

Subject	Fisheries Act Amendment Bill (No.2)
Summary	This paper provides you with a response to the Committee's request for a briefing on the issue of managing stocks above a level that can produce the maximum sustainable yield
Action sought	Response to request for information during hearing of 7 August 2008
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Management of Stocks Above B_{MSY}

Submitters for non-commercial fishing interests raised the subject of management of fish stocks at a biomass above a level that can produce maximum sustainable yield. The Committee has asked officials for a short explanation of policy in this area. This paper provides an overview of the policy issue and recent approaches to this by the Ministry and Ministers of Fisheries.

Provisions of the Fisheries Act

The Fisheries Act 1996 provides discretion for the Minister in setting TACs, which is the key means for managing the biomass level of fish stocks. Section 13 of the Act prescribes target biomass levels for stock management **at or above** a level that can produce the maximum sustainable yield (MSY – a biomass level that can produce MSY is referred to as B_{MSY}). On the face of it, this provides the legal option for the Minister to manage a stock at levels above B_{MSY} if they believe this is consistent with the purpose of the Act.

It should be noted that where a stock is managed at a biomass higher than B_{MSY} , the yield (catch) that can be taken while maintaining the stock at that level will generally be lower than the MSY. The purpose of the Act provides two main reasons why the Minister might wish to manage a stock to produce less than the maximum sustainable yield – sustainability and utilisation.

Sustainability

(a) Most information in fisheries management involves considerable uncertainty. An estimate of B_{MSY} is essentially the midpoint of a range of biomass levels within which MSY could be achieved. Even where information is available so that B_{MSY} can be accurately estimated at a point in time, the biomass for most stocks will vary considerably around an average level, rather than remaining stable. Where a Minister feels a precautionary approach to setting the TAC is warranted, they may wish to set a TAC above the midpoint estimate to ensure that the risk of moving below the actual B_{MSY} is minimised. It should be noted here that although the Act provides the ability in setting TACs to implement precaution in this way, the construct of section 10 infers that caution should be considered both in respect of sustainability and utilisation.

(b) Another sustainability consideration is mentioned in section 13(2): the Minister must have regard to the interdependence of stocks. For example, where the viability of another stock is dependent on the level of the stock for which a TAC is being set – for instance as a food source – the TAC may be set lower to ensure the dependent stock is not under sustainability threat. This has been a consideration in the setting of TACs for small pelagic fish stocks such as anchovy, sprats, pilchards, and garfish, all introduced into the quota management system in 2002. Many other species are dependent on these small fish as a food source, and hence the Minister considered the interdependence of stocks in making those TAC decisions.

Utilisation

Under the purpose of the Act the Minister is obliged to provide for utilisation while ensuring sustainability. The recent High Court judgement on orange roughy found that utilisation should be provided for to the extent possible. However, there is some question in interpretation as to whether assessment of maximum utilisation should be in terms of maximising the quantity of catch being made available from a stock (MSY), or if the focus should be on maximising the benefits or value being obtained from the use of the stock.

The balance of opinion taken from a range of judgements on this issue and the Ministry's interpretation of the statutory obligations favours the view that to best enable utilisation is to maximise the benefits obtained from the use of the resource. Therefore, where there is a reasonable case to be made that, in a particular fishery, total utilisation benefits are increased by managing the stock above B_{MSY} rather than at that level, such a strategy could be recommended to the Minister in advice on TAC setting.

The Ministry is of the view that there exists a sound general argument that managing stocks above B_{MSY} can lead to greater total value in certain circumstances. This could occur in some shared fisheries where fish size and abundance are valued highly by non-commercial fishers. However, whether the Minister would support management above B_{MSY} in a particular case depends on several matters.

First there is the question of information on the values held by the stakeholders affected. Where information on catches by non-commercial fishers is absent or very

uncertain (as it is for most shared fisheries), it is difficult to begin the valuation exercise. In addition, the marginal values (what would one more fish be worth to a sector) of both commercial and non-commercial fishers would need to be properly assessed in order to ensure that moving to a particular level of biomass would in fact result in a value gain overall. This task would be difficult and resource intensive. Although a few studies have attempted to assess non-market values of recreational fishing in New Zealand, work has not been carried out to date to a level that would robustly justify a major reallocation of value from one sector to another on the basis of increased total benefits to society.

The second key issue is the degree to which such a decision would represent a redistribution of value from the status quo allocation. In a fishery that is already above B_{MSY} under the status quo, a decision to leave it there does not require redistribution of existing catch allocations. On the other hand, a decision to build the level of a stock to increase value, for example from B_{MSY} to a higher level, would involve TAC cuts. Depending on how the cuts are shared among user groups, this could involve permanent reduction in the TACC.

In these circumstances the decision would be moving value from one group of stakeholders to another, and despite the fact that this would be predicated on an expected increase in value overall, those that suffer a reduction in benefits can be expected to protest. Where significant quota values are involved the government will inevitably face claims for redress for the economic impacts of the decision. Section 308 of the Fisheries Act may not protect the government from such claims. Recipients of Fisheries Settlement quota assets could also be expected to raise arguments that their interests would be compromised by such management strategies.

Conclusion

MFish is of the view that the issues discussed here raise difficulties for management strategies that include moving stocks from B_{MSY} to a level significantly above it to increase total value from the stock. The concept is supported by both policy principles and the basic structure of the statute, but there are some questions that hang over interpretation of the Act, and there are significant issues to be faced in implementation.

Such important decisions will always need to be based on careful consideration of circumstances in each case, but a well understood and accepted policy framework for dealing with the range of recognised issues that will be encountered should come first. Recent policy processes on Shared Fisheries raised these issues for discussion with stakeholders and the wider community but they remain unresolved to date.

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