



SANFORD LIMITED
SUSTAINABLE SEAFOOD

PRESS RELEASE

23 August 2011

SANFORD INCREASES FOCUS ON ASIA AND MĀORI WITH MULTI LINGUAL WEBSITE

Sanford announces the go live of its website in 5 languages with three focused on the fast growing Asian market. With the China New Zealand FTA moving tariffs to zero from 1 January 2012 we decided to increase our ability to work with potential Chinese as well as Japanese and Korean customers by making our website and seafood offerings more user friendly. Over the past few years we have increased our in house ability to deal with enquiries in these languages but we expect the new website will facilitate increased awareness of the best New Zealand seafood available from Sanford.

With our new and increasingly strong relationship with the North Island based Iwi Collective Partnership as well as with other Māori fishing companies and Iwi groups the Māori language version will enable a wider understanding of the Sanford business and our commitment to the long term sustainability of the resource.

In line with that commitment to the long term sustainability of the resource Sanford is today releasing its correspondence to the Minister of Fisheries calling on him to hold off increasing the Total Allowable Catch for hoki until further research information is collected on the effects of recent catch increases on the West Coast portion of the hoki stocks. The Minister has advice papers suggesting he has an option to increase the TAC by 10,000 tonnes or leave it at the same level. We see no reason to rush through another increase in the stock when further research work already planned would provide more certainty to justify an increase.

E F Barratt
Managing Director

Attached letter to Minister of Fisheries.



SANFORD LIMITED
SUSTAINABLE SEAFOOD

9 August 2011

Hon Phil Heatley
Minister of Fisheries and Aquaculture
Parliament Buildings
Wellington

Dear Minister Heatley

**Sanford recommends you leave the Hoki TACC at the current level.
(We support Option 1)**

Officials are currently considering options for a final advice paper for you on revising the Hoki Total Allowable Commercial Catch (TACC). Two options have been put forward for stakeholder consultation;

Option 1 is status quo;

Option 2 is to lift the TACC by 10,000mt in the western stock.

Sanford supports Option 1.

We note your recent public comments (Press Release 22 June 2011) about the positive state of the resource and its recovery. We think the resource is more positive than it has been in recent years but we ask you to take a precautionary approach until there is an opportunity for further scientific data and information to be collected and analysed.

In the early 2000's and in subsequent years Sanford were in the minority calling for HOK TACC reductions but were ignored because the *'best available science'* said the fishery could sustain taking over 200,000mt. In 2003-04 again the *'best available science'* said we could take 180,000mt yet despite more than sufficient capacity and massive effort, industry could only manage to harvest 135,000mt. The reductions came too late and were too small; Industry paid a heavy price for that with the TACC eventually being lowered to 90,000mt. As a result the industry needed to restructure; companies downsized their fleets and a lot of on-water and shore-based capital went under-utilised and jobs were lost.

In the period July to September 2009 the industry took the permitted 25,000mt from the Western Stock. Since then with transfers from the East and two TACC increases the take from the Western Stock is now 60,000mt.

This means that since 2009 we will have taken an additional 105,000mt of hoki all from the Western stock without having seriously measured the impact of this additional extraction. In Sanford's opinion it is time to pause and take stock. A further increase this year is too much, too fast.

Sanford commissioned a report by Dr Kevin Stokes (copy attached) and shared this with others active in the hoki fishery. Response has been positive and a number of quota owners are now supportive of maintaining the status quo.

There is no doubt that hoki is a valuable year round fishery that New Zealand can take pride in. The fishery has been certified by the Marine Stewardship Council since 2001 and despite a diminishing biomass in the early 2000s the fishery has pulled back and is now rebuilding. In time, the hoki fishery will again be robust enough to support a higher TACC.

Sanford asks that you hold back announcing TACC increases until the working group and your fishery managers have had time to consider the survey results timetabled to occur over the next 12 months. The 2011-12 Sub Antarctic trawl survey is due to begin in December 2011; the West Coast trawl survey is scheduled for August 2012. Both surveys will assist in determining how quickly the hoki stock is rebuilding.

An incremental (and considered) upward TACC climb is preferential for managing both capital decisions and re-gaining the public's confidence in hoki management.

Sincerely

A handwritten signature in black ink, appearing to read 'Eric Barratt', written in a cursive style.

Eric Barratt
Managing Director

Attachment : Report Dr Kevin Stokes

Considerations relevant to 2011 hoki TACC options

Report prepared for Sanford Ltd

by stokes.net.nz Ltd

20 July 2011

Background

- 1 The New Zealand Ministry of Fisheries (MFish) recently released an Initial Position Paper (IPP) on sustainability measures for hoki. The IPP notes that the most recent (2011) stock assessment shows that both eastern and western stocks of hoki are at or above the agreed management target range and proposes either i) maintaining the status quo TACC of 120,000 tonnes (60,000 tonnes from each of the eastern and western stocks), or ii) increasing the TACC to 130,000 tonnes (60,000 tonnes from the eastern stock and 70,000 tonnes from the western stock).
- 2 Sanford Ltd has already expressed a clear position to the DeepWater Group, favouring maintenance of the status quo.
- 3 This brief report provides some thoughts on the 2011 assessment and projections and offers possible reasons to support a cautious approach to TACC setting in 2011.

The 2011 assessment and projections

- 4 The 2011 assessment updates the 2010 assessment with new commercial fishery data, and a new Chatham Rise survey index point, but no new Sub-Antarctic survey point. The base 2011 assessment comprises a base case (with age-dependent natural mortality and asymptotic selectivity) and three sensitivity runs. The base case is the same as one of the two alternate formulations previously presented. The previous alternate formulation (with domed selectivity and constant natural mortality) is now presented as a sensitivity run. The new sensitivity runs consider variations in survey catchability.
- 5 Results from all models are shown separately for eastern and western stocks as well as for stocks combined. The combined results are at best hard to interpret and are arguably meaningless. The combined results were introduced originally when attempts were made to configure an alternative assessment in which the proportion of fish migrating from the Chatham Rise to the Sub-Antarctic was estimated annually (as opposed to being estimated as a constant in the current models). That alternative model remains a useful exploration. It is disappointing that the latest assessments have introduced arguably two uninteresting sensitivity runs, have not included work on the envisaged alternate migration model, and have provided unhelpful and confusing combined area outputs.
- 6 Nevertheless, the base case assessment model is a continuation from previous years and constitutes a credible basis for providing advice on stock status. Whether or not it provides a similarly credible basis for making projections is moot.
- 7 Projections were made after the Fishery Assessment Working Group (FAWG) and are provided as Appendix 1 to the IPP. Projections are all based on the base case model and, as in recent years, are made assuming either recent or long-term recruitment. Projections are made for four catch scenarios, including the status quo (120,000 tonnes) and increased catch (130,000 tonnes) options presented in the IPP. Given the recent history of the hoki stocks and poor recruitment, only the recent recruitment scenarios are of immediate relevance to management and are considered here. This will remain the case unless and until recruitment actually increases to longer-term levels. Given recent difficulties particularly with the status of the western stock, management needs especially to focus on this area.
- 8 The projection using recent recruitment and assuming status quo catch suggests that the

stock should increase from 41% B₀ (unfished spawning biomass) to 55% B₀ by 2016. Assuming recent recruitment and an increase in catch to 130,000 tonnes leads to a projected increase to 52% B₀. The agreed target range for hoki is 35-50% B₀. At least superficially, therefore, either option (status quo or an increase to 130,000 tonnes) appears justifiable.

- 9 However, a number of factors need to be considered in interpreting the assessment and projections in order to make management decisions.

Factors to take in to account when interpreting projections

- 10 While the 2011 base case model is a continuation of the previous base case (in part), and recognising 2011 sensitivity runs do not create undue concerns, there is still a need to develop the alternative assessment model allowing for annual variation in the proportion of fish that move from the Chatham Rise to form part of the western stock. This model, if also suggesting high western stock status and projected spawning biomass, would provide greater confidence than the more limited current range of sensitivity tests.
- 11 A major cause of concern for some years has been the strong retrospective pattern in estimates of year-class strength, especially for the western stock. Year on year estimates of any given year-class tend to decline as more data are accumulated. This pattern is still arguably evident and can be seen when comparing detailed outputs from the assessments from 2011 and 2010. Specifically, in the comparable 2010 model the 2006 and 2007 year-classes for the western stock were estimated to be very strong and the highest since the early 1990s. In the 2011 base case assessment, those same year-classes are estimated to be just above average.
- 12 In general, recent year-classes are highly uncertain. Estimates of the influential (in projections) 2006 – 2009 year-classes are particularly uncertain. The 2011 assessment suggests these 4 year-classes are all just above average, representing just 4 out of 5 above average year-classes in the past 15 years.
- 13 That year-class estimates are uncertain is not in itself a problem. The uncertainty is due to the fact that there is only limited information on young fish from survey indices and that it takes time to accumulate information as fish age, migrate and get caught in commercial fisheries. The issue of concern is that year-class estimates that influence projections may be biased and give an unduly optimistic impression of future status.
- 14 It is notable in 2011 that there is no Sub-Antarctic index available to provide new information on western stock year-classes. Also, the very high 2009 Chatham Rise survey index for 2 year old fish which influenced a previous high year-class estimate has not been borne out in subsequent data. Looking further at survey indices there is concern that gear changes have led to changes in recent survey catchability. The FAWG considered these issues and did not make changes to the assessment. Nevertheless, the lack of an important index and possible changes in catchability add at this time to overall uncertainty and willingness to trust too much in detailed probabilistic statements and prognoses.
- 15 Interpreting separate pieces of information always need to be done carefully – the purpose of stock assessment is to integrate and weight various information sources within a clear framework. However, it is worth noting a number of data-related points.

- 16 First, although the assessment generally points to increasing spawning biomass of both the eastern and western stocks, the Chatham Rise survey indices are not so encouraging for older fish. For fish aged 3 and older, the index has been well below average since 2000 and is currently at 2/3 the average since 1992. Further, the index has fallen in both 2010 and 2011. Generally, this does not suggest an increase in spawning biomass over coming years unless the populations of age 1 and 2 fish are strong. The assessment suggests at best they are about average and if there are retrospective patterns in estimation this could be misleading. This is a cause for some concern as to the optimism of projections.
- 17 Second, one source of information on the western stock is the age data from South Island spawning fisheries. Again, these data are interpreted in the full assessment, but it is useful to look in detail at the data (as shown to the FAWG in initial data documents). Care is needed as the data presented are numbers at age by year, not proportions. However, looking just at female data, it is clear that in 1988 the age structure was very wide but through to the early 2000s, as the western fishery removed a high percentage of the large overall hoki catch, the western stock age range contracted and the fishery came to rely more and more on incoming year-classes. Looking just at the data from 2006 to 2009, the age structure has continued to contract and the reliance on the above average 2002 year-class has persisted, with that year-class still dominant in 2009. Worryingly, the 2006 and 2007 year-classes, estimated high in the 2010 assessment, are not clearly seen in the 2009 catch data – which is presumably why the 2011 assessment no longer estimates those year-classes to be so strong.

Conclusion

- 18 The 2011 base case stock assessment is a partial continuation of previous assessments and is a credible basis for assessing stock status. Further confidence could be gained by investigating a previously identified alternative model. Although a good basis for assessing stock status, care is needed not to over-interpret projections based on the assessment.
- 19 Care is needed primarily because of the retrospective patterns seen in estimates of recruitment for the western stock and because individual data sources (Chatham Rise 3+ index and South Island spawning fishery age data) suggest the projected status may not be as high as estimated.
- 20 It is important to distinguish between the credibility of the assessment for assessing stock status or as a basis for projections. The assessed stock status is credible. Projections, however, while encouraging, need to be treated carefully.
- 21 Given the options available in the IPP, either option could be supported based on the science available. The choice of options depends on a willingness to interpret the assessment and projections at face value, in which case either option could be deemed low risk, or with circumspection given a variety of considerations, in which case the cautious approach would be to adopt the status quo option.