

3 April 2014

Dr Paul Crozier
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Dear Paul,

WWF-NZ's Submission on Draft ORH Fishery Improvement Plans

Thank you for taking the time to submit on the draft Fisheries Improvement Plans (FIPs) for four New Zealand orange roughy fisheries. Deepwater Group has given careful consideration to each of the points in your submission and we offer our response below. Should you wish to meet to discuss any of this further we'd be happy to do so.

MSC Fisheries Certification Project

In 2008, with the objective of obtaining MSC Certification, MPI and DWG embarked on a MSC Fisheries Certification Project for orange roughy. Based on the pre-assessment findings by Moody Marine in 2009, over the past five years we have been progressively implementing a staged Fisheries Certification Project to improve those areas of performance assessed to not meet the 80SG for each Performance Indicator.

We first discussed our MSC certification plans for orange roughy with WWF-US in 2012 and we have elected to take their advice, which was to 'partner' with WWF-NZ in contracting MRAG-Americas to undertake four pre-assessments against the MSC Fisheries Standard and to develop and implement FIPs for these fisheries. The pre-assessments have been completed and we have now drafted four FIPs and ensured that all of these processes are open to all participants.

To date WWF-NZ has elected to not actively 'partner' in these processes, but have contributed on the Risk Assessment Panel, have attended the public meetings held by MPI and DWG, and have responded to requests for consultation on these matters. We respect their choice to not 'partner' and we welcome the level of engagement provided to date.

MPI and DWG have given careful consideration to the advice from WWF-US that we develop four public time-bound Fisheries Improvement Plans within our MSC Fisheries Certification Project. There are always multiple paths towards achieving any desired goal - but the chosen path matters less than the end result. In the absence of WWF-NZ's acceptance of our invitation to 'partner', MPI and DWG have continued with the MSC Fisheries Certification Project, and have developed four Fisheries Improvement Plans (FIPs) using tools and templates provided by MSC, with the primary objective to establish a public, transparent, inclusive and stepwise approach towards MSC Certification..

In the development of these orange roughy FIPs, MPI and DWG considered a wide range of options, tools and 'templates', including the ones promoted by WWF. Most of these FIP options are aimed at fisheries in developing states where the management authority and/or industry involved do not have the required experience or expertise to re-configure the management of their fisheries to enable performance that meets the MSC Fisheries Standard. As such, the external competences and funding that can be offered by WWF or by SFP (to name two NGOs in this market) would likely be of material technical assistance.

The New Zealand orange roughy fisheries are competently managed within the New Zealand Quota Management System (QMS) by the New Zealand Government (MPI) and orange roughy quota owners

(DWG), within a partnership agreement first signed in 2006. Both MPI and DWG retain, or are able to contract, experienced and competent expertise in fisheries science, fisheries management and in the application of the MSC Fisheries Standards. We do not have the same requirement for external technical assistance to develop and implement a FIP process as developing states do.

The primary purpose of the four orange roughy FIPs is to meet the MSC Fisheries Standard and achieve MSC Certification. The lack of any response from WWF-NZ to our invitation to 'partner' in this process, together with the extant capabilities within MPI and DWG, leads to the logical choice by MPI and DWG to use the FIP templates and tools developed by the MSC. MSC's FIP templates and tools provide for the progressive and time-bound implementation of improvements that align with existing and robust fisheries management systems like the QMS, and provide external observers with the ability to benchmark fisheries improvement, to track progress, and to demonstrate conformance with the MSC Certification requirements. These MSC improvement tools have been coupled with an open, transparent and publically notified pathway to facilitate MSC certification of the orange roughy fisheries.

Timing

You have advised of concerns within WWF that there is a 'rush' to get the orange roughy fisheries through MSC Certification before the proposed changes to the MSC Standard come into effect.

Nothing could be further from the truth; this has been a considered and multi-year Fisheries Certification Project.

DWG and MPI embarked upon the path towards MSC Certification for orange roughy in 2008 (many years before the current MSC FSR was envisaged) and have been progressively implementing the required remedial actions over the past five years. This Fisheries Certification Project has required the progressive development and implementation of:

- Improved scientific tools and survey techniques that enable more accurate estimates of the spawning biomass of orange roughy. These are based on the acoustic methods that were pioneered by industry and have included the use of the multi-frequency AOS developed and deployed by CSIRO in New Zealand orange roughy fisheries each year.
- A scientifically robust age-based stock assessment model, developed over several years. This was completed and accepted by MPI's Deepwater Working Group and Plenary in 2013 (for ORH MEC) and is now being applied to each of the four orange roughy fisheries under consideration during 2013-14.
- A harvest strategy that meets both New Zealand policy and legal requirements. This was first implemented in the ORH3B ESCR in 2010, has since been refined, and revision work remains ongoing.
- A comprehensive research plan to measure and monitor orange roughy fisheries, promoted by DWG and undertaken by MPI and DWG.
- A robust risk Assessment of the Environmental Effects of Fishing (AEEF) of the performance of each orange roughy fishery against the MSC P2 80SG standards. This was undertaken in 2012, based on the best available scientific expertise in a workshop environment, to which all participants and service providers were invited.
- A strategy to mitigate the effects of trawling on benthic habitats within the New Zealand EEZ. Large representative areas (including two extant orange roughy fisheries) were selected using the best available information (the government's Marine Environment Classification, WWF-NZ's report "Shining the Spotlight on Marine Biodiversity", and industry knowledge of coral and sponge beds) and closed to trawling as Benthic Protection Areas (BPAs) by law in 2007. These BPAs, recognised as Marine Protected Areas by IUCN, close 30% of New Zealand's EEZ. At the time of introduction the BPA closures equated to 24% of the total area closed under MPAs in the world. Currently they equate to 15% of the global area under MPAs, principally due to subsequent MPA closures in Australia. Within their two zones, New Zealand and Australia together have 58% of the global area protected under MPAs.

The orange roughy Fisheries Certification Project is now nearly completed and the next stage is to contract an accredited MSC CAB to undertake full assessments against the MSC Fisheries Standard planned for July 2014.

Harvest Strategy

You have raised questions in relation to the harvest strategy employed for orange roughy.

The New Zealand Harvest Strategy Standard (HSS) provides guidance to be used in the absence of stock-specific or species-specific information, providing very conservative default targets, scaled by productivity. For slow growing species such as orange roughy a default management target of 45% B_0 is proposed in the absence of stock specific information. However, the HSS also provides that, when properly peer-reviewed scientific analyses provide estimates of reference points (or ranges) of relevance to stock management (i.e. biological reference points, management targets), then these take precedence over the default.

For orange roughy we now have model derived estimates of B_{MSY} , a biological reference point that aligns with both the New Zealand legislation and with the MSC Standard. The harvest strategy for orange roughy takes into account both estimation and implementation error as the management target (30-40% B_0) and is set above the biological reference point, B_{MSY} (~25% B_0). Further work has been contracted to undertake Management Strategy Evaluations (MSE) for each stock against the 2014 stock assessment results to better determine optimal management regimes amongst a range of management scenarios, including management target ranges and different levels of fishing mortality. This work could lead to changes in the management targets and the current harvest strategy.

The MSC Fisheries Standard is the benchmark against which New Zealand fisheries management has chosen to test these fisheries. Hence the objective of FIPs is to raise the performance of each of these four fisheries to the level where they will meet the MSC Fisheries Standard.

WWF-NZ's belief that the ratio of $B_{current}$ to B_{target} should be greater than unity (i.e. that the current biomass should always be greater than the management target) is a fine position to hold, but this differs from, and is a higher test than, the MSC Standard. The MSC Standard permits $B_{current}$ to fluctuate around the management target (i.e. as some form of average, $B_{current} = B_{target}$).

Rebuilding Timeframes

WWF-NZ's view on rebuilding plans and timeframes is somewhat premature.

A scientific programme is already underway to develop and deliver formal stock assessments for each of the four orange roughy fisheries. When these are finalised, which is expected to be within a few weeks, we will have a much better idea of the status of each orange roughy stock and which, if any, of these stocks might require a formal rebuilding plan.

The New Zealand HSS requires any stock that is estimated to be below 20% B_0 to be rebuilt within a formal time-constrained rebuilding plan that provides for stock size to be increased to the management target within a period that is not more than twice the time it would take in the absence of fishing.

The development of rebuilding plans is consistent for all New Zealand fisheries. Based on stock assessments, estimates are made of future stock sizes using future projections in which three assumptions are typically made:

- there are no major environmental trends (i.e. *status quo*),
- recruitment is based on some aspect of recent history (typically recent average recruitment); and
- some assumed pattern of catch is used.

There is no fundamental difference in approach to developing future projections for orange roughy stocks than for other fish stocks. However, long timescales and the patterns of recruitment do need to be carefully considered in interpretation.

In developing sustainable approaches to management the key should not be to define highly precautionary rebuilding plans but rather to ensure that the routine management, especially the harvest control rule and harvest strategy, ensures that stocks do not decline to a level that requires a rebuilding plan.

It pays to also bear in mind that MPI and DWG have already embarked on a management strategy to rebuild orange roughy stocks and the preliminary results of the 2013 and 2014 stock assessments indicate this has been successful in time periods much shorter than are prescribed within the MSC Fisheries Standard. We do have demonstrable real world experience in managing orange roughy stocks, including how to rebuild them if the stock size falls below the biological reference points or management targets.

Bycatch Species

In defining the smooth skate and deepwater dogfish species as 'main' bycatch species, WWF-NZ is pre-empting the role of the CAB. That the status of these stocks is uncertain is not a relevant criterion in determining whether a species is considered main or minor. CABs follow the guidance and typically use a mix of catch, value and vulnerability data to determine whether a species is considered 'main' or 'minor'. In the orange roughy pre-assessments the CAB applied a catch threshold of 5% of total catch to designate 'main' species, and a catch threshold of 2% of the total catch was used for valuable or vulnerable species.

From the data provided to the AEEF and to the CAB, the following percentages of catch can be derived for smooth skate and the two multi-species codes OSD and DWD combined.

Species/Area	NWCR	E&SCR	MEC	7A
Smooth skate	0.0019%	0.0015%	0.0043%	0.0006%
Deepwater dogfish (DWD & OSD)	1.1911%	0.8777%	0.4619%	0.7772%

Given the extremely low percentage catch of smooth skates, it would be difficult for a CAB to argue that this is a 'main species' in terms of the MSC Fisheries Standard. The deepwater dogfish catch is less well defined as it includes two multi-species codes. If catches of DWD and OSD are combined treated as one species they do not exceed the usual 2% threshold. Given this, it is unlikely that any accredited CAB would define the deepwater dogfish as 'main' bycatch species. Taking this analysis to the extreme, if it is assumed that the catch of these two codes (DWD & OSD) comprised only one species and was the same species as the largest catch of any other elasmobranch (an unrealistic assumption), this would exceed the 2% threshold in only one area (NWCR).

Thus, the only area where a CAB may make a determination of 'main' bycatch species for elasmobranchs is for the NWCR and only then under an unrealistic assumption of species identity.

Habitats and Ecosystem

The view that WWF-NZ has expressed about the MSC Standard in this area is understood.

However, it is the MSC Fisheries Standard that we are seeking to achieve. DWG accepts that this will be one of the issues for the CAB to assess.

In Summary

We note and understand WWF-NZ's views and concerns about these fisheries.

However, we differ in our views about whether these fisheries are ready for and will likely pass full MSC certification assessments in a few months' time. The pre-assessments clearly identify the key remaining issues of non-conformance are within P1 and we are currently addressing these within the MSC Fisheries Certification Project and as outlined in the Fisheries Improvement Plans.

We welcome your feedback and remain happy to meet with you at any mutually convenient time to further discuss any of these matters should you wish to do so.

Kind regards



George Clement
CEO