



9 January 2019

Note to Delegates

This note accompanies the DSCC [Briefing](#) for the Seventh Meeting of the Commission of the South Pacific Regional Fisheries Management Organisation (SPRFMO) and is intended as an overview and as a further discussion of the threshold and naturalness issues related to the bottom fishing Conservation and Management Measure (CMM), [Comm7-Prop03](#).

It would be a mistake for SPRFMO to adopt this CMM proposal. The proposal requires considerable improvement and further consideration by both the Scientific Committee (on scientific matters) and the Commission (on policy matters). It not only falls far short of but actually runs counter to the purpose and intent of the United Nations General Assembly (UNGA) resolutions, most recently reaffirmed in UNGA resolution 71/123. It is imperative that SPRFMO ensure that the biodiversity conservation commitments established through the UNGA resolutions since 2006 are effectively implemented in the region. This is especially pertinent in light of the upcoming UNGA review of bottom fisheries in 2020 and the UN negotiations on an implementing agreement for conserving marine biodiversity in areas beyond national jurisdiction (BBNJ) currently underway in which the role and efficacy of RFMOs are under discussion.

Scientific Matters

The Zonation Model and the ‘Naturalness’ Issue

New Zealand’s National Institute of Water and Atmospheric Research (NIWA) has undertaken predictive modelling for a variety of vulnerable marine ecosystem (VME) indicator species. This is good and recognized as useful by the UNGA in its resolution 71/123. However, the Zonation model, upon which the open management areas in the CMM proposed by New Zealand and Australia are based, contains two components that fundamentally run counter to the UNGA resolutions and FAO Guidelines - the so-called ‘naturalness layer’. This ‘layer’ effectively designates many areas where the habitat suitability modeling indicated VMEs are likely to occur as open to bottom fishing because they have been fished in the past. The DSCC asked during the stakeholder consultations for the zonation model to be run without the naturalness layer and fishing effort layer. That was not done.

Both the UNGA resolutions and the FAO Guidelines commit States and RFMOs to closing areas where VMEs are known or likely to occur unless bottom fisheries in the area are assessed and can be managed to prevent significant adverse impacts (SAIs). In some ways this zonation proposal continues the approach that New Zealand adopted in 2007/2008 – the ‘spatial management’ approach which divided up the footprint into ‘lightly’, ‘moderately’, and ‘heavily’ fished areas and which was based on the assumption that no management measures were needed in the so-called heavily fished areas because

any VMEs that might have existed in such areas were probably already destroyed as a result of past fishing. This is not the case, as is clearly evidenced by the widespread and extensive bycatch of VME indicator taxa in the bottom trawl fisheries over the past 10 years as reported by New Zealand to the SPRFMO Scientific Committee in 2018 (document SC6-DW09).

The Proposed Encounter Threshold: Far too high

The only explanation for why the proposed bycatch threshold levels for VME indicator species to trigger the move-on rule are so high is that New Zealand must anticipate continued, extensive interactions with VMEs in bottom trawl fisheries under the proposed CMM. In the case of stony corals - one of the most important deep-water habitat forming taxa on seamounts in the SPRFMO area - the threshold proposed is 250 kg of bycatch in a single tow before a vessel is required to stop bottom trawling and move out of an area. This figure is based on the '99th percentile' of bycatch of stony corals in the bottom trawl fisheries in the SPRFMO area in the past, which in effect means for every 100 tows in which stony corals are observed in the nets, 99 would not trigger a closure of the area but allow for continued fishing in the same spot. The proposed second biodiversity trigger has negligible impact on the result affecting only one additional tow in 11 years.

Many VME indicator species used in the modeling are habitat forming species – e.g. *Scleractinia* or stony corals - and are thus essentially proxies for a range of other species for which they provide habitat. Some or many of these may qualify as VME indicator species under the FAO Guidelines (e.g. rare species, endemics, fragile etc.) but may have not yet been identified (or discovered even), or have been recorded/identified as bycatch because they have seldom come up in the nets.

The threshold levels must be far lower and a much more precautionary move-on rule is required, especially given the importance of stony corals and other VME indicator taxa as habitat forming species for a range of other deep-water species. Many of these are themselves vulnerable to damage, depletion or destruction by bottom trawl fishing but have not been adequately identified, assessed, or catalogued, or, in some cases, possibly not yet even discovered. Moreover, when trawling over corals or other VME species the vast majority of impacted taxa would most likely either remain on the bottom or fall out of the net during haulback; a 'bycatch' of 250 kg would likely represent a far larger destruction of biodiversity.

Policy Matters

The proposed bottom fishing measure has taken the scientifically derived Zonation model, which is appropriate as part of a suite of tools for management, and has turned it into the main management measure itself, without sufficient explanation or discussion of this, and most importantly, without providing any measures for preventing SAIs on VMEs in areas the model designates as open to bottom fishing. This is completely unsupportable. It is absolutely clear from all of the resolutions adopted by the UNGA, beginning with resolution 59/25 that prevention of SAIs on VMEs is key. Even more immediately, the SPRFMO Convention itself says this, both in its objective ("safeguard the marine ecosystems in which these resources occur"), Article 20(1)(d) "measures to prevent significant adverse impacts on vulnerable marine ecosystems and precautionary measures where it cannot adequately be determined whether vulnerable marine ecosystems are present or whether fishing would cause significant adverse impacts on vulnerable marine ecosystems") and Article 10(2)(c) "advice and recommendations on the identification and distribution of vulnerable marine ecosystems, the likely impacts of fishing on such

vulnerable marine ecosystems and measures to prevent significant adverse impacts on them.” Adoption of the proposed measure would, in short, be a breach of the SPRFMO Convention.

The zonation model itself is proposed as the key management measure. Yet it is only a model, and as such needs extensive ground truthing (“all models are wrong but some are useful” – George Box). Also, critically, if the encounter protocol is triggered, the Scientific Committee’s only task is assessing whether the encounter is “consistent” with the model. This is an inappropriate test. The task of SPRFMO should instead be to close the area, undertake an evaluation of the area through the Scientific Committee, and put into place measures to prevent further degradation of an area and SAIs.

We would suggest that the reason the measure has gone so far wrong is that the Commission has in effect delegated the matter to the New Zealand (and Australian) governments, and they in turn have focused entirely on the zonation model. The workshops throughout 2018 and 2019 focused almost entirely on the zonation model: when it was time to develop the measure, there was zero consultation on the measure, and stakeholders such as the DSCC were not even given a copy. We downloaded it from the website when it was posted.

Nor, as noted in our briefing, have prior impact assessments been done. The zonation model is not an impact assessment. Impact assessments, including cumulative assessments (as per UNGA resolution 66/68 paras 129 and 135 and subsequent resolutions & FAO Guidelines para 47), should be conducted in time for review and consideration by the Scientific Committee at its meeting in 2019. We note that this is particularly important given emerging information about climate change and ocean acidification.

Recommendations

1. The Commission needs to redraft the measure to follow the UNGA system of prior impact assessments, closure of areas and imposition of measures to prevent SAIs on VMEs and the move-on rule to catch any impacts on VMEs.
2. The Scientific Committee be tasked with:
 - a. Recommending thresholds that are precautionary in its 2019 meeting.
 - b. Running the Zonation model without the Naturalness layer and assess areas likely to represent VMEs which should be protected from SAI.
3. In the meantime, New Zealand and Australia should maintain the current threshold levels for the move-on rule,¹ require all fishing vessels to stop fishing in an area when the threshold is triggered, apply the rule to all areas where bottom trawl fishing may be permitted using the requirements similar to those established by Australia for closing the area, and close areas where the habitat suitability modelling done by New Zealand indicated that VMEs are likely to occur.

¹ As set out in the New Zealand SPRFMO Area Bottom Fishery Impact Assessment, December 2008, Appendix C. VME Identification Form and associated VME Species Identification Guide implemented on New Zealand high seas bottom trawlers.