SPRFMO

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Revised Bottom Fishing Conservation and Mangement Measure

New Zealand

Revised Bottom Fishing Conservation and Management Measure (rev1)
New Zealand

Purpose

The purpose of this paper is to accompany the proposal under development for a revised bottom fishing conservation and management measure (CMM), submitted by New Zealand and Australia, providing further background and rationale for the measures included in the proposal. As advised in the letter to the Secretariat on 19 January 2018, this CMM is now being presented as an information paper for the comment of the members.

The revised CMM is comprehensive and based on a spatial management approach. It includes:

a) management areas in which bottom fishing may be conducted, based on spatial modelling that considers cumulative impacts, to be implemented consistently across the membership and differentiated by gear according to their relative benthic impact;
b) an Evaluated Area within which vulnerable marine ecosystem (VME) distribution has been predicted and mapped;
c) measures to ensure the long-term conservation and sustainable use of deep-sea fishery resources, including target fish stocks as well as non-target or associated and dependent species; and
d) measures to safeguard the marine ecosystems in which these fishery resources occur, including a VME encounter protocol and measures to prevent significant adverse impacts on VMEs, to be implemented consistently across the membership.

The revised CMM under development envisages two avenues for bottom fishing with a particular gear type in the SPRFMO Convention Area:

(1) in a Management Area[1] (within the Evaluated Area) for that gear type under this CMM, or
(2) anywhere else in the Convention Area under CMM 13-2016 (Exploratory fisheries), including within the Evaluated Area but with a gear type other than the three provided for in the revised CMM.

These elements of the CMM under development are discussed in this paper. A number of consequential amendments were also proposed to CMM 13-2016 (Exploratory fisheries) but they too have been withdrawn as a proposal for the 2018 Commission meeting.

[1] The three Management Areas are the 'open' areas, although each Management Area actually comprises several smaller, spatially discrete areas.

Spatial modelling and analyses underpinning the proposed management areas for bottom trawling

Work to underpin the development of spatial management areas as part of the revised CMM has been ongoing for several years. At the third meeting of the Scientific Committee (SC-03) in 2015, Australia, New Zealand, and Chile agreed to work together on finalising the various components. After SC-04, a detailed update was provided to the Commission in early 2017 (see Bottom Fishing CMM Information Paper), indicating that a revised bottom fishing CMM would be prepared for consideration by the Commission meeting in early 2018 or, if this proves difficult, a report on progress (paragraph 36). That paper described progress on the two key pieces of work required to develop candidate spatial management areas: the mapping of vulnerable marine ecosystems (VMEs); and the use of spatial decision-support software to design open and closed areas that would prevent significant adverse impacts on VMEs and provide for a fishery.

Records of the location or density of VMEs or VME indicator taxa such as reef-forming corals within the SPRFMO Convention Area are sparse and inadequate to map the distribution of VMEs directly. This means that predictive models are required to map VMEs. During 2017, New Zealand concluded the work it has been conducting for many years, generating models that cover the area from the South Tasman Rise in the west to the southern tip of the Louisville Ridge in the east (Figure 1). All available biological, physical and chemical information from depths between 200 and 3000 metres was used to predict habitat suitability (and the likely distribution) of a variety of VME indicator taxa (e.g., Figure 2).

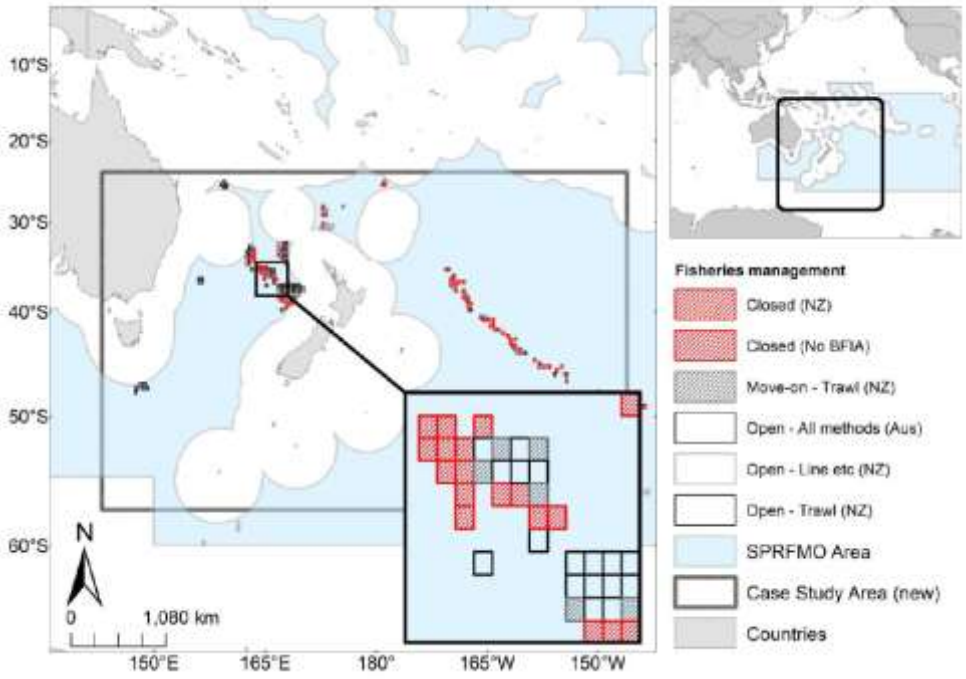

Figure 1: Location of the area within which the distribution of VME indicator taxa was modelled (grey box) overlaid with existing open, closed, and move-on management blocks.

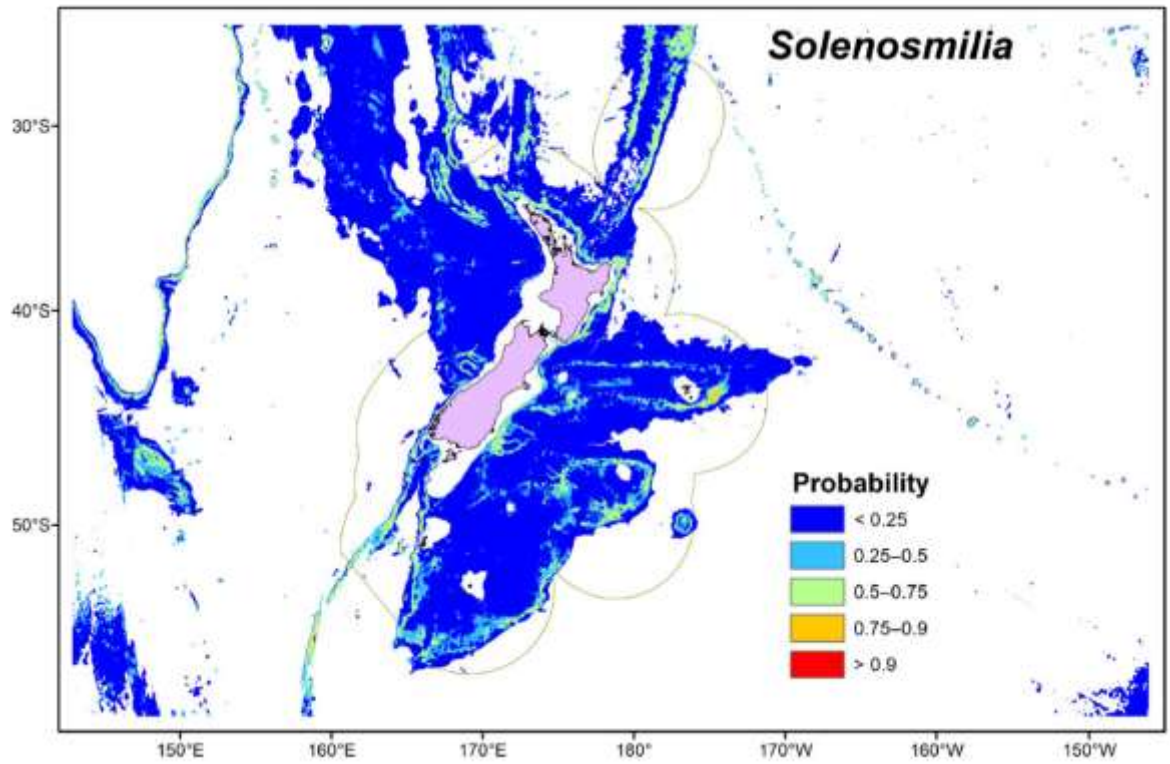

Figure 2: Example model predictions of habitat suitability for the stony coral *Solenosmilia variabilis*. Only information outside EEZs was used in the design of candidate spatial management areas for the bottom fishing CMM.

The modelled distribution maps of VME indicator taxa and the reported distribution of fishing can be used within spatial decision-support software to prioritise areas to be closed to fishing (to prevent significant adverse impacts on VMEs) and areas to be opened to fishing (to provide for a viable fishery). New Zealand has been using Zonation software (Moilanen et al. 2011) for this purpose because it provides a flexible and powerful tool for policy makers, scientists and stakeholders to explicitly consider the costs and benefits of opening or closing particular areas to bottom fishing.

In the months leading up to the fifth meeting of the Scientific Committee (SC-05) in September 2017, New Zealand and Australia convened five workshops (a meeting of the Scientific Committee Deep Water Working Group, chaired by Chile in May 2017 in Hobart, primarily scientific, and four workshops in Wellington in July-August 2017 involving New Zealand and Australian officials and scientists and domestic stakeholders) to guide the development of appropriate models to predict the distribution of VME indicator taxa (taxa to be included are summarised in Table 1) and agree on the objectives and key settings for the application of Zonation software. The focus of these (and subsequent) workshops was primarily on bottom trawling because it is widely acknowledged that the impact of this method on benthic habitat (and VMEs) is much greater than the impact of midwater trawling for bentho-pelagic species and all bottom line methods.

Table 1: VME indicator taxa for which habitat suitability maps were generated for inclusion in Zonation analyses.

Taxon	Common name	Modelling approach
Demospongiae	Sponges	Modelled as one group
Hexactinellidae	Sponges	Modelled as one group
Alcyonacea (including Gorgonacea)	Soft corals and sea fans	Modelled as one group
Pennatulacea	Sea pens	Modelled as one group
Antipatharia	Black corals	Modelled as one group
Stylasteridae	Hydro corals	Modelled as one group
Scleractinia	Stony corals	Modelled separately for *Enallopsammia rostrata, Goniocorella dumosa, Madrepora oculata, Solenosmilia variabilis*

The outputs from these workshops and other research relevant to the revised CMM were considered in detail by SC-05 who appreciated during discussions that significant improvements in the protection of VMEs could probably be achieved at reduced cost to the fishing industry. SC-05 **agreed** that the scientific approach was appropriate and, in particular, in its report, SC-05:

- **Noted** (para 108) the substantial progress made in capacity development and agreement on analytical methods that can be used in the design of candidate spatial management areas to meet the objective of the SPRFMO Commission;
- **Agreed** (para 108) that the analytical approach using Zonation decision-support software is scientifically defensible and appropriate;
- **Agreed** (para 111) that the proposed spatially explicit bottom fishing impact evaluation methodology is appropriate for assessing the impacted area, intensity of impact by location, and likely impact on benthic epifauna;
- **Noted** (para 114) that further work is required and New Zealand and Australia will continue to progress the development of a revised bottom fishing CMM in order to submit a proposed draft CMM to the Commission meeting in early 2018;
- **Agreed** (para 108, 114) to convene or otherwise support … an additional workshop in October / November 2017 to finalise the Zonation analyses and oversee scientific analyses required to underpin the design of candidate spatial management areas.

Following SC-05, and in line with its advice, New Zealand convened two further stakeholder workshops in Wellington in November 2017 to finalise the Zonation analyses that would provide the basis for informing the design of candidate spatial management areas. Australian and New Zealand stakeholders, and both scientific and policy personnel from both nations were included in these meetings. As with previous stakeholder workshops, the focus of the discussions was around maps showing relative priorities for fishing and protection of VMEs (e.g., Figure 3), and the relative performance of different candidate spatial management areas offered by New Zealand officials as a basis for

discussion. Two of the sets of candidate areas were designed using automated GIS procedures using a fixed geographical grid; one was designed to select areas of low biodiversity value to open for fishing, the other was designed to select areas of high value for fishing. A third set of candidate areas was designed by officials by combining the two automated selections and "nuancing" the boundaries to achieve better protection for VMEs and better access for the fishery. Performance of candidate spatial management areas was assessed from both a fishery and conservation perspective in Zonation using conservation benefit curves (e.g., Figure 4) and summary tables (having the type of information shown in Table 2). These were presented to stakeholders for their information and feedback.

Following the feedback from the various workshops and additional discussions with scientists, experts and stakeholders, New Zealand officials and scientists from key departments worked together to design the final proposals contained in the draft CMM. In particular, the proposed open areas were further refined to ensure they were large enough to allow trawl fishing operations to be conducted following industry feedback. The performance of the revised proposed areas for protecting VMEs and providing for a viable fishery was then reassessed (results shown in Table 2).

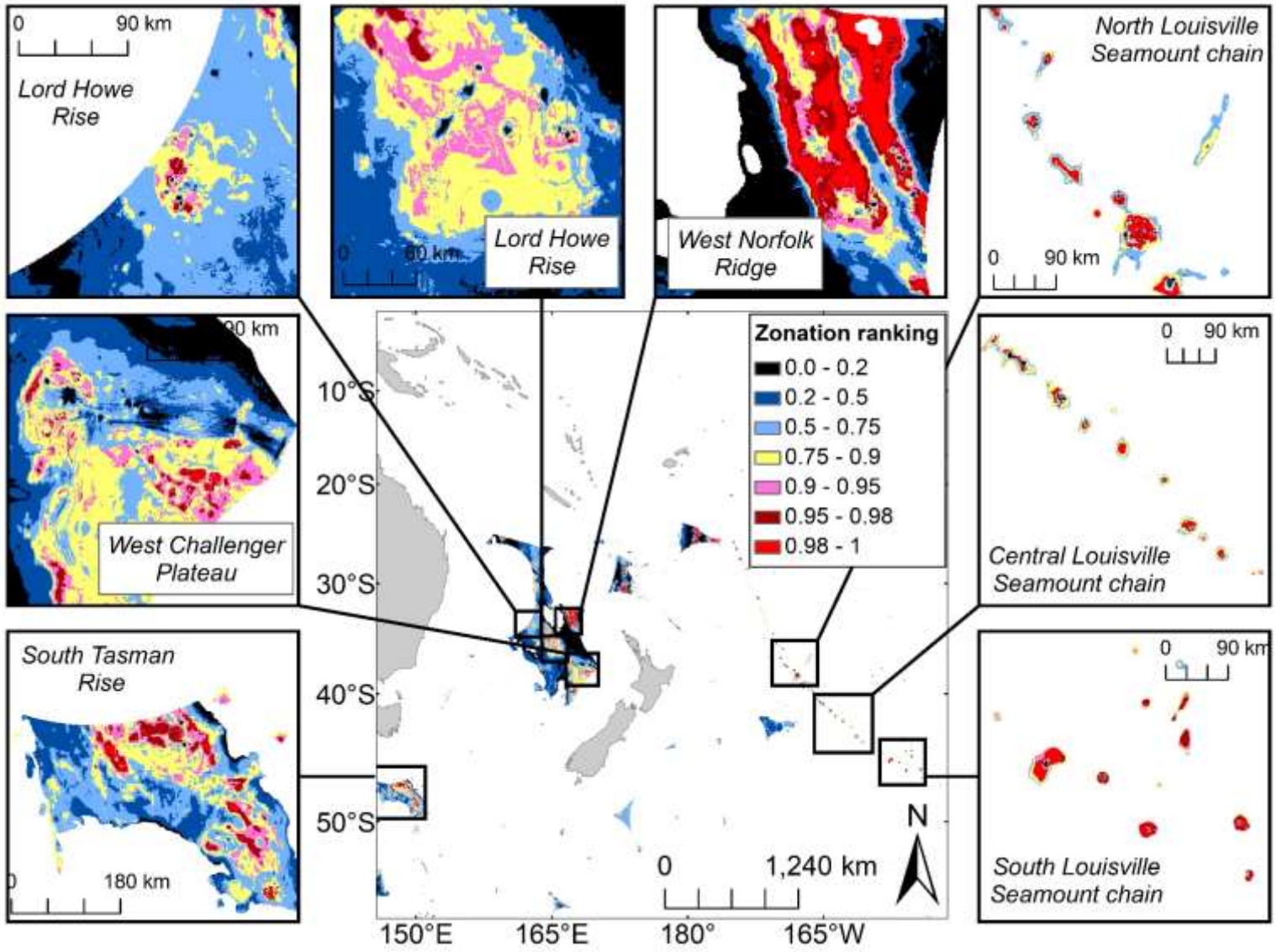

Figure 3: Example output maps from the Zonation spatial decision-support software showing priority areas for protection of VMEs. In this example, shades of red indicate areas of high priority for protection. See Table 1 for taxa included in this analysis.

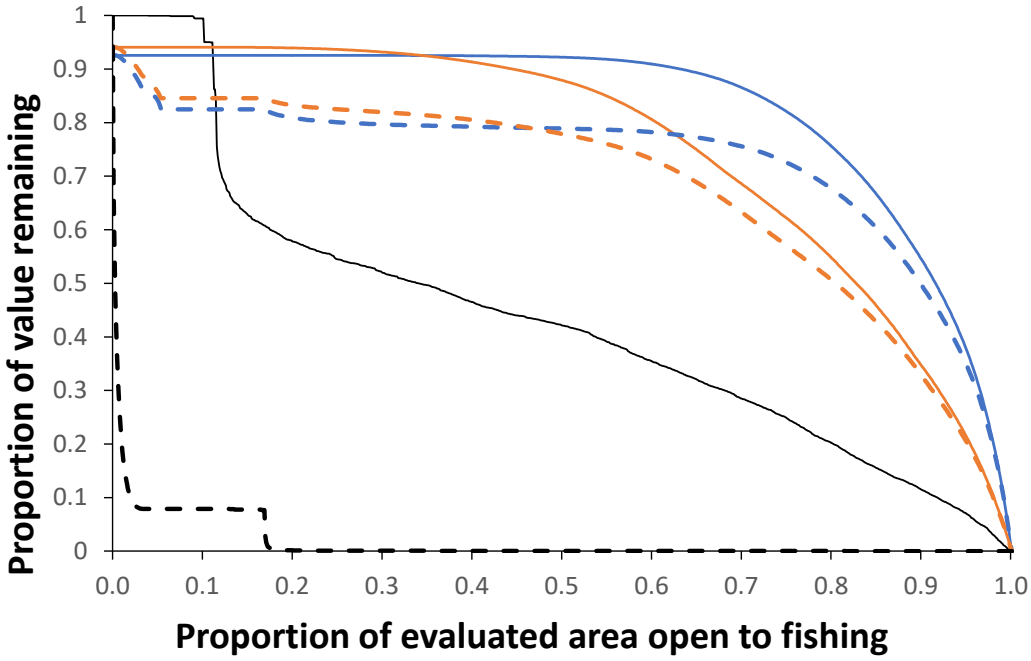

Figure 4: Example average conservation benefit curves used by stakeholders to understand the likely performance of candidate spatial management areas for bottom trawls. In this example, blue lines relate to average protection for stony corals, orange lines relate to average protection for other VME indicator taxa, and black lines relate to the "cost" to the fishing industry in terms of space wherein fishing would be prohibited. Solid lines relate to models where costs to the fishing industry are ignored and dotted lines relate to models where those costs are taken into account. See Table 1 for taxa included in the analysis.

Table 2: Estimated performance of the proposed spatial management measures for bottom trawl compared with the existing measures implemented by Australia and New Zealand. Note the greatly improved protection for predicted VME indicator taxa provided by the proposed measures and the slightly lower "cost" to the fishing industry in the main fishery areas. Louisville means Louisville Seamount Chain.

Location	Percent of fishing industry value layer unavailable ("cost")		Overall percent of VME habitat protected		Percent of stony coral habitat protected		Percent of habitat for other VME indicator taxa protected	
	Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed
Overall	8.7	7.9	65.4	84.1	61.9	83.0	67.6	84.9
Tasman Sea	10.9	2.9	61.0	86.5	56.1	86.1	64.2	86.7
Louisville	6.3	12.7	56.2	74.4	51.8	72.5	59.1	75.6
Other areas	95.8	100.0	86.2	100.0	84.9	100.0	87.1	100.0

It can be seen from Table 2 that the proposed spatial management measures for bottom trawl would provide substantially greater protection for stony corals and other VME indicator taxa than the existing management measures implemented by Australia and New Zealand. Overall, the proportion of the distribution of VME indicator taxa protected from any adverse effects of bottom trawl would increase from 65% to 84% were the proposed measures to be implemented. There is some regional variation in this proportion; about 87% of the distribution of VME indicator taxa would be protected in the Tasman Sea fishery areas compared with about 74% on the Louisville Seamount Chain. The average proportions of stony corals and other VME indicator taxa likely to be protected are similar.

Although the Zonation analyses and priority maps used to design the proposed spatial management measures for bottom trawl were based on data for stony corals and six other VME indicator taxa, the performance of the proposed open and closed areas for other biological and ecological features can also be estimated. For instance, an estimated 84% of the distribution of "rare or unique" species is outside of the areas proposed to be open to bottom trawl, compared with 59% under the existing measures, and 100% of hydrothermal vents would be protected. These species and features were not considered useful VME indicators for direct inclusion in the analysis but were identified through the stakeholder workshops as features that ought to be assessed. Similarly, of the seven Ecologically or Biologically Significantly Areas (EBSAs) within the western SPRFMO area, only EBSA17 (covering part of the Louisville Seamount Chain) has any overlap (only 2% of the total area of EBSA17) with the areas proposed to be open to bottom trawl.

The "cost" to the fishing industry of implementing the proposed spatial management measures, in terms of the access to fishing locations they value for bottom or midwater trawling, is estimated to be somewhat lower than the "cost" of the existing measures. Overall, the "cost" of the proposed measures would involve 7.9% of the area the industry values for trawling not being available to them compared with 8.7% under the existing measures. There are quite large differences between locations. In the Tasman Sea, the industry currently has no access to 10.9% of the area they value for trawling and this would decline to just 2.9% under the proposed measures. On the Louisville Seamount Chain, industry currently has no access to 6.3% of the area they value for trawling and this would increase to 12.7% under the proposed measures. The increased "cost" to the industry and the lower proportion (compared with the Tasman Sea) of the distribution of VMEs that would be protected under the proposed measures is an indication of the relatively close proximity of areas of high fishery value and high likelihood of supporting VMEs on the Louisville Seamount Chain. This closeness makes it more difficult to design practical and effective spatial management areas on the Louisville Seamount Chain than it is in the Tasman Sea.

Spatial management areas for other fishing methods

The workshops and the use of decision-support software Zonation were focussed primarily on bottom trawling because it is widely acknowledged that the impact of this method on benthic habitat (and VMEs) is much greater than the impact of midwater trawling for bentho-pelagic species and all bottom line methods. Proposed management areas for these other methods were developed after the proposed areas for bottom trawl had been finalised. For midwater trawling for bentho-pelagic species, the areas are mostly the same as for bottom trawl, but additional open areas were added in the northern Tasman Sea to provide for fishing in areas of know high value for this method while avoiding areas of particularly high priority for protecting VMEs. For bottom line fisheries, additional open areas with simple boundaries based on the existing open blocks were added in the Tasman Sea. Given the very low impact of this method on VMEs, the proposed open areas were designed to cover existing open blocks for Australia and New Zealand modified only to avoid unfished areas of high priority for protecting VMEs. It should be noted that the proposed open areas for bottom line fishing have a small overlap with EBSA15, South Tasman Sea.

VME encounter protocol

Consistent with the United Nations General Assembly resolutions noted in the preamble, and the FAO Deep-sea Fisheries Guidelines, the revised CMM incorporates a protocol in the event that specific thresholds of VME indicator taxa are encountered by vessels engaged in bottom fishing in the SPRFMO Convention area.

SC-05's advice was followed in designing the VME encounter protocol, in that the threshold for the move-on rule was set at a level that should be triggered only following more than one encounter involving weights of bycatch of benthic fauna that would likely indicate the spatial models used to predict the distribution of VME taxa are misleading. In other words, this protocol ensures that there is an immediate response mechanism for unexpected interactions that does not require the longer process necessary for the Commission to review the boundaries of the Management Areas.

In the absence of data allowing the calculation of biomass-derived thresholds (e.g. taxa-specific biomass estimates, VME patch size estimates, taxon-specific catchability, probability of encounter with bottom trawl gear, etc.), calculations were based on observed benthic bycatch of VMEs from the New Zealand bottom trawl fishery. The data explored included 4071 tows with records of benthic bycatch taken by observers in the SPRFMO Area between 2012 and 2017. Only trawls for orange roughy were used, and VME indicator taxa were assessed using those taxa identified by Parker et al. (2009) for VME encounter protocols (Table 3). It is likely there are spatial differences in the bycatch of VME taxa that would warrant more detailed analysis but, for this analysis, all data were pooled to provide consistent thresholds across all areas (Tasman Sea and Louisville Seamount Chain).

Percentiles for *Alcyonacea*, *Gorgonacea*, *Porifera*, and *Scleractinia* (taxa with larger bycatch weights) were taken directly from the sorted data and no interpolation was used.

The 10th, 5th, 3rd, 2nd and 1st percentiles were calculated, and potential thresholds were based on the 2nd percentile (Table 4). For taxa with lower bycatch weights and fewer records (Antipatharia, Pennatulacea, Anthoathecatea, Brisingida), weight thresholds were not considered appropriate and a better approach was to include these taxa in a count for each tow, as in the current New Zealand implementation. A trigger of five high-level taxa was considered reasonable (compared with three in the current New Zealand implementation). If the current level of fishing effort (roughly 1,000 bottom trawl tows each year) and the distribution of fishing do not change much, it should be expected that these thresholds will lead to the move-on rule being triggered up to about 20 times each year.

Table 3: VME indicator taxa identified for the southwest Pacific by Parker et al (2009)[2]

	Taxon	**Common name**
VME indicator taxa	Porifera	Sponges
	Actinaria	Anemones
	Alcyonacea	Soft corals
	Gorgonacea	Sea fans
	Pennatulacea	Sea pens
	Scleractinia	Stony corals
	Antipatharia	Black corals
	Stylasteridae	Hydro corals
VME habitat indicator taxa	Crinoidea	Sea lillies
	Brisingida	Armless stars

Table 4: Percentiles of observed catch weights for four VME indicator taxa using New Zealand bottom trawl tows in the SPRFMO Area 2012–2017. The threshold weights for these taxa are indicated in the right-hand column.

Taxa and approximate number of trawls with records	**Percentiles from 2012-2017 SPRFMO bottom trawl catches (kilograms, calculated based on ordered values from non-zero catches)**					**Suggested threshold weight for move-on rule (2-percentile rounded to nearest 10kg)**
	10%	**5%**	**3%**	**2%**	**1%**	
Alcyonacea (N ~ 150)	2	6	18.92	28.28	50.84	**30 kg**
Gorgonacea (N < 100)	5	15	40.1	40.1	40.1	**40 kg**
Porifera (N ~ 200)	7.8	15.02	20	25	80	**30 kg**
Scleractinia (N ~ 600)	10	20	30	42.4	500	**40 kg**

[2] Parker S.J.; Penney A.J.; Clark M.R. (2009). Detection criteria for managing trawl impacts on vulnerable marine ecosystems in high seas fisheries of the South Pacific Ocean. *Marine Ecology Progress Series*, 397: 309–317. (doi: 10.3354/meps08115)

The proposed CMM provides for the Scientific Committee to review the VME indicator taxa, thresholds and encounter area size (one nautical mile) contained in paragraph 35 of the proposed draft CMM no later than its 2020 meeting, to ensure their appropriateness for achieving the CMM's objective.

Marine Mammals, seabirds, reptiles, and other species of concern

The objective of the revised CMM requires an ecosystem approach to managing bottom fishing that ensures the long-term conservation of non-target and associated or dependent species. This section of the measure defines non-target and associated or dependent species as marine mammals, seabirds, reptiles (as referenced in Article 1, para f (iv) of the Convention) and other species of concern (as defined in Annex 14 of CMM 02-2017 (Data standard)). It requires vessels undertaking bottom fishing to implement existing CMMs on seabird bycatch mitigation (CMM 09-2017) and data standards (CMM 02-2017). It also seeks specific advice from the Scientific Committee on interactions of bottom fisheries with marine mammals, seabirds, reptiles and other species of concern and potential management actions. This may include consideration of risk assessments, important bird areas or other information relating to the non-target or associated or dependent species caught as bycatch by bottom fisheries.

Catch limits and monitoring

Work to inform the setting of catch limits as part of the revised CMM has been ongoing for several years. At the third meeting of the Scientific Committee (SC-03) in 2015, Australia, New Zealand, and Chile agreed to work together on finalising the various components. After SC-04, a detailed update was provided to the Commission in early 2017 (see Bottom Fishing CMM Information Paper), indicating that a revised bottom fishing CMM would be prepared for consideration by the Commission meeting in early 2018. That paper briefly described progress on the two key pieces of work required to inform catch limits for all species taken in bottom fisheries: the development of a stock assessment framework; and stock assessment modelling where sufficient data are available. These two aspects are covered below.

SC-05 considered and **adopted** (para 83) the generalised assessment framework for bottom fisheries proposed by Australia and New Zealand to provide direction for future assessment work and speed the committee's processes in developing advice for the Commission. SC-05 also **recommended** to the Commission that it agree to the nature and structure of advice on precautionary catch limits for bottom fisheries that will stem from such an assessment framework. This framework has not been populated with the relevant assessment methods, reference points, and harvest control rules that would make it operational and SC-05 therefore **requested** Members with bottom fisheries to work together on developing this detail and included the tasks in its draft workplan. Until such time as the Commission agrees to the framework and it is populated, Scientific Committee will develop advice on catch limits as required using the best available information.

The information available for the key target species, orange roughy, is insufficient to support sophisticated age-structured models. New Zealand has therefore developed Bayesian biomass dynamic models for each stock using spatially-disaggregated catch per unit of effort (CPUE) as an index of abundance. These models use the catch history from all nations and CPUE from Australian and New Zealand vessels. An alternative low-information stock assessment approach using an age-structured model was also applied using biological parameters borrowed from stock assessments of five New Zealand orange roughy stocks. That method used the catch history from all nations and an assumed maximum annual exploitation rate of 67% to estimate the minimum unfished biomass that would allow the historical catches to have been taken. The second 2017 Workshop of the SC's Deepwater Working Group (held immediately before SC-05) considered these two assessment approaches, together with a separate model exploring the reasons for differences in results between the two approaches, and **recommended** to SC-05 that all science presented to the workshop was **considered acceptable** and should be considered by the SC when providing scientific advice to support the development of a new bottom fishing conservation and management measure.

After considering the advice of its Deepwater Working Group and two summary papers from New Zealand and Australia, SC-05 **agreed** (para 114) that the scientific approach was appropriate and, in its report, developed advice for the Commission and:

- **Noted** (para 100) that the stocks on the Louisville Ridge (Louisville North, Central and South) have a lower potential of having low stock status, and **recommended** a catch limit for the whole of the Louisville Ridge of **1,140 tonnes** to apply for the area for no more than 2 years[3].
- **Noted** that the stocks in the Tasman Sea (Lord Howe Rise, Northwest Challenger Plateau, and West Norfolk Ridge) are estimated to have a higher potential of being depleted, and **recommended** a catch limit for the Tasman Sea stocks of **346 tonnes** for the area to apply for no more than 3 years[4].
- **Noted** that New Zealand will advise the Commission on an allowance for Westpac Bank which would be in addition to the limit proposed above.
- **Recommended** no allowance be included for the South Tasman Rise area, which is closed to fishing by Australian and New Zealand vessels.

These recommendations are reflected in the catch limits proposed in the revised CMM.

In the absence of specific advice from SC-05, the proposals in the revised CMM for other species taken in bottom fisheries represent a continuation of the existing restrictions for

[3] SC-05 **recommended** a significantly more precautionary approach if insufficient advancement is made in data collection and stock assessments for the relevant stocks within 2 years and that, within this group, the Louisville Central stock should be prioritised for improved data collection and stock assessment.

[4] SC-05 **recommended** a significantly more precautionary approach if insufficient advancement is made in data collection to support stock assessments for the relevant stocks in 3 years and that, within this group, the Lord Howe Rise and Northwest Challenger Plateau stocks should be prioritised for improved data collection and stock assessment.

these species. Both Australia and New Zealand currently limit their catches to the average between 2002 and 2006 (all species combined). The revised CMM proposes that the limit for each Member or CNCP be calculated as its average catch between 2002 and 2006 (all species combined) minus its average catch of orange roughy in that same period.

The revised CMM proposes that bottom fishing Members or CNCPs (as specified in Annex 2) participate in a competitive or "Olympic" fishery with weekly electronic reporting to the secretariat. Paragraph 42(g) requires Members and CNCPs to report the weekly catch of their flagged vessels electronically to the Secretariat within 48 hours of the end of each week, and paragraph 27 requires the Executive Secretary to notify all Members and CNCPs listed in Annex 2 of the CMM of the total catch taken during the reporting period, the total aggregate catch for the season to date, and an estimate of the date upon which each of the catch limits in paragraph 19 and the provisional catch limits in paragraph 20 are likely to be reached for that season. There are also provisions in paragraph 27 for all Members and CNCPs to be notified once 70% of the catch limits have been taken, and for the Executive Secretary to close the fishery one the day it is estimated that the catch limit will have been taken.

The revised CMM specifies the same minimum levels of observer coverage as the existing measure, which is 100% coverage for bottom and midwater trawling and at least 10% observer coverage for all other methods.

Assessment of proposed bottom fishing

The revised CMM establishes a centralised assessment process for proposals to undertake bottom fishing activities. This is modelled on the approach used by the Commission for the Conservation of Antarctic Marine Living Resources, particularly its Conservation Measure 22-06, adapted for the SPRFMO context that includes trawl as well as line fishing, and has a smaller Secretariat.

The aim is to determine, based on the best available scientific information, if proposed bottom fishing activities, taking account of the history of bottom fishing in the areas proposed and the cumulative impacts of the proposed activities, would contribute to having significant adverse impacts on VMEs, and to ensure that if it is determined that these activities would make such contributions, that they are managed to prevent such impacts or are not authorised to proceed.

Each Member or CNCP proposing to participate in bottom fishing activities will be required to submit to the Scientific Committee a proposed assessment based on the SPRFMO Bottom Fishery Impact Assessment Standard (SPRFMO BFIAS). SC-05 recommended to the Commission that the Scientific Committee's work plan include preparation of a revised and updated SPRFMO BFIAS for agreement no later than the Scientific Committee's meeting in 2019. The revised CMM would also require an updated proposed assessment to be submitted to the Scientific Committee where there is a

material change to the SPRFMO BFIAS or a substantial change in the fishery, such that it is likely that the risk or impact of the fishery may have changed.

The Scientific Committee must review each proposed assessment and the Commission will, based on the proposed assessment and the Scientific Committee's review and advice, determine the extent to which the proposal should be authorised to proceed. The Commission can also determine which, if any, additional measures are required pursuant to Article 20 of the Convention as well as additional precautionary measures required where it cannot adequately be determined whether VMEs are present or whether fishing could cause significant adverse impacts on VMEs.

Members and CNCPs that have previously undertaken and submitted an impact assessment consistent with paragraph 30(d) would not need to submit a further proposed assessment where these requirements have already been met.

The revised CMM provides for the Secretariat to make publicly available on the SPRFMO website all proposed assessments, as well as the Scientific Committee's review of such assessments in accordance with its usual procedures. These procedures are that the documents are uploaded to the SPRFMO website in advance of the relevant meetings, so that they are publicly available. Members, CNCPs and observers will all have access to the documents at the same time.