

7th Annual Meeting of the Commission

23-27 January, The Hague, The Netherlands

COMM7-Report ANNEX 7a CMM for the Management of Bottom Fishing in the SPRFMO Convention Area (COMM 7 - Prop 03_Rev4)

The Commission of the South Pacific Regional Fisheries Management Organisation;

RECOGNISING Article 2 of the Convention on the Conservation and Management of High Seas Fishery Resources in the South Pacific Ocean (the Convention), which provides that the objective of the Convention is, through the application of the precautionary approach and an ecosystem approach to fisheries management, to ensure the long-term conservation and sustainable use of fishery resources and, in so doing, to safeguard the marine ecosystems in which these resources occur; [New]

FURTHER RECOGNISING Articles 3(1)(a)(i) and (vii) of the Convention, which call on the Commission, in giving effect to the objective of the Convention, to adopt Conservation and Management Measures (CMMs) that take account of international best practices and protect marine ecosystems, particularly ecosystems with long recovery times following disturbance; [Source: PP1 of CMM 03-2018]

FURTHER RECOGNISING Articles 3(1)(b) and (2) of the Convention which call on the Commission to apply the precautionary approach and an ecosystem approach to the conservation and management of fishery resources under the mandate of the Convention; [Source: PP2 of CMM 03-2018]

FURTHER RECOGNISING Article 4 of the Convention in which Contracting Parties acknowledge their duty to cooperate to ensure compatibility of conservation and management measures established for fishery resources that are identified as straddling areas under national jurisdiction and the adjacent high seas of the Convention Area;

MINDFUL of Article 31(1) of the Convention which calls on the Commission to cooperate with other regional fisheries management organisations (RFMOs), the Food and Agriculture Organization of the United Nations (FAO), other specialised agencies of the United Nations and other relevant organisations on issues of mutual interest; [Source: PP3 of CMM 03-2018]

<u>RECALLING</u> that in 2007, Participants in the International Consultations on the Establishment of the South Pacific RFMO adopted voluntary interim management measures, including *inter alia*, for the management of bottom fisheries in the Convention Area; [Source: PP4 of CMM 03-2018]

NOTING United Nations General Assembly (UNGA) Resolution 61/105 which calls upon RFMOs to assess, on the basis of the best available scientific information, whether individual bottom fishing activities would have significant adverse impacts on vulnerable marine ecosystems (VMEs), and to ensure that if it is assessed that these activities would have significant adverse impacts, they are managed to prevent such impacts, or not authorised to proceed; [Source: PP5 of CMM 03-2018]

FURTHER NOTING UNGA Resolution 64/72 which calls upon RFMOs to establish and implement appropriate protocols for the implementation of UNGA Resolution 61/105, including definitions of what constitutes



evidence of an encounter with a VME, in particular threshold levels and indicator species; and to implement the FAO International Guidelines for the Management of Deep-sea Fisheries in the High Seas (FAO, 2009; FAO Deep-sea Fisheries Guidelines) in order to sustainably manage fish stocks and protect VMEs; [Source: PP6 of CMM 03-2018]

FURTHER NOTING UNGA Resolution 66/68 which encourages RFMOs to consider the results available from marine scientific research, including those obtained from seabed mapping programmes concerning the identification of areas containing VMEs, and to adopt CMMs to prevent significant adverse impacts from bottom fishing on such ecosystems, consistent with the FAO Deep-sea Fisheries Guidelines, or to close such areas to bottom fishing until such CMMs are adopted, as well as to continue to undertake further marine scientific research, in accordance with international law as reflected in Part XIII of the 1982 Convention; [Source: PP7 of CMM 03-2018]

FURTHER NOTING UNGA Resolutions 71/123 and 72/72 which call upon RFMOs to use the full set of criteria in the FAO Deep-sea Fisheries Guidelines to identify where VMEs occur or are likely to occur as well as for assessing significant adverse impacts, to ensure that impact assessments, including for cumulative impacts of activities covered by the assessment, are conducted consistent with the FAO Deep-sea Fisheries Guidelines, are reviewed periodically and are revised whenever a substantial change in the fishery has occurred or there is relevant new information, and that, where such impact assessments have not been undertaken, they are carried out as a priority before authorizing bottom fishing activities, and to ensure that CMMs are based on and updated on the basis of the best available scientific information, noting in particular the need to improve effective implementation of thresholds and move-on rules; [New – incorporates reference to 2016 UNGA bottom fishing review from UNGA resolution]

BEARING IN MIND the description in the FAO Deep-sea Fisheries Guidelines of what constitutes significant adverse impacts, factors to be considered when determining the scale and significance of an impact, what constitutes temporary impacts and factors to be considered in determining whether an impact is temporary; [New – reference to FAO Deep-sea Fisheries Guidelines paragraphs 17 to 20]

REAFFIRMING the steps already taken by the Commission to address the impacts of large-scale pelagic driftnets and all deepwater gillnets in the Convention Area, through the implementation of CMM 08-2013 (Gillnetting); [Source: PP8 of CMM 03-2018];

<u>COMMITTED</u>RECOGNISING Articles 20(1)(a) and (d) of the Convention, which provide that the CMMs adopted by the Commission shall include measures to ensure the long-term sustainability of fishery resources and promote the objective of their responsible utilisation, and to protect the habitats and marine ecosystems in which fishery resources and non-target and associated or dependent species occur from the impacts of fishing, including measures to prevent significant adverse impacts on VMEs and precautionary measures where it cannot adequately be determined whether VMEs are present or whether fishing would cause significant adverse impacts on VMEs; [New]

FURTHER RECOGNISING Article 22 of the Convention, which provides that a fishery that has not been subject to fishing or has not been subject to fishing with a particular gear type or technique for ten years or more shall be opened only when the Commission has adopted cautious preliminary CMMs in respect of that fishery, and, as appropriate, non-target and associated or dependent species, and appropriate measures to protect the marine ecosystem in which that fishery occurs from adverse impacts of fishing activities; [New]

ADOPTS the following CMM in accordance with Articles 8, 20, 21 and 22 of the Convention:



Objective

1. The objective of the CMM together with Deepwater Species CMM xx-2019 is, through the application of the precautionary approach and an ecosystem approach to fisheries management, 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, in doing so, to safeguard the marine ecosystems in which these resources occur, including inter alia the prevention of significant adverse impacts on vulnerable marine ecosystems. [Source: para 1 of CMM 03-2018]

Definitions

- For the purposes of this CMM, the term "bottom fishing" is defined as fishing using any gear type likely to come in contact with the seafloor or benthic organisms during the normal course of operations, and includes: Bottom trawl, Mid water trawl and Bottom line, as defined in paragraphs 3 to 5. [Source: para 4 of CMM 03-2018 with addition of cross-references to gear type definitions below].
 - a)3 For the purposes of this CMM, the term "Bottom trawl" which is defined as fishing using a trawl net that is designed to be pulled through the water and to come into contact with the seabed.

 [Source: New Zealand high seas permit definition]
 - b)4 For the purposes of this CMM, the term "Mid-water trawl" which is defined as fishing for bentho-pelagic species using a trawl net that is designed to be pulled through the water near the seabed and designed not to come into extended contact with the seabed. [Source: New Zealand high seas permit definition, adapted for SPRFMO context]
 - c)5 For the purposes of this CMM, the term "Bottom line" which is defined as fishing using a line to which a hook or hooks (whether baited or not) are attached and rigged to sink and fish on or near the seabed. This includes, but is not limited to, longlines, hand lines, drop lines, trot lines, and dahn lines. [Source: New Zealand high seas permit definition]
- 6 For the purposes of this CMM, the term "vulnerable marine ecosystem" (VME) means a marine ecosystem that has the characteristics referred to in paragraph 42 of, and elaborated in the Annex to, the FAO Deep-sea Fisheries Guidelines [Source: para 3 of CMM 03-2018]
- For the purposes of this CMM, the term "Evaluated Area" means those parts of the Convention Area that are within the area starting at a point of 24°S latitude and 146°W, extending southward to latitude 57° 30S, then eastward to 150°E longitude, northward to 55°S, eastward to 143°E, northward to 24°S and eastward back to point of origin (Annex 1). [New definition to allow management of bottom fisheries in area evaluated by the Scientific Committee for likelihood of vulnerable marine ecosystems].
- 8 For the purposes of this CMM, the term "Management Area(s)" means those parts of the Evaluated Area specified in paragraph 16. [New – see para 7]
- 9 For the purposes of this CMM, the term "fishing year" means the period starting 0001 hours UTC on 1 January and ending 2359 hours on 31 December in the same year. [New definition].



General provisions

- 10 This CMM applies to the entire Convention Area. [New]
- This CMM together with Deepwater Species CMM xx 2019 are adopted as cautious preliminary conservation and management measures consistent with Article 22(1) of the Convention. [New]
- This CMM together with Deepwater Species CMM xx 2019 applies to all fishing vessels flying the flag of a Member or Cooperating non-Contracting Party (CNCP) to the South Pacific Regional Fisheries

 Management Organisation (SPRFMO) engaging or intending to engage in bottom fishing in the

 Convention Area. [Source: para 2 of CMM 03-2018, and para 2 of SIOFA CMM 2017/01]
- Members and CNCPs shall prohibit vessels flying their flag from participating in bottom fishing in the Convention Area other than in accordance with the provisions of this CMM together with Deepwater Species CMM xx 2019. [Source: para 8(b) of CMM 03-2018 with "agree to" replaced by "shall"]
- Only fishing vessels duly authorised pursuant to Article 25 of the Convention and in accordance with CMM 05-2016 (Record of Vessels) that are flagged to Members and CNCPs shall participate in bottom fishing in the Convention Area. [Source: para 2 of CMM 01-2018 on Jack Mackerel]
- No Member or CNCP shall authorise vessels flying their flag to engage in any bottom fishing in the Convention Area unless
 - (a) authorisation has been given by the Commission under paragraph 23(c)(i); or
 - (b) paragraph 24 applies to the Member or CNCP; or-
 - (c) approval has been given by the Commission under paragraph 12 of CMM 13-201[6] (Exploratory Fisheries).

Bottom fishing Management Areas [New]

- The Commission hereby establishes within the Evaluated Area the following Management Areas, the coordinates for which are provided in Annex 4:
 - (a) Bottom trawl Management Area
 - (b) Mid-water trawl Management Area
 - (c) Bottom line Management Area
- Bottom fishing in the Convention Area shall occur only in the three Management Areas established in paragraph 16 and in accordance with the terms of this CMM together with Deepwater Species CMM xx-2018. CMM 13-201[6] (Exploratory Fisheries) does not apply to bottom fishing in the three Management Areas established in paragraph 16.
- 18 Notwithstanding paragraphs 13 and 17, proposals to undertake bottom fishing:
 - (a) outside a Management Area; or
 - (b) inside a Management Area using bottom fishing methods other than bottom trawl, midwater trawl or bottom line fishing; or
- (c) in a mid-water trawl Management Area using bottom trawl gear or in a bottom line Management



Area using bottom trawl or mid-water trawl gear; or

(d) inside a Management Area targeting species not previously targeted in the area the subject of the proposal proposed to be fished (unless the species has regularly been caught as part of an existing fishery);

shall be handled in accordance with CMM 13-201[6] (Exploratory Fisheries).

- Unless a Member or CNCP is fishing in an exploratory fishery established pursuant to CMM 13-201[9], Members and CNCPs shall ensure that vessels flying their flag comply with the following provisions:

 (a) Bottom trawling shall only occur in a bottom trawl Management Area;
 - (b) Midwater trawling shall only occur in a midwater trawl Management Area or a bottom trawl Management Area;
 - (c) bottom lining shall only occur in a Management Area.
- The Commission may in future establish, disestablish, or adjust the boundaries of the Evaluated Area or any Management Area, based on advice from the Scientific Committee.

Marine mammals, seabirds, reptiles and other species of concern1

- Members and CNCPs shall require vessels flying their flag and undertaking bottom fishing to implement seabird mitigation measures in accordance with CMM 09-2017 (minimising bycatch of seabirds in the SPRFMO Convention Area), and shall report annually to the Commission on bycatch rates and total bycatch estimates in accordance with CMM 02-2018 (Data Standards) and the Guidelines for Annual National Reports to the SPRFMO Scientific Committee.
- The Scientific Committee shall provide advice biennially to the Commission on:
 - (a) direct and indirect interactions between bottom fishing and marine mammals, seabirds, reptiles and other species of concern;
 - (b) any recommended spatial or temporal closures or spatially/temporally limited gear prohibitions for any identified hotspots of these species; and
 - (c) any recommended bycatch limits and/or measures for an encounter protocol for any of these species.

Assessment of proposed bottom fishing

- 23 Subject to paragraphs 18 and 24, all proposals to undertake bottom fishing in one of the Management
 Areas established in paragraph 16 shall be subject to an assessment process, based on the best
 available scientific information information and taking into account of the history of bottom fishing in
 the areas proposed and cumulative impacts of past and proposed fishing. The assessment , towill
 determine if such fishing, taking account of the history of bottom fishing in the areas proposed and
 the cumulative impacts of the past and proposed fishing, would contribute to having significant
 adverse impacts on VMEs, and to ensure that if it is determined that this fishing would make such
 contributions, that they are managed to prevent such impacts or are not authorised to proceed. The
 assessments shall follow the following procedures: [Source: CCAMLR CM 22-06, para 7]
 - (a) Each Member or CNCP proposing to participate in bottom fishing activities shall submit to the Scientific Committee a proposed assessment based onthat meets the SPRFMO

 Bottom Fishery Impact Assessment Standard (SPRFMO BFIAS²) with the best available

¹ "Other species of concern" means the list contained in Annex 14 of CMM 02-2017 (Data standards).

² As adopted at the third session of the Preparatory Conference, 2012, available at:

http://www.sprfmo.int/assets/Meetings/Meetings-before-2013/Scientific-Working-Group/SWG-06-2008/a-Miscellaneous-Documents/SPRFMO-Bottom-Fishing-Impact-Assessment-Standardagreed-Vanuatu-Fri23Sep2011-1140am.pdf



data including consideration of cumulative impacts, not less than 60 days prior to the annual meeting of the Scientific Committee. These submissions shall also include the mitigation measures proposed by the Member or CNCP to prevent such impacts.

- (b) The Scientific Committee shall undertake a review of the proposed assessment and provide advice to the Commission on:
 - as to-whether the proposed bottom fishing would contribute to having significant adverse impacts on deep sea fish stocks for which no stock assessment has been completed, bycatch species and/or VMEs and, if so,
 - whether theany proposed or additional mitigation measures would prevent such impacts.

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(b)bis In its review of the proposed assessment, the Scientific Committee may use additional information available to it, including information from other fisheries in the region or similar fisheries elsewhere. The Scientific Committee is not obliged to consider, or provide advice on, proposed assessments provided after the deadline for submission of proposed assessments contained in paragraph 23(a).

- On the basis of the Scientific Committee's review of the submitted assessment, taking into account any recommendations and advice of the Scientific Committee land in line with the precautionary approach, the Commission shall, on the basis of a proposed assessment and the Scientific Committee's review of the proposed assessment, taking into account any recommendations and advice of the Scientific Committee:
 - i. consider whether, and if applicable the extent to which, bottom fishing in the
 Management Area(s) for which the proposed assessment was conducted should be authorised;
 - <u>ii.</u> which, if any, additional measures to those proposed are required pursuant to Article 20 to prevent significant adverse impacts on VMEs;
 - iii. which, if any, additional precautionary measures are required where it cannot adequately be determined whether VMEs are present or whether fishing could cause significant adverse impacts on VMEs; and
 - iv. in relation to an application to target a species for which no total catch limit exists,
 consider an exemption for such a Member or CNCP to paragraph101 of CMM XX-2019 (Deepwater Species), bearing in mind the need to be precautionary.
- Subject to paragraph 25, Members or CNCPs that engaged in bottom fishing in the Convention Area consistently with CMM 03-2018, CMM 03-2017, CMM 4.03 or CMM 2.03 do not need to submit the proposed assessment otherwise required in paragraph 23(a) for the 2019 and 2020 fishing season.
- Members and CNCPs whose bottom fishing proposal has been authorised by the Commission under paragraph 23(c)(i) or to whom paragraph 24 applies shall ensure that an updated a proposed assessment meeting the requirements contained in paragraph 23(a) is submitted to the Scientific Committee and Commission at least every 3 years and when a substantial change in the fishery has occurred, such that it is likely that the risk or impact of the fishery may have changed. [Source: CMM]



03-2018, para 14]

- The Secretariat shall make publicly available on the SPRFMO website all proposed-submitted
 assessments assessments in accordance with its
 usual procedures, and shall invite comment on proposed assessments. [Source: CMM 03-2018, para 15]
- The Scientific Committee shall update the SPRFMO BFIAS no later than 2019 and regularly review every 5 years thereafter to ensure that it reflects, as appropriate, best practice—and the objectives of this—CMM. -[New]
- 27bis Members and CNCPs who are engaged in fishing pursuant to paragraph 24 are required to submit a revised Bottom Fishing Impact Assessment to the Scientific Committee no later than its annual meeting in 2020 according to the procedure in paragraph 23.

Encounters with potential VMEs

- For the purposes of this section of the CMM, the term "VME indicator taxa" means any benthic organism listed in Annex 5. [Source: CCAMLR CM 22-07, para 2(ii)]
- For the purposes of this section of the CMM, the term "Encounter" means catch of a VME indicator taxa above threshold levels as set out in paragraph 30. [source: NAFO Article [x]]
- Where VME indicator taxa are encountered in any one tow at or above the threshold limits in Annex 6(A), or 3 or more different VME indicator taxa at or above the weight limits in Annex 6(B), Members and CNCPs shall require any vessel flying their flag to:
 - (a) cease bottom fishing or midwater trawling immediately within an encounter area of one (1) nautical mile either side of the trawl track extended by one (1) nautical mile at each end;
 - (b) report the encounter immediately to the Member or CNCP whose flag the vessel is flying and the Secretariat, in accordance with the Guidelines for the preparation and submission of notifications of encounters with potential VMEs, contained in Annex 7. [Source: CCAMLR CM 22-07, para 4 and SIOFA CMM 2017/01, para 12];
- In the event of an encounter, Members and CNCPs shall cooperate to the extent possible with the Secretariat and other Members or CNCPs engaged in bottom trawl or midwater trawlingfishing to exchange such data and information as may be relevant to the Scientific Committee's consideration of the encounter area.
- On receipt of a notification under paragraph 30(b) the Secretariat shall:
 - (a) record the location of the encounter area; and



- (b) within three (3) working days of receipt, notify the Commission VMS service provider³ and all flag

 States with fishing vessels participating in bottom fishing in the Convention Area that bottom

 fishing trawling and midwater trawling are is suspended in the encounter area in paragraph 30(a).
- Members and CNCPs shall ensure that vessels flying their flags do not bottom fish in an encounter area notified under paragraph 32(b) unless and until such time as the Commission determines management actions under paragraph 37 that would permit the resumption of bottom fishing in the area.
- Members and CNCPs shall submit to the Scientific Committee a detailed description of each encounter by vessels flying their flag that resulted in a temporary suspension pursuant to paragraph 30, and an analysis of whether the encounter was consistent with a comparison of the encounter with the existing model prediction, and suggested management actions to prevent significant adverse impacts on VMEs⁴. scientific models used to underpin the spatial management approach applied to prevent significant adverse impacts on VMEs in the SPREMO Convention Area.
- The Scientific Committee, at its next annual meeting, shall review all encounters reported pursuant to paragraph 30(b) and provide advice to the Commission on whether each encounter reviewed is consistent with the scientific models applied to prevent significant adverse impacts on VMEs in the SPREMO Convention Area and determine whether any encounters were unexpected based on the relevant VME habitat suitability models, and provide advice on appropriate management actions including those proposed by the relevant Member or CNCP under paragraph 33 and any other management actions the Scientific Committee considers appropriate. This review should include consideration of:
 - (a) the detailed analyses provided by a Member or CNCP pursuant to paragraph 33;
 - (b) historical fishing events within 5nm of the encounter tow, in particular, any previous encounters, and all information on benthic bycatch;
 - (c) model predictions for all VME indicator taxa;
 - (d) details of the relevant fishing activity, including the bioregion; and
 - (e) any other information the Scientific Committee considers relevant.
- 35 [If the Scientific Committee concludes that the encounter was not inconsistent with the scientific models applied to prevent significant adverse impacts on VMEs in the SPRFMO Convention Area [TB1], the encounter area suspension shall be lifted and the Secretariat shall, within five (5) working days of the adoption of the report of the Scientific Committee meeting, notify the VMS service provider and all flag States with fishing vessels participating in bottom fishing in the Convention Area.]
- 36 If the Scientific Committee concludes that the encounter was not consistent with the scientific models which underpin the spatial management approach applied to prevent significant adverse impacts on VMEs in the SPREMO Convention Area the suspension on fishing with bottom trawl and midwater trawl gears in the encounter area established pursuant to paragraph 30(a) shall remain in effect until management actions are determined by the Commission.
- Taking into account the advice and information received from the Scientific Committee, at its nextannual meeting the Commission shall determine management actions for any encounter area referred to in paragraph 36. In determining management actions, the Commission acknowledges that a singleencounter does not in and of itself provide rationale for ongoing suspension of bottom trawling and

³ As at January 2019, this is CLS.

⁴ Relevant outputs from habitat suitability models (e.g. shapefiles of predicted distributions) will be made available to Members.



midwater trawling.] Taking into account the Scientific Committee's determination of whether the encounter was unexpected based on the relevant VME habitat suitability models, and advice on management actions, at its next annual meeting, the Commission shall determine management actions for each encounter area. Management actions determined by the Commission will apply as appropriate, unless otherwise determined, from the conclusion of the relevant Commission meeting.

- Members and CNCPs shall submit to the Secretariat annual reports of all benthic bycatch data from vessels flying their flag, consistent with CMM 02-2018 (Data Standards), to enable an ongoing review of the effectiveness of the spatial management arrangements. By no later than its annual meeting in 2019, the Scientific Committee shall develop a review process to provide for ongoing monitoring and feedback.
- At its annual meeting in 2019 and 2020, the Scientific Committee shall review and provide advice on the effectiveness of the applied management measures, including:
 - VME indicator thresholds:
 - The number of encounters;
 - The number of encounters that were expected based on habitat suitability models;
 - The appropriateness of the management approach (e.g. scale);
 - Additional relevant VME indicator species that have not been modelled, assessed or for which thresholds have not been established;
 - Refinement of the encounter protocol;
 - Measures to prevent the catch and/or impacts on rare species; and
 - Anything else the SC considers relevant

to ensure the measure is achieving its objective and the objectives of the Convention.

- 39 bis. From 2020, the Scientific Committee shall review all available data and provide advice on the ongoing appropriateness of the management measures in this CMM to ensure the measure continues to achieve its objective and the objectives of the Convention. The Scientific Committee shall review the VME indicator thresholds and encounter area size contained in paragraph 30 no later than its 2021 meeting, and regularly thereafter, to ensure their appropriateness for achieving the objective of this CMM.
- 40 Nothing in this CMM shall prevent Members or CNCPs from taking additional measures compatible with this measure in relation to encounters with VME indicator taxa below the threshold in paragraph 30.

Monitoring and control of bottom fishing activities

- 41 Members and CNCPs shall:
 - (a) ensure that vessels that fly their flag and participate in bottom fishing:
 - i. are equipped and configured so that they can comply with all relevant SPRFMO CMMs
 - ii. act in accordance with CMM 06-2018 (Commission VMS), polling once every 30 minutes for the duration of the trip notwithstanding para 3(b)(i) of CMM 02-2018 (Data standards);⁵
 - <u>iii.</u> report tow or set start and end position to 1/100th degree resolution decimal format, notwithstanding the Annexes of CMM 02-2018 (Data standards)

⁵ This obligation shall apply to all trips in which the vessel departs port with the intention of entering the Convention Area. The term "duration of the trip" commences from the time the vessel departs from port, includes all times that it is in the Convention Area and concludes once it enters port.



- (b) only authorise vessels flying their flag to fish in the Convention Area where they are able to exercise their responsibilities as a flag State under the Convention and all relevant SPRFMO CMMs;
- (c) ensure that they meet the level of observer coverage specified in this CMM to collect data in accordance with this and other CMMs;
- (d) prohibit vessels flying their flag from participating in bottom fishing if the agreed minimum required data submissions have not been provided in accordance with the agreed subset of the vessel identification data requirements;
- (e) in respect of each vessel that flies their flag and participates in bottom fishing, submit VMS reports in an electronic format to the Secretariat in accordance with CMM 06-2018.
- report, in an electronic format the monthly catches of their flagged vessels participating in bottomfishing to the Secretariat within 20 days of the end of each month, consistent with the SPRFMO Datasubmission templates.
- 42 The Executive Secretary shall circulate monthly catch reports (from data provided in accordance with paragraph 41(f)) aggregated by flag State and month, to all Members and CNCPs as soon as possible, once collated. [TB2]

Observer Coverage

- All Members and CNCPs participating in bottom fishing pursuant to this CMM shall ensure scientific observer coverage of trips for vessels flying their flag consistent with the minimum observer coverage levels set out in Annex 8 and shall ensure that such observers collect and report data as described in CMM 02-2018 (Data Standards). [Source: CMM 01-2018 para 22 for Jack Mackerel]
- Nothing in this measure shall affect the rights of Members and CNCPs to apply higher levels of observer coverage than set out in Annex 8, in accordance with their domestic requirements. [Source: CMM 09-2017 on Seabirds, para 12]

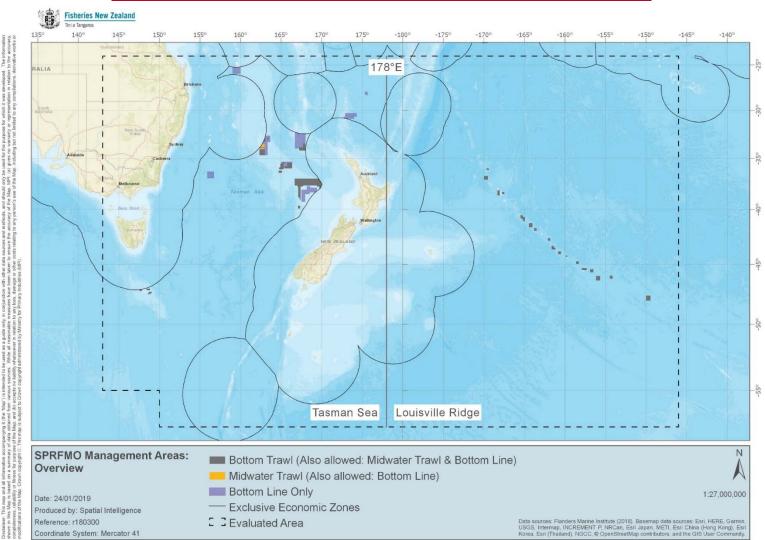
Electronic Monitoring [New]

45 Members and CNCPs may also require vessels flying their flag to have an electronic monitoring system installed and operating that is capable of recording (including visually) and storing recordings of fishing events for data collection and verification purposes.

Review

The Commission shall review this CMM in 2021 and at least every 3 years thereafter, and in doing so, take appropriate action to meet the objectives of this CMM and the Convention, in view of the advice and recommendations of the Scientific Committee. Each such review shall consider the protocol for encounters with VME indicator taxa and the appropriateness of applied management measures. This CMM shall be reviewed at least every five (5) years by the Commission. The review shall include a review of [insert reference to provisions on the sharing of TACs] and the protocol for encounters with VME indicator taxa. Such review shall take into account the advice of the Scientific Committee and the CMM's effectiveness in achieving its objective.

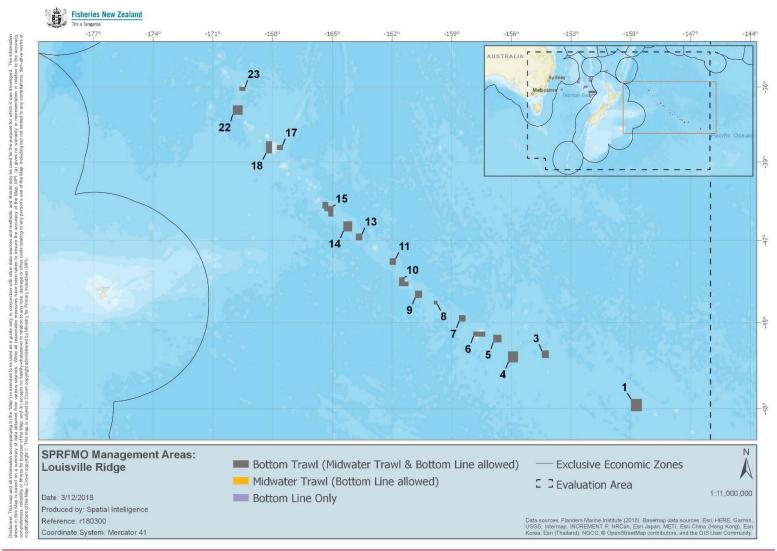




Annex 1: SPRFMO Bottom Fishing Evaluated Area and Bottom Fishing Management Areas



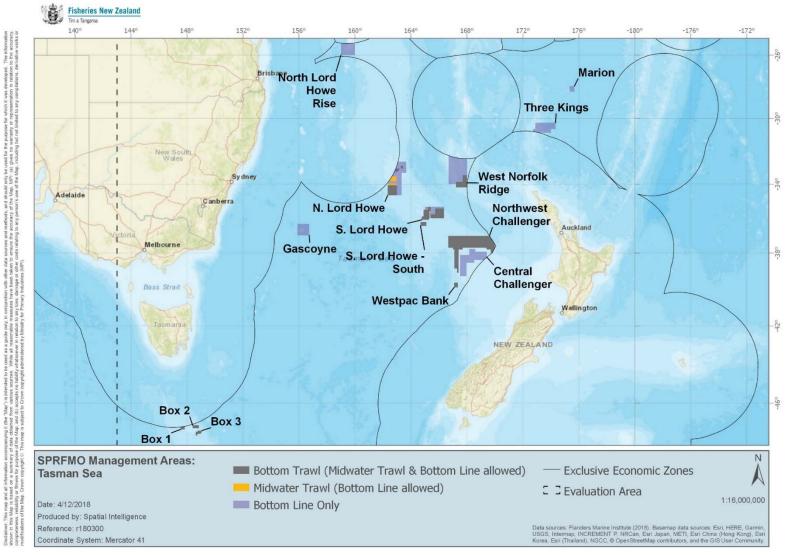
Annex 2: SPRFMO Bottom Fishing Management Areas for the Louisville Ridge







Annex 3: SPRFMO Bottom Fishing Management Areas for the Tasman Sea





Annex 4: Coordinates for each bottom fishing management area⁶

(a) Bottom Trawl Management Area coordinates

<u>Name</u>	Region	Method	<u>Latitude</u>	Longitude	EEZ Direction
<u>1</u>	<u>Louisville</u>	<u>BT</u>	48°05.000′S	150°00.000′W	
1	<u>Louisville</u>	<u>BT</u>	47°40.000′S	150°00.000′W	
1	<u>Louisville</u>	<u>BT</u>	47°40.000′S	149°27.000′W	
1	<u>Louisville</u>	<u>BT</u>	48°05.000′S	149°27.000′W	
<u>5</u>	<u>Louisville</u>	<u>BT</u>	45°42.000′S	<u>156°55.000′W</u>	
<u>5</u>	<u>Louisville</u>	<u>BT</u>	45°26.000′S	<u>156°55.000′W</u>	
<u>5</u>	<u>Louisville</u>	<u>BT</u>	45°26.000′S	<u>156°30.000′W</u>	
<u>5</u>	<u>Louisville</u>	<u>BT</u>	45°42.000′S	156°30.000′W	
<u>7</u>	<u>Louisville</u>	<u>BT</u>	44°57.950′S	<u>158°38.000′W</u>	
7	<u>Louisville</u>	<u>BT</u>	44°43.950′S	158°38.000′W	
7	<u>Louisville</u>	<u>BT</u>	44°43.950′S	158°18.000′W	
<u>7</u>	<u>Louisville</u>	<u>BT</u>	44°57.950′S	158°18.000′W	
<u>9</u>	<u>Louisville</u>	<u>BT</u>	44°07.000′S	<u>160°50.820′W</u>	
<u>9</u>	<u>Louisville</u>	<u>BT</u>	43°51.183′S	<u>160°50.820′W</u>	
<u>9</u>	<u>Louisville</u>	<u>BT</u>	43°51.183′S	<u>160°29.235′W</u>	
9	<u>Louisville</u>	<u>BT</u>	44°07.000′S	<u>160°29.235′W</u>	
<u>10</u>	<u>Louisville</u>	<u>BT</u>	43°41.440′S	161°39.000′W	
<u>10</u>	<u>Louisville</u>	<u>BT</u>	43°22.000′S	161°39.000′W	
<u>10</u>	<u>Louisville</u>	<u>BT</u>	43°22.000′S	<u>161°21.770′W</u>	
<u>10</u>	<u>Louisville</u>	<u>BT</u>	43°31.370′S	<u>161°21.770′W</u>	
<u>10</u>	<u>Louisville</u>	<u>BT</u>	43°31.370′S	161°10.170′W	
<u>10</u>	<u>Louisville</u>	<u>BT</u>	43°41.440′S	161°10.170′W	
<u>11</u>	<u>Louisville</u>	<u>BT</u>	42°54.500′S	<u>162°07.000′W</u>	
<u>11</u>	<u>Louisville</u>	<u>BT</u>	42°40.000′S	<u>162°07.000′W</u>	
<u>11</u>	<u>Louisville</u>	<u>BT</u>	42°40.000′S	<u>161°48.000′W</u>	
<u>11</u>	<u>Louisville</u>	<u>BT</u>	42°54.500′S	161°48.000′W	
<u>13</u>	<u>Louisville</u>	<u>BT</u>	42°00.000′S	<u>163°29.500′W</u>	
<u>13</u>	<u>Louisville</u>	<u>BT</u>	42°00.000′S	<u>163°49.000′W</u>	
<u>13</u>	<u>Louisville</u>	<u>BT</u>	41°45.000′S	163°49.000′W	
<u>13</u>	<u>Louisville</u>	<u>BT</u>	41°45.000′S	163°29.500′W	
<u>14</u>	<u>Louisville</u>	<u>BT</u>	41°40.000′S	164°00.000′W	
<u>14</u>	<u>Louisville</u>	<u>BT</u>	41°40.000′S	164°27.000′W	
<u>14</u>	<u>Louisville</u>	<u>BT</u>	41°17.000′S	164°27.000′W	
<u>14</u>	<u>Louisville</u>	<u>BT</u>	41°17.000′S	164°00.000′W	
<u>15</u>	<u>Louisville</u>	<u>BT</u>	40°42.000′S	164°56.400′W	
<u>15</u>	<u>Louisville</u>	<u>BT</u>	41°06.000′S	164°56.400′W	

⁶ For the avoidance of doubt, no Management Area shall include any area under within the exclusive economic zone of a Member, CNCP or non-Member.



<u>15</u>	<u>Louisville</u>	<u>BT</u>	41°06.000′S	<u>165°12.000′W</u>
<u>15</u>	<u>Louisville</u>	<u>BT</u>	40°54.000′S	165°12.000′W
<u>15</u>	<u>Louisville</u>	<u>BT</u>	40°54.000′S	165°24.000′W
<u>15</u>	Louisville	BT	40°48.000′S	165°24.000′W
<u>15</u>	Louisville	BT	40°48.000′S	165°30.000′W
<u>15</u>	Louisville	BT	40°32.897′S	165°30.000′W
<u>15</u>	Louisville	BT	40°32.897′S	165°12.000′W
<u>15</u>	Louisville	BT	40°42.000′S	165°12.000′W
<u>17</u>	Louisville	BT	38°32.000′S	167°47.067′W
<u>17</u>	<u>Louisville</u>	<u>BT</u>	38°20.013′S	167°47.067′W
<u>17</u>	<u>Louisville</u>	<u>BT</u>	38°20.013′S	<u>167°29.000′W</u>
<u>17</u>	<u>Louisville</u>	<u>BT</u>	38°32.000′S	<u>167°29.000'W</u>
<u>18</u>	<u>Louisville</u>	<u>BT</u>	38°40.000′S	<u>168°01.785′W</u>
<u>18</u>	<u>Louisville</u>	<u>BT</u>	38°40.000′S	<u>168°20.000′W</u>
<u>18</u>	<u>Louisville</u>	<u>BT</u>	38°11.013′S	<u>168°20.000′W</u>
<u>18</u>	Louisville	BT	38°11.013′S	168°01.785′W
Northwest	Challenger	BT	38°00.000′S	169°47.848′E
Challenger	Plateau			
Northwest	<u>Challenger</u>	<u>BT</u>	38°00.000′S	<u>169°42.000′E</u>
<u>Challenger</u>	<u>Plateau</u>			
Northwest	<u>Challenger</u>	<u>BT</u>	37°48.000′S	<u>169°42.000′E</u>
<u>Challenger</u> Northwest	<u>Plateau</u> Challenger	DT	37°48.000′S	169°24.000′E
<u>Challenger</u>	<u>Plateau</u>	<u>BT</u>	37 48.000 3	109 24.000 E
Northwest	Challenger	BT	37°42.000′S	169°24.000′E
Challenger	Plateau	_		
Northwest	<u>Challenger</u>	<u>BT</u>	37°42.000′S	<u>167°42.000′E</u>
<u>Challenger</u>	<u>Plateau</u>			
Northwest	<u>Challenger</u>	<u>BT</u>	37°48.000′S	<u>167°42.000′E</u>
<u>Challenger</u> Northwest	<u>Plateau</u> Challenger	<u>BT</u>	37°48.000′S	167°24.000′E
<u>Challenger</u>	<u>Plateau</u>	DI	37 48.000 3	107 24.000 E
Northwest	Challenger	BT	39°06.000′S	167°24.000′E
Challenger	Plateau			
Northwest	<u>Challenger</u>	<u>BT</u>	39°06.000′S	<u>167°18.000′E</u>
<u>Challenger</u>	<u>Plateau</u>			
Northwest Challenger	<u>Challenger</u>	<u>BT</u>	38°52.000′S	<u>167°18.000′E</u>
<u>Challenger</u> <u>Northwest</u>	<u>Plateau</u> Challenger	DT	38°52.000′S	167°06.000′E
<u>Challenger</u>	<u>Challenger</u> <u>Plateau</u>	<u>BT</u>	30 32,000 3	107 00.000 L
Northwest	<u>Challenger</u>	BT	37°48.000′S	167°06.000′E
Challenger	Plateau			
Northwest	Challenger	<u>BT</u>	37°48.000′S	<u>167°00.000′E</u>
<u>Challenger</u>	<u>Plateau</u>			
Northwest	<u>Challenger</u>	<u>BT</u>	37°42.000′S	<u>167°00.000′E</u>
<u>Challenger</u>	<u>Plateau</u>	DT	27942 000/0	166040 000/5
Northwest Challenger	<u>Challenger</u> Plateau	<u>BT</u>	37°42.000′S	<u>166°40.000′E</u>
challeriger	riatedu			



Northwest	Challenger	<u>BT</u>	37°01.333′S	166°40.000′E	
Challenger	Plateau	<u> </u>	37 01.3333	100 40.000 L	
Northwest	Challenger	BT	37°01.333′S	169°36.706′E	South-east along the New
Challenger	Plateau				Zealand EEZ
Northwest	Challenger	BT	37°29.902′S	170°00.000′E	Due south to a point on the
Challenger	Plateau				New Zealand EEZ
Northwest	<u>Challenger</u>	<u>BT</u>	37°41.589′S	170°00.000′E	South-west along the New
<u>Challenger</u>	<u>Plateau</u>				Zealand EEZ
<u>22</u>	<u>Louisville</u>	<u>BT</u>	36°45.000′S	169°30.000′W	
<u>22</u>	<u>Louisville</u>	<u>BT</u>	37°08.000′S	169°30.000′W	
22	<u>Louisville</u>	<u>BT</u>	37°08.000′S	170°00.000′W	
<u>22</u>	<u>Louisville</u>	<u>BT</u>	36°45.000′S	170°00.000′W	
S. Lord	South Lord	BT	36°26.800′S	164°40.830′E	
Howe -	Howe Rise	_			
South					
S. Lord	South Lord	<u>BT</u>	36°13.460′S	<u>164°40.830′E</u>	
<u>Howe -</u>	<u>Howe Rise</u>				
<u>South</u>					
S. Lord	South Lord	<u>BT</u>	36°13.460′S	165°06.050′E	
Howe -	<u>Howe Rise</u>				
South		DT	26,36 20016	1.55000 050/5	
S. Lord	South Lord	<u>BT</u>	36°26.800′S	165°06.050′E	
<u>Howe -</u> <u>South</u>	Howe Rise				
<u>23</u>	<u>Louisville</u>	ВТ	36°10.000′S	169°22.000′W	
<u>23</u>	Louisville	BT	36°10.000′S	169°40.000′W	
<u>23</u>	Louisville	BT	36°00.000′S	169°40.000′W	
				_	
<u>23</u>	Louisville	<u>BT</u>	36°00.000′S	169°22.000′W	
S. Lord	South Lord	<u>BT</u>	35°31.000′S	<u>164°54.000′E</u>	
Howe - West	Howe Rise	5.7	25024 20010	1.05040.550/5	
S. Lord Howe - West	South Lord Howe Rise	<u>BT</u>	35°31.000′S	<u>165°13.550′E</u>	
S. Lord	South Lord	BT	35°21.000′S	165°13.553′E	
Howe - West	Howe Rise	<u>D1</u>	33 21.000 3	103 13.333 L	
S. Lord	South Lord	BT	35°21.000′S	165°24.000′E	
Howe - West	Howe Rise	<u> </u>	35 21.000 3		
S. Lord	South Lord	BT	35°36.000′S	165°24.000′E	
Howe - West	Howe Rise				
S. Lord	South Lord	<u>BT</u>	35°36.000′S	165°18.000′E	
<u>Howe - West</u>	<u>Howe Rise</u>				
S. Lord	South Lord	<u>BT</u>	36°06.000′S	<u>165°18.000′E</u>	
<u>Howe - West</u>	Howe Rise				
S. Lord	South Lord	<u>BT</u>	36°06.000′S	<u>164°46.000′E</u>	
Howe - West	Howe Rise South Lord	RT	35°54.000′S	164°46.000′E	
S. Lord Howe - West	Howe Rise	<u>BT</u>	33 34.000 3	104 40.000 E	
S. Lord	South Lord	BT	35°54.000′S	164°54.000′E	
Howe - West	Howe Rise	<u> </u>	35 5555 5	<u></u>	
N. Lord	Lord Howe Rise	BT	33°16.400′S	162°52.540′E	
Howe - West		_			



N. Lord Howe - West Lord Howe Rise BT 33°09.296'S 162°52.540'E North-east along the Austrie N. Lord Howe - West Lord Howe Rise BT 33°04.400'S 162°54.941'E N. Lord Howe - West Lord Howe Rise BT 33°04.400'S 163°10.540'E N. Lord Howe - West Lord Howe Rise BT 33°10.400'S 163°10.540'E N. Lord Howe - West Lord Howe Rise BT 33°10.400'S 163°04.540'E N. Lord Howe - West Lord Howe Rise BT 33°16.400'S 163°04.540'E	allan_
N. Lord Lord Howe Rise BT 33°04.400′S 162°54.941′E N. Lord Lord Howe Rise BT 33°04.400′S 163°10.540′E N. Lord Lord Howe Rise BT 33°10.400′S 163°10.540′E N. Lord Howe - West BT 33°10.400′S 163°04.540′E N. Lord Lord Howe Rise BT 33°10.400′S 163°04.540′E N. Lord Lord Howe Rise BT 33°16.400′S 163°04.540′E Howe - West BT 33°16.400′S 163°04.540′E	
N. Lord Howe - West Lord Howe Rise BT 33°04.400′S 163°10.540′E N. Lord Howe - West Lord Howe Rise BT 33°10.400′S 163°10.540′E N. Lord Howe - West Lord Howe Rise BT 33°10.400′S 163°04.540′E N. Lord Howe - West Lord Howe Rise BT 33°16.400′S 163°04.540′E N. Lord Howe - West Lord Howe Rise BT 33°16.400′S 163°04.540′E	
N. Lord Lord Howe Rise BT 33°10.400′S 163°10.540′E N. Lord Lord Howe Rise BT 33°10.400′S 163°04.540′E N. Lord Lord Howe Rise BT 33°16.400′S 163°04.540′E N. Lord Lord Howe Rise BT 33°16.400′S 163°04.540′E Howe - West Howe -	
N. Lord Howe - West Lord Howe Rise BT 33°10.400′S 163°10.540′E N. Lord Howe - West Lord Howe Rise BT 33°10.400′S 163°04.540′E N. Lord Howe - West Lord Howe Rise BT 33°16.400′S 163°04.540′E	
Howe - West	
N. Lord Lord Howe Rise BT 33°10.400′S 163°04.540′E N. Lord Lord Howe Rise BT 33°16.400′S 163°04.540′E Howe - West BT 33°16.400′S 163°04.540′E	
N. Lord Lord Howe Rise BT 33°16.400'S 163°04.540'E Howe - West BT 33°16.400'S 163°04.540'E	
Howe - West	
N. Lord Lord Howe Rise BT 33°04.400′S 163°16.615′E	
Howe - East	
Howe - East	
N. Lord	
Howe - East	
<u>N. Lord</u> <u>Lord Howe Rise</u> <u>BT</u> <u>33°04.400′S</u> <u>163°26.380′E</u>	
Howe - East	
6 Louisville BT 45°19.500'S 157°55.000'W	
6 Louisville BT 45°19.500'S 157°19.000'W	
6 <u>Louisville</u> <u>BT</u> <u>45°30.000′S</u> <u>157°19.000′W</u>	
6 Louisville BT 45°30.000'S 157°55.000'W	
8 Louisville BT 44°21.000′S 159°54.000′W	
8 Louisville BT 44°13.000′S 159°54.000′W	
8 Louisville BT 44°13.000'S 159°43.000'W	
<u>8</u> <u>Louisville</u> <u>BT</u> <u>44°21.000′S</u> <u>159°43.000′W</u>	
Westpac Challenger BT 39°55.000′S 167°05.000′E	
Bank Plateau	
Westpac Challenger BT 39°39.000′S 167°05.000′E	
BankPlateauBT39°39.000'S167°21.090'E	
WestpacChallengerBT39°39.000'S167°21.090'EBankPlateau	ļ
Westpac Challenger BT 39°55.000'S 167°21.090'E	
Bank Plateau Plateau	
<u>3</u> <u>Louisville</u> <u>BT</u> <u>46°15.000'S</u> <u>154°28.653'W</u>	
<u>3</u> <u>Louisville</u> <u>BT</u> <u>45°59.000'S</u> <u>154°28.653'W</u>	
<u>3</u> <u>Louisville</u> <u>BT</u> <u>45°59.000'S</u> <u>154°07.224'W</u>	
<u>3</u> <u>Louisville</u> <u>BT</u> <u>46°15.000'S</u> <u>154°07.224'W</u>	
S. Lord South Lord BT 36°00.500'S 165°26.000'E	
Howe - East Howe Rise	
S. Lord South Lord BT 35°47.000'S 165°26.000'E	
Howe - East Howe Rise S. Lord South Lord BT 35°47.000′S 165°44.000′E	
S. Lord South Lord BT 35°47.000'S 165°44.000'E Howe - East Howe Rise	ļ
S. Lord South Lord BT 35°26.000'S 165°44.000'E	
Howe - East Howe Rise	
S. Lord South Lord BT 35°26.000'S 166°21.915'E	



<u>Howe - East</u>	Howe Rise				
S. Lord	South Lord	<u>BT</u>	36°00.500′S	166°21.915′E	
<u>Howe - East</u>	<u>Howe Rise</u>				
N. Lord Howe -	<u>Lord Howe Rise</u>	<u>BT</u>	34°04.035′S	<u>163°00.000′E</u>	
South South					
N. Lord	Lord Howe Rise	<u>BT</u>	34°40.000′S	163°00.000′E	
Howe -					
South N. Lord	Lord Howe Rise	DT	34°40.000′S	162°20.000′E	
Howe -	LOTO HOWE KISE	<u>BT</u>	<u>34 40.000 3</u>	162 20.000 E	
South					
N. Lord	Lord Howe Rise	<u>BT</u>	34°04.035′S	<u>162°20.000′E</u>	
Howe -					
South Wanganella	West Norfolk	<u>BT</u>	34°12.000′S	168°00.000′E	
<u>wanganena</u>	Ridge	<u>51</u>	31 12.000 3	100 00.000 L	
<u>Wanganella</u>	West Norfolk	<u>BT</u>	34°12.000′S	167°13.000′E	
) A /	Ridge	DT	22852 000/6	1.67912.000/5	
<u>Wanganella</u>	West Norfolk Ridge	<u>BT</u>	33°52.000′S	167°13.000′E	
Wanganella	West Norfolk	BT	33°52.000′S	167°42.000′E	
	<u>Ridge</u>				
<u>Wanganella</u>	West Norfolk	<u>BT</u>	33°28.000′S	<u>167°42.000′E</u>	
<u>Wanganella</u>	Ridge West Norfolk	<u>BT</u>	33°28.000′S	168°00.000′E	
vanganena	Ridge	<u> </u>	33 28.000 3	108 00.000 L	
4	<u>Louisville</u>	<u>BT</u>	46°01.000′S	156°10.000′W	
4	<u>Louisville</u>	<u>BT</u>	46°01.000′S	155°40.000′W	
<u>4</u>	<u>Louisville</u>	<u>BT</u>	46°24.000′S	155°40.000′W	
4	<u>Louisville</u>	<u>BT</u>	46°24.000′S	156°10.000′W	
<u>Box 3</u>	South Tasman	<u>BT</u>	47°21.000′S	<u>149°03.200′E</u>	
<u>Box 3</u>	South Tasman	<u>BT</u>	47°24.800′S	<u>149°03.200′E</u>	
<u>Box 3</u>	South Tasman	<u>BT</u>	47°30.320′S	<u>148°57.650′E</u>	
<u>Box 3</u>	South Tasman	<u>BT</u>	47°30.320′S	<u>148°44.390′E</u>	
<u>Box 3</u>	South Tasman	<u>BT</u>	47°35.205′S	<u>148°44.390′E</u>	
<u>Box 3</u>	South Tasman	<u>BT</u>	47°35.205′S	<u>148°37.235′E</u>	
Box 3	South Tasman	<u>BT</u>	47°24.015′S	<u>148°37.235′E</u>	
Box 3	South Tasman	<u>BT</u>	47°24.015′S	148°45.610′E	
Box 3	South Tasman	<u>BT</u>	47°21.000′S	<u>148°45.610′E</u>	
<u>Box 2</u>	South Tasman	<u>BT</u>	47°05.160′S	148°50.670′E	
<u>Box 2</u>	South Tasman	<u>BT</u>	47°13.780′S	148°50.670′E	
<u>Box 2</u>	South Tasman	<u>BT</u>	47°13.780′S	148°24.165′E	
<u>Box 2</u>	South Tasman	<u>BT</u>	47°05.160′S	148°24.165′E	
<u>Box 1</u>	South Tasman	<u>BT</u>	47°08.280′S	147°50.200′E	Start on the Australian EEZ
<u>Box 1</u>	South Tasman	<u>BT</u>	47°17.370′S	147°50.200′E	
<u>Box 1</u>	South Tasman	<u>BT</u>	47°17.370′S	147°32.300′E	



<u>Box 1</u>	South Tasman	<u>BT</u>	47°10.197′S	147°32.300′E	East along the Australian EEZ to
					the start point

(b) Mid-water trawl Management Area coordinates

<u>Name</u>	<u>Region</u>	Method	<u>Latitude</u>	<u>Longitude</u>	EEZ_Direction
<u>1</u>	Louisville Ridge	<u>MWT</u>	48°05.000′S	150°00.000′W	
<u>1</u>	Louisville Ridge	<u>MWT</u>	47°40.000′S	150°00.000′W	
1	<u>Louisville Ridge</u>	<u>MWT</u>	47°40.000′S	149°27.000′W	
<u>1</u>	Louisville Ridge	<u>MWT</u>	48°05.000′S	149°27.000′W	
<u>5</u>	Louisville Ridge	<u>MWT</u>	45°42.000′S	<u>156°55.000′W</u>	
<u>5</u>	<u>Louisville Ridge</u>	<u>MWT</u>	45°26.000′S	<u>156°55.000′W</u>	
<u>5</u>	Louisville Ridge	<u>MWT</u>	45°26.000′S	156°30.000′W	
<u>5</u>	<u>Louisville Ridge</u>	<u>MWT</u>	45°42.000′S	<u>156°30.000′W</u>	
<u>7</u>	<u>Louisville Ridge</u>	<u>MWT</u>	44°57.950′S	158°38.000′W	
<u>7</u>	Louisville Ridge	MWT	44°43.950′S	158°38.000′W	
<u>7</u>	Louisville Ridge	MWT	44°43.950′S	158°18.000′W	
<u>7</u>	Louisville Ridge	<u>MWT</u>	44°57.950′S	158°18.000′W	
9	Louisville Ridge	MWT	44°07.000′S	160°50.820′W	
9	Louisville Ridge	MWT	43°51.183′S	160°50.820′W	
9	Louisville Ridge	MWT	43°51.183′S	160°29.235′W	
<u>9</u>	Louisville Ridge	MWT	44°07.000′S	160°29.235′W	
<u>10</u>	Louisville Ridge	MWT	43°41.440′S	161°39.000′W	
<u>10</u>	Louisville Ridge	MWT	43°22.000′S	161°39.000′W	
<u>10</u>	Louisville Ridge	MWT	43°22.000′S	<u>161°21.770′W</u>	
<u>10</u>	Louisville Ridge	MWT	43°31.370′S	161°21.770′W	
<u>10</u>	Louisville Ridge	MWT	43°31.370′S	161°10.170′W	
<u>10</u>	Louisville Ridge	MWT	43°41.440′S	161°10.170′W	
<u>11</u>	Louisville Ridge	MWT	42°54.500′S	162°07.000′W	
<u>11</u>	Louisville Ridge	MWT	42°40.000′S	162°07.000′W	
<u>11</u>	Louisville Ridge	MWT	42°40.000′S	161°48.000′W	
<u>11</u>	Louisville Ridge	MWT	42°54.500′S	161°48.000′W	
<u>13</u>	Louisville Ridge	MWT	42°00.000′S	163°29.500′W	
<u>13</u>	Louisville Ridge	MWT	42°00.000′S	163°49.000′W	
<u>13</u>	Louisville Ridge	MWT	41°45.000′S	163°49.000′W	
<u>13</u>	Louisville Ridge	MWT	41°45.000′S	163°29.500′W	
<u>14</u>	Louisville Ridge	MWT	41°40.000′S	164°00.000′W	
<u>14</u>	Louisville Ridge	MWT	41°40.000′S	164°27.000′W	
<u>14</u>	Louisville Ridge	MWT	41°17.000′S	164°27.000′W	
<u>14</u>	Louisville Ridge	MWT	41°17.000′S	164°00.000′W	
<u>15</u>	Louisville Ridge	MWT	40°42.000′S	164°56.400′W	
<u>15</u>	Louisville Ridge	MWT	41°06.000′S	164°56.400′W	



<u>15</u>	<u>Louisville Ridge</u>	<u>MWT</u>	41°06.000′S	165°12.000′W	
<u>15</u>	Louisville Ridge	<u>MWT</u>	40°54.000′S	165°12.000′W	
<u>15</u>	Louisville Ridge	MWT	40°54.000′S	165°24.000′W	
<u>15</u>	Louisville Ridge	MWT	40°48.000′S	165°24.000′W	
<u>15</u>	Louisville Ridge	MWT	40°48.000′S	165°30.000′W	
<u>15</u>	Louisville Ridge	MWT	40°32.897′S	165°30.000′W	
<u>15</u>	Louisville Ridge	MWT	40°32.897′S	165°12.000′W	
	Louisville Ridge	MWT	40°42.000′S	165°12.000′W	
<u>15</u>					
<u>17</u>	Louisville Ridge	MWT	38°32.000′S	167°47.067′W	
<u>17</u>	<u>Louisville Ridge</u>	<u>MWT</u>	38°20.013′S	<u>167°47.067′W</u>	
<u>17</u>	<u>Louisville Ridge</u>	<u>MWT</u>	38°20.013′S	167°29.000′W	
<u>17</u>	Louisville Ridge	<u>MWT</u>	38°32.000′S	167°29.000′W	
<u>18</u>	Louisville Ridge	<u>MWT</u>	38°40.000′S	168°01.785′W	
<u>18</u>	Louisville Ridge	MWT	38°40.000′S	168°20.000′W	
<u>18</u>	Louisville Ridge	MWT	38°11.013′S	168°20.000′W	
18	Louisville Ridge	MWT	38°11.013′S	168°01.785′W	
Northwest	Challenger	MWT	37°01.333′S	166°40.000′E	
Challenger	Plateau	101001	37 01.3333	100 40.000 L	
Northwest	Challenger	MWT	37°01.333′S	<u>169°36.706′E</u>	South-east along the New
<u>Challenger</u>	<u>Plateau</u>				Zealand EEZ
<u>Northwest</u>	<u>Challenger</u>	<u>MWT</u>	37°29.902′S	170°00.000′E	Due south to a point on
<u>Challenger</u>	<u>Plateau</u>				the New Zealand EEZ
Northwest	<u>Challenger</u>	<u>MWT</u>	37°41.589′S	<u>170°00.000′E</u>	South-west along the New
<u>Challenger</u>	<u>Plateau</u>	MWT	38°00.000′S	169°47.848′E	Zealand EEZ
Northwest Challenger	<u>Challenger</u> Plateau	IVIVVI	38 00.000 3	109 47.046 E	
Northwest	Challenger	MWT	38°00.000′S	169°42.000′E	
Challenger	Plateau				
Northwest	<u>Challenger</u>	<u>MWT</u>	37°48.000′S	169°42.000′E	
<u>Challenger</u>	<u>Plateau</u>				
<u>Northwest</u>	<u>Challenger</u>	MWT	37°48.000′S	<u>169°24.000′E</u>	
Challenger	<u>Plateau</u>	N 4) A /T	27842 000/6	1.00%2.4.000/5	
Northwest Challenger	<u>Challenger</u> Plateau	MWT	37°42.000′S	<u>169°24.000′E</u>	
Northwest	<u>Challenger</u>	MWT	37°42.000′S	167°42.004′E	
<u>Challenger</u>	Plateau	10000	37 12.000 3	107 12.0012	
Northwest	Challenger	MWT	37°48.000′S	<u>167°42.000′E</u>	
Challenger	Plateau				
Northwest	<u>Challenger</u>	MWT	37°48.000′S	<u>167°24.000′E</u>	
Challenger	Plateau		20022222	4.6702 1.22-1-	
Northwest Challenger	<u>Challenger</u>	MWT	39°06.000′S	<u>167°24.000′E</u>	
<u>Challenger</u> Northwest	<u>Plateau</u> <u>Challenger</u>	MWT	39°06.000′S	167°18.000′E	
Challenger	Plateau	IVIVVI	35 00.000 3	107 10.000 E	
Northwest	<u>Challenger</u>	MWT	38°52.000′S	167°18.000′E	
Challenger	Plateau				
Northwest	Challenger	MWT	38°52.000′S	167°06.000′E	
Challenger	<u>Plateau</u>				



Northwest	Challenger	MWT	37°48.000′S	167°06.000′E	
Challenger	Plateau	101001	37 40.000 3	107 00.000 L	
Northwest	Challenger	MWT	37°48.000′S	167°00.000′E	
Challenger	Plateau	<u> </u>			
Northwest	Challenger	MWT	37°42.000′S	167°00.000′E	
Challenger	Plateau				
Northwest	Challenger	<u>MWT</u>	37°42.000′S	166°40.000′E	
<u>Challenger</u>	<u>Plateau</u>				
<u>22</u>	<u>Louisville Ridge</u>	<u>MWT</u>	36°45.000′S	169°30.000′W	
<u>22</u>	Louisville Ridge	<u>MWT</u>	37°08.000′S	169°30.000′W	
<u>22</u>	Louisville Ridge	MWT	37°08.000′S	170°00.000′W	
<u>22</u>	Louisville Ridge	MWT	36°45.000′S	170°00.000′W	
S. Lord Howe -	South Lord Howe	MWT	36°26.800′S	164°40.830′E	
South	Rise				
S. Lord Howe -	South Lord Howe	MWT	36°13.460′S	164°40.830′E	
<u>South</u>	Rise				
S. Lord Howe -	South Lord Howe	<u>MWT</u>	36°13.460′S	165°06.050′E	
<u>South</u>	<u>Rise</u>				
S. Lord Howe -	South Lord Howe	<u>MWT</u>	36°26.800′S	<u>165°06.050′E</u>	
<u>South</u>	Rise				
<u>23</u>	<u>Louisville Ridge</u>	<u>MWT</u>	36°10.000′S	169°22.000′W	
<u>23</u>	<u>Louisville Ridge</u>	<u>MWT</u>	36°10.000′S	169°40.000′W	
<u>23</u>	Louisville Ridge	<u>MWT</u>	36°00.000′S	169°40.000′W	
<u>23</u>	Louisville Ridge	MWT	36°00.000′S	169°22.000′W	
S. Lord Howe -	South Lord Howe	MWT	35°31.000′S	164°54.000′E	
West	Rise				
S. Lord Howe -	South Lord Howe	<u>MWT</u>	35°31.000′S	165°13.550′E	
<u>West</u>	<u>Rise</u>				
S. Lord Howe -	South Lord Howe	<u>MWT</u>	35°21.000′S	<u>165°13.550′E</u>	
<u>West</u>	Rise				
S. Lord Howe -	South Lord Howe	<u>MWT</u>	35°21.000′S	165°24.000′E	
West	Rise				
S. Lord Howe -	South Lord Howe	MWT	35°40.383′S	<u>165°24.000′E</u>	
West	Rise	N 4) A / T	25°40 202/6	165°10,000/5	
S. Lord Howe - West	South Lord Howe Rise	MWT	35°40.383′S	<u>165°18.000′E</u>	
S. Lord Howe -	South Lord Howe	MWT	36°06.000′S	165°18.000′E	
West	Rise	101001	30 00.000 3	103 10.000 E	
S. Lord Howe -	South Lord Howe	MWT	36°06.000′S	164°46.000′E	
West	Rise	1		<u></u>	
S. Lord Howe -	South Lord Howe	MWT	35°54.000′S	164°46.000′E	
West	Rise				
S. Lord Howe -	South Lord Howe	MWT	35°54.000′S	164°54.000′E	
West	<u>Rise</u>				
N. Lord Howe	Lord Howe Rise	<u>MWT</u>	33°16.400′S	<u>162°52.540′E</u>	
- West	1. 1.0			1000	
N. Lord Howe	<u>Lord Howe Rise</u>	MWT	33°09.296′S	<u>162°52.540′E</u>	North-east along the
- West	Lord Howe Dies	N ANA/T	22°04 400/0	162°54 044/5	<u>Australian EEZ</u>
N. Lord Howe	Lord Howe Rise	MWT	33°04.400′S	<u>162°54.941′E</u>	
<u>- West</u>					



	1			
N. Lord Howe - West	<u>Lord Howe Rise</u>	MWT	33°04.400′S	<u>163°10.540′E</u>
N. Lord Howe	Lord Howe Rise	MWT	33°10.400′S	<u>163°10.540′E</u>
- West	I III Di	N 4) A / T	22840 400/6	1.02204.540/5
N. Lord Howe - West	Lord Howe Rise	<u>MWT</u>	33°10.400′S	<u>163°04.540′E</u>
N. Lord Howe	<u>Lord Howe Rise</u>	MWT	33°16.400′S	<u>163°04.540′E</u>
- West	1 111 B:	A 4) 4 (T	22224 42242	100010 015/5
N. Lord Howe - East	Lord Howe Rise	MWT	33°04.400′S	<u>163°16.615′E</u>
N. Lord Howe - East	<u>Lord Howe Rise</u>	MWT	32°54.650′S	<u>163°16.615′E</u>
N. Lord Howe	Lord Howe Rise	MWT	32°54.650′S	163°26.380′E
- East	Lord Howe Mise	101001	32 34.030 3	103 20.300 <u>L</u>
N. Lord Howe - East	<u>Lord Howe Rise</u>	<u>MWT</u>	33°04.400′S	<u>163°26.380′E</u>
<u>6</u>	Louisville Ridge	MWT	45°19.500′S	157°55.000′W
<u>6</u>	Louisville Ridge	MWT	45°19.500′S	157°19.000'W
<u>6</u>	Louisville Ridge	MWT	45°30.000′S	157°19.000′W
<u>6</u>	Louisville Ridge	MWT	45°30.000′S	157°55.000′W
8	Louisville Ridge	MWT	44°21.000′S	159°54.000′W
8	Louisville Ridge	MWT	44°13.000′S	159°54.000′W
8	Louisville Ridge	MWT	44°13.000′S	159°43.000′W
8	Louisville Ridge	MWT	44°21.000′S	159°43.000′W
Westpac Bank	Challenger	MWT	39°55.000′S	167°05.000′E
Westpac Barrix	<u>Plateau</u>	101001	33 33.000 3	107 03.000 E
Westpac Bank	<u>Challenger</u> <u>Plateau</u>	MWT	39°39.000′S	<u>167°05.000′E</u>
Westpac Bank	<u>Challenger</u> <u>Plateau</u>	MWT	39°39.000′S	<u>167°21.090′E</u>
Westpac Bank	<u>Challenger</u> Plateau	MWT	39°55.000′S	<u>167°21.090′E</u>
<u>3</u>	Louisville Ridge	MWT	46°15.000′S	154°28.653′W
<u>3</u>	Louisville Ridge	MWT	45°59.000′S	154°28.653′W
<u>3</u>	Louisville Ridge	MWT	45°59.000′S	<u>154°07.224′W</u>
<u>3</u>	Louisville Ridge	MWT	46°15.000′S	154°07.224′W
S. Lord Howe -	South Lord Howe	MWT	36°00.500′S	165°26.000′E
<u>East</u>	Rise			
S. Lord Howe - East	South Lord Howe Rise	MWT	35°47.000′S	<u>165°26.000′E</u>
S. Lord Howe -	South Lord Howe	MWT	35°47.000′S	<u>165°44.000′E</u>
<u>East</u>	Rise			
S. Lord Howe -	South Lord Howe	<u>MWT</u>	35°26.000′S	<u>165°44.000′E</u>
East Howe	Rise South Lord Howe	NANA/T	25°26 000/s	166°21 015′5
S. Lord Howe - East	South Lord Howe Rise	MWT	35°26.000′S	<u>166°21.915′E</u>
S. Lord Howe -	South Lord Howe	MWT	36°00.500′S	<u>166°21.915′E</u>
<u>East</u>	Rise			
N. Lord Howe	<u>Lord Howe Rise</u>	<u>MWT</u>	33°58.670′S	<u>163°00.000′E</u>



- South					
N. Lord Howe	Lord Howe Rise	MWT	34°40.000′S	163°00.000′E	
<u>- South</u>					
N. Lord Howe - South	Lord Howe Rise	MWT	34°40.000′S	162°20.000′E	
N. Lord Howe - South	<u>Lord Howe Rise</u>	MWT	33°58.670′S	162°20.000′E	
Wanganella	West Norfolk Ridge	MWT	34°12.000′S	168°00.000′E	
Wanganella	West Norfolk Ridge	MWT	34°12.000′S	167°13.000′E	
Wanganella	West Norfolk Ridge	MWT	33°52.000′S	167°13.000′E	
Wanganella	West Norfolk Ridge	MWT	33°52.000′S	167°42.000′E	
Wanganella	West Norfolk Ridge	MWT	33°28.000′S	<u>167°42.000′E</u>	
Wanganella	West Norfolk Ridge	MWT	33°28.000′S	168°00.000′E	
4	Louisville Ridge	MWT	46°01.000′S	156°10.000′W	
<u>4</u>	Louisville Ridge	MWT	46°01.000′S	155°40.000′W	
<u>4</u>	Louisville Ridge	MWT	46°24.000′S	155°40.000′W	
<u>4</u>	Louisville Ridge	MWT	46°24.000′S	156°10.000′W	
N. Lord Howe	Lord Howe Rise	MWT	33°49.630′S	162°25.670′E	
<u>- Central</u>					
N. Lord Howe - Central	Lord Howe Rise	MWT	33°48.622′S	162°25.670′E	North-east along the Australian EEZ
N. Lord Howe - Central	Lord Howe Rise	MWT	33°32.530′S	<u>162°38.450′E</u>	
N. Lord Howe - Central	<u>Lord Howe Rise</u>	MWT	33°32.530′S	<u>162°57.770′E</u>	
N. Lord Howe - Central	Lord Howe Rise	MWT	33°49.630′S	<u>162°57.770′E</u>	
<u>Box 3</u>	South Tasman	MWT	47°21.000′S	<u>149°03.200′E</u>	
<u>Box 3</u>	South Tasman	MWT	47°24.800′S	<u>149°03.200′E</u>	
<u>Box 3</u>	South Tasman	MWT	47°30.320′S	<u>148°57.650′E</u>	
<u>Box 3</u>	South Tasman	MWT	47°30.320′S	<u>148°44.390′E</u>	
<u>Box 3</u>	South Tasman	MWT	47°35.205′S	<u>148°44.390′E</u>	
<u>Box 3</u>	South Tasman	MWT	47°35.205′S	148°37.235′E	
<u>Box 3</u>	South Tasman	MWT	47°24.015′S	148°37.235′E	
<u>Box 3</u>	South Tasman	MWT	47°24.015′S	148°45.610′E	
<u>Box 3</u>	South Tasman	MWT	47°21.000′S	148°45.610′E	
Box 2	South Tasman	MWT	47°05.160′S	148°50.670′E	
Box 2	South Tasman	MWT	47°13.780′S	148°50.670′E	
Box 2	South Tasman	MWT	47°13.780′S	148°24.165′E	
Box 2	South Tasman	MWT	47°05.160′S	<u>148°24.165′E</u>	
<u>Box 1</u>	South Tasman	MWT	47°08.280′S	<u>147°50.200′E</u>	Start on the Australian EEZ



<u>Box 1</u>	South Tasman	MWT	47°17.370′S	<u>147°50.200′E</u>	
<u>Box 1</u>	South Tasman	MWT	47°17.370′S	<u>147°32.300′E</u>	
<u>Box 1</u>	South Tasman	MWT	47°10.197′S	147°32.300′E	East along the Australian EEZ to the start point

(c) Bottom line Management Area coordinates

<u>Name</u>	Region	Method	<u>Latitude</u>	Longitude	EEZ_Direction
<u>1</u>	<u>Louisville Ridge</u>	<u>Bottom Line</u>	48°05.000′S	149°27.000′W	
<u>1</u>	<u>Louisville Ridge</u>	<u>Bottom Line</u>	48°05.000′S	150°00.000′W	
<u>1</u>	<u>Louisville Ridge</u>	<u>Bottom Line</u>	47°40.000′S	150°00.000′W	
<u>1</u>	<u>Louisville Ridge</u>	<u>Bottom Line</u>	47°40.000′S	<u>149°27.000′W</u>	
<u>4</u>	<u>Louisville Ridge</u>	<u>Bottom Line</u>	46°24.000′S	<u>155°40.000′W</u>	
<u>4</u>	<u>Louisville Ridge</u>	<u>Bottom Line</u>	46°24.000′S	<u>156°10.000′W</u>	
<u>4</u>	<u>Louisville Ridge</u>	<u>Bottom Line</u>	46°01.000′S	<u>156°10.000′W</u>	
<u>4</u>	<u>Louisville Ridge</u>	<u>Bottom Line</u>	46°01.000′S	<u>155°40.000′W</u>	
<u>3</u>	<u>Louisville Ridge</u>	<u>Bottom Line</u>	46°15.000′S	<u>154°07.224′W</u>	
<u>3</u>	<u>Louisville Ridge</u>	Bottom Line	46°15.000′S	<u>154°28.653′W</u>	
<u>3</u>	<u>Louisville Ridge</u>	<u>Bottom Line</u>	45°59.000′S	<u>154°28.653′W</u>	
<u>3</u>	<u>Louisville Ridge</u>	<u>Bottom Line</u>	45°59.000′S	<u>154°07.224′W</u>	
<u>5</u>	<u>Louisville Ridge</u>	Bottom Line	45°26.000′S	<u>156°30.000′W</u>	
<u>5</u>	<u>Louisville Ridge</u>	<u>Bottom Line</u>	45°42.000′S	<u>156°30.000′W</u>	
<u>5</u>	<u>Louisville Ridge</u>	<u>Bottom Line</u>	45°42.000′S	<u>156°55.000′W</u>	
<u>5</u>	<u>Louisville Ridge</u>	<u>Bottom Line</u>	45°26.000′S	<u>156°55.000′W</u>	
<u>6</u>	<u>Louisville Ridge</u>	<u>Bottom Line</u>	45°30.000′S	<u>157°19.000′W</u>	
<u>6</u>	<u>Louisville Ridge</u>	<u>Bottom Line</u>	45°30.000′S	<u>157°55.000′W</u>	
<u>6</u>	<u>Louisville Ridge</u>	<u>Bottom Line</u>	45°19.500′S	<u>157°55.000′W</u>	
<u>6</u>	<u>Louisville Ridge</u>	<u>Bottom Line</u>	45°19.500′S	<u>157°19.000′W</u>	
<u>7</u>	<u>Louisville Ridge</u>	<u>Bottom Line</u>	44°57.950′S	<u>158°18.000′W</u>	
7	<u>Louisville Ridge</u>	<u>Bottom Line</u>	44°57.950′S	<u>158°38.000′W</u>	
7	<u>Louisville Ridge</u>	<u>Bottom Line</u>	44°43.950′S	<u>158°38.000′W</u>	
<u>7</u>	<u>Louisville Ridge</u>	<u>Bottom Line</u>	44°43.950′S	<u>158°18.000′W</u>	
<u>8</u>	<u>Louisville Ridge</u>	<u>Bottom Line</u>	44°21.000′S	<u>159°43.000′W</u>	
<u>8</u>	<u>Louisville Ridge</u>	<u>Bottom Line</u>	44°21.000′S	<u>159°54.000′W</u>	
<u>8</u>	<u>Louisville Ridge</u>	<u>Bottom Line</u>	44°13.000′S	<u>159°54.000′W</u>	
<u>8</u>	<u>Louisville Ridge</u>	<u>Bottom Line</u>	44°13.000′S	<u>159°43.000′W</u>	
<u>9</u>	Louisville Ridge	<u>Bottom Line</u>	44°07.000′S	<u>160°29.235′W</u>	
<u>9</u>	Louisville Ridge	<u>Bottom Line</u>	44°07.000′S	<u>160°50.820′W</u>	
<u>9</u>	Louisville Ridge	<u>Bottom Line</u>	43°51.183′S	<u>160°50.820′W</u>	
<u>9</u>	Louisville Ridge	<u>Bottom Line</u>	43°51.183′S	<u>160°29.235′W</u>	
<u>10</u>	<u>Louisville Ridge</u>	<u>Bottom Line</u>	43°22.000′S	<u>161°21.770′W</u>	
<u>10</u>	<u>Louisville Ridge</u>	<u>Bottom Line</u>	43°31.370′S	<u>161°21.770′W</u>	
<u>10</u>	<u>Louisville Ridge</u>	Bottom Line	43°31.370′S	161°10.170′W	



<u>10</u>	Louisville Ridge	Bottom Line	43°41.440′S	161°10.170′W	
<u>10</u>	Louisville Ridge	Bottom Line	43°41.440′S	161°39.000′W	
<u>10</u>	Louisville Ridge	Bottom Line	43°22.000′S	161°39.000′W	
11	Louisville Ridge	Bottom Line	42°54.500′S	161°48.000′W	
<u>11</u>	Louisville Ridge	Bottom Line	42°54.500′S	162°07.000′W	
11	Louisville Ridge	Bottom Line	42°40.000′S	162°07.000′W	
11	Louisville Ridge	Bottom Line	42°40.000′S	161°48.000′W	
<u>13</u>	Louisville Ridge	Bottom Line	42°00.000′S	163°29.500′W	
<u>13</u>	Louisville Ridge	Bottom Line	42°00.000′S	163°49.000′W	
<u>13</u>	Louisville Ridge	Bottom Line	41°45.000′S	163°49.000′W	
<u>13</u>	Louisville Ridge	Bottom Line	41°45.000′S	163°29.500′W	
-	Louisville Ridge		41°40.000′S	164°00.000′W	
14		Bottom Line			
14	Louisville Ridge	Bottom Line	41°40.000′S	164°27.000′W	
<u>14</u>	Louisville Ridge	Bottom Line	41°17.000′S	164°27.000′W	
<u>14</u>	Louisville Ridge	Bottom Line	41°17.000′S	164°00.000′W	
<u>15</u>	<u>Louisville Ridge</u>	Bottom Line	40°32.897′S	165°12.000′W	
<u>15</u>	<u>Louisville Ridge</u>	Bottom Line	40°42.000′S	<u>165°12.000′W</u>	
<u>15</u>	<u>Louisville Ridge</u>	<u>Bottom Line</u>	40°42.000′S	<u>164°56.400′W</u>	
<u>15</u>	<u>Louisville Ridge</u>	Bottom Line	41°06.000′S	164°56.400′W	
<u>15</u>	<u>Louisville Ridge</u>	<u>Bottom Line</u>	41°06.000′S	165°12.000′W	
<u>15</u>	<u>Louisville Ridge</u>	<u>Bottom Line</u>	40°54.000′S	165°12.000′W	
<u>15</u>	<u>Louisville Ridge</u>	<u>Bottom Line</u>	40°54.000′S	<u>165°24.000′W</u>	
<u>15</u>	<u>Louisville Ridge</u>	<u>Bottom Line</u>	40°48.000′S	<u>165°24.000′W</u>	
<u>15</u>	<u>Louisville Ridge</u>	Bottom Line	40°48.000′S	<u>165°30.000′W</u>	
<u>15</u>	<u>Louisville Ridge</u>	<u>Bottom Line</u>	40°32.897′S	<u>165°30.000′W</u>	
Westpac	<u>Challenger</u>	Bottom Line	39°55.000′S	167°21.090′E	
<u>Bank</u>	<u>Plateau</u>	Dotton Line	39°55.000′S	167°05 000/5	
<u>Westpac</u> <u>Bank</u>	<u>Challenger</u> <u>Plateau</u>	<u>Bottom Line</u>	39 55.000 5	<u>167°05.000′E</u>	
Westpac	<u>Challenger</u>	Bottom Line	39°39.000′S	<u>167°05.000′E</u>	
<u>Bank</u>	<u>Plateau</u>				
<u>Westpac</u>	<u>Challenger</u>	Bottom Line	39°39.000′S	<u>167°21.090′E</u>	
<u>Bank</u> <u>17</u>	Plateau Louisville Ridge	Bottom Line	38°32.000′S	167°29.000′W	
<u>17</u>	Louisville Ridge	Bottom Line	38°32.000′S	167°47.067′W	
<u>17</u> <u>17</u>	Louisville Ridge	Bottom Line	38°20.013′S	167°47.067′W	
	Louisville Ridge	Bottom Line Bottom Line	38°20.013′S	167°29.000′W	
<u>17</u>	ļ ·			168°01.785′W	
18	Louisville Ridge	Bottom Line	38°40.000′S		
<u>18</u>	Louisville Ridge	Bottom Line	38°40.000′S	168°20.000′W	
<u>18</u>	Louisville Ridge	Bottom Line	38°11.013′S	168°20.000′W	
<u>18</u>	Louisville Ridge	Bottom Line	38°11.013′S	168°01.785′W	
<u>Central</u> Challenger	<u>Challenger</u> Plateau	Bottom Line	37°45.615′S	<u>168°35.830′E</u>	
<u>Challenger</u> <u>Central</u>	<u>Challenger</u>	Bottom Line	37°55.230′S	168°35.830′E	
<u>central</u>	<u>chancinger</u>	DOCCOTT LITE	37 33.2303	100 00.000 L	



Challenger	Plateau				
Central	Challenger	Bottom Line	37°55.230′S	169°25.400′E	
Challenger	Plateau	<u>BOTTOTT EITE</u>	37 33.2303	103 23.400 L	
Central	Challenger	Bottom Line	38°13.830′S	169°25.400′E	South-west along the
Challenger	Plateau	BOCCOTT EITE	30 13.030 3	103 23.100 L	New Zealand EEZ
Central	Challenger	Bottom Line	38°23.165′S	169°11.967′E	IVEW ZEGIGITA EEZ
Challenger	Plateau	<u>Bottom Eme</u>	30 23.103 3	103 11.307 L	
Central	<u>Challenger</u>	Bottom Line	38°23.165′S	168°30.780′E	
Challenger	Plateau				
Central	Challenger	Bottom Line	38°32.750′S	<u>168°30.780′E</u>	
Challenger	Plateau				
Central	Challenger	Bottom Line	38°32.750′S	<u>167°57.950′E</u>	
Challenger	Plateau				
Central	Challenger	Bottom Line	39°17.180′S	167°57.950′E	
Challenger	Plateau				
Central	Challenger	Bottom Line	39°17.180′S	167°30.500′E	
Challenger	Plateau				
Central	Challenger	Bottom Line	38°06.430′S	167°30.500′E	
Challenger	<u>Plateau</u>				
Central	<u>Challenger</u>	Bottom Line	38°06.430′S	168°09.833′E	
<u>Challenger</u>	<u>Plateau</u>				
<u>Central</u>	<u>Challenger</u>	Bottom Line	37°45.615′S	168°09.833′E	
<u>Challenger</u>	<u>Plateau</u>				
Northwest	<u>Challenger</u>	Bottom Line	37°01.333′S	169°36.706′E	South-east along the
<u>Challenger</u>	<u>Plateau</u>				New Zealand EEZ
<u>Northwest</u>	<u>Challenger</u>	<u>Bottom Line</u>	37°29.902′S	<u>170°00.000′E</u>	Due south to a point on
<u>Challenger</u>	<u>Plateau</u>				the New Zealand EEZ
<u>Northwest</u>	<u>Challenger</u>	<u>Bottom Line</u>	37°41.589′S	170°00.000′E	South-west along the
<u>Challenger</u>	<u>Plateau</u>				New Zealand EEZ
<u>Northwest</u>	<u>Challenger</u>	Bottom Line	38°00.000′S	169°47.848′E	
<u>Challenger</u>	<u>Plateau</u>				
Northwest	<u>Challenger</u>	Bottom Line	38°00.000′S	169°42.000′E	
<u>Challenger</u>	<u>Plateau</u>				
Northwest	<u>Challenger</u>	<u>Bottom Line</u>	37°48.000′S	<u>169°42.000′E</u>	
Challenger	<u>Plateau</u>	Date: 11	27040 00010	1.00004.000/5	
Northwest	<u>Challenger</u>	Bottom Line	37°48.000′S	169°24.000′E	
<u>Challenger</u>	<u>Plateau</u> Challenger	Pottom Line	27°42 000/5	160°24 000/F	
Northwest Challenger	<u>Challenger</u> Plateau	Bottom Line	37°42.000′S	169°24.000′E	
Northwest	<u>Challenger</u>	Bottom Line	37°42.000′S	167°42.000′E	
<u>Challenger</u>	Plateau	BOLLOIN LINE	3/ 42.0003	10/ 42.000 E	
Northwest	Challenger	Bottom Line	37°48.000′S	167°42.000′E	
Challenger	Plateau	DOCCOLL FILE	37 40.000 3	107 42.000 E	
Northwest	<u>Challenger</u>	Bottom Line	37°48.000′S	167°24.000′E	
Challenger	<u>Plateau</u>	Socion Line	2, 10.0003	10, 21.000 L	
Northwest	Challenger	Bottom Line	39°06.000′S	167°24.000′E	
Challenger	Plateau		35 55,666 5	<u> </u>	
Northwest	<u>Challenger</u>	Bottom Line	39°06.000′S	167°18.000′E	
Challenger	Plateau				
Northwest	<u>Challenger</u>	Bottom Line	38°52.000′S	167°18.000′E	
Challenger	Plateau				
Northwest	Challenger	Bottom Line	38°52.000′S	167°06.000′E	
	· · · · · · ·	l ———	1 ———		



Challenger	<u>Plateau</u>				
Northwest	Challenger	Bottom Line	37°48.000′S	167°06.000′E	
Challenger	Plateau				
Northwest	<u>Challenger</u>	Bottom Line	37°48.000′S	<u>167°00.000′E</u>	
<u>Challenger</u>	<u>Plateau</u>				
Northwest	<u>Challenger</u>	<u>Bottom Line</u>	37°42.000′S	<u>167°00.000′E</u>	
<u>Challenger</u>	<u>Plateau</u>	B	27042 22212	1.55010.000/5	
Northwest Challenger	<u>Challenger</u>	Bottom Line	37°42.000′S	<u>166°40.000′E</u>	
<u>Challenger</u> Northwest	<u>Plateau</u> Challenger	Bottom Line	37°01.333′S	166°40.000′E	
Challenger	Plateau	BOLLOITI LITTE	37 01.555 5	100 40.000 E	
<u>22</u>	Louisville Ridge	Bottom Line	37°08.000′S	169°30.000′W	
22	Louisville Ridge	Bottom Line	37°08.000′S	170°00.000′W	
22	Louisville Ridge	Bottom Line	36°45.000′S	170°00.000′W	
22	Louisville Ridge	Bottom Line	36°45.000′S	169°30.000′W	
Gascoyne	West Tasman	Bottom Line	36°59.440′S	156°43.770′E	
			36°59.440′S	155°53.630′E	
Gascoyne	West Tasman	Bottom Line			
Gascoyne	<u>West Tasman</u>	Bottom Line	36°19.950′S	<u>155°53.630′E</u>	
Gascoyne	<u>West Tasman</u>	<u>Bottom Line</u>	<u>36°19.950′S</u>	<u>156°43.770′E</u>	
S. Lord	South Lord	Bottom Line	36°26.800′S	<u>165°06.050′E</u>	
Howe -	<u>Howe Rise</u>				
South	Carrella Land	Datta and Line	26826 000/6	164840 020/5	
S. Lord Howe -	South Lord Howe Rise	Bottom Line	36°26.800′S	<u>164°40.830′E</u>	
South	Howe Mise				
S. Lord	South Lord	Bottom Line	36°13.460′S	164°40.830′E	
Howe -	Howe Rise				
<u>South</u>					
S. Lord	South Lord	<u>Bottom Line</u>	<u>36°13.460′S</u>	<u>165°06.050′E</u>	
Howe -	Howe Rise				
South 23	Louisville Ridge	Bottom Line	36°10.000′S	169°22.000′W	
<u>23</u>	Louisville Ridge	Bottom Line	36°10.000′S	169°40.000′W	
<u>23</u>	<u>Louisville Ridge</u>	Bottom Line	36°00.000′S	169°40.000′W	
<u>23</u>	<u>Louisville Ridge</u>	Bottom Line	36°00.000′S	<u>169°22.000′W</u>	
S. Lord	South Lord	Bottom Line	35°20.000′S	<u>166°21.915′E</u>	
<u>Howe</u>	Howe Rise	D 11 11	26800 55515	4.00004.01=1=	
S. Lord	South Lord	Bottom Line	36°00.500′S	<u>166°21.915′E</u>	
Howe S. Lord	Howe Rise South Lord	Bottom Line	36°00.500′S	165°18.000′E	
Howe	Howe Rise	<u> DOLLOITI LIITE</u>	30 00.300 3	103 10.000 E	
S. Lord	South Lord	Bottom Line	36°06.000′S	<u>165°18.000′E</u>	
Howe	Howe Rise				
S. Lord	South Lord	<u>Bottom Line</u>	36°06.000′S	<u>164°46.000′E</u>	
<u>Howe</u>	Howe Rise				
S. Lord	South Lord	<u>Bottom Line</u>	35°54.000′S	<u>164°46.000′E</u>	
Howe C. Land	Howe Rise	Dath L	25% 4 000/0	164954 000/5	
S. Lord	South Lord	Bottom Line	35°54.000′S	<u>164°54.000′E</u>	
<u>Howe</u>	<u>Howe Rise</u>	I .			



S. Lord	South Lord	<u>Bottom Line</u>	35°31.000′S	<u>164°54.000′E</u>	
<u>Howe</u>	Howe Rise	Dathan Line	25824 000/6	165,00 000/5	
S. Lord Howe	South Lord Howe Rise	Bottom Line	35°31.000′S	<u>165°00.000′E</u>	
S. Lord	South Lord	Bottom Line	35°20.000′S	165°00.000′E	
Howe	Howe Rise	Bottom Eme	33 20.000 3	103 00.000 E	
N. Lord	Lord Howe Rise	Bottom Line	32°39.630′S	163°04.415′E	Start on the Australian
<u>Howe</u>					EEZ
N. Lord	Lord Howe Rise	Bottom Line	32°39.630′S	163°40.000′E	
<u>Howe</u>					
N. Lord	<u>Lord Howe Rise</u>	Bottom Line	33°20.000′S	<u>163°40.000′E</u>	
Howe N. Lord	Lord Howa Pica	Bottom Line	33°20.000′S	163°20.000′E	
Howe	Lord Howe Rise	<u>BOLLOITI LITTE</u>	<u>33 20.000 3</u>	163 20.000 E	
N. Lord	Lord Howe Rise	Bottom Line	34°40.000′S	163°20.000′E	
Howe	2014 HOWE MISC	Bottom Eme	3 . 10.000 3	100 20.000 L	
N. Lord	Lord Howe Rise	Bottom Line	34°40.000′S	162°20.000′E	
<u>Howe</u>					
N. Lord	Lord Howe Rise	<u>Bottom Line</u>	33°54.773′S	<u>162°20.000′E</u>	North-east along the
<u>Howe</u>					Australian EEZ to the
					start point
West	West Norfolk	<u>Bottom Line</u>	32°17.000′S	166°41.530′E	
<u>Norfolk</u>	<u>Ridge</u>				
<u>Ridge</u>)	D 11 11	22847 000/6	1.669.44.02.4/5	
West Norfells	West Norfolk	Bottom Line	32°17.000′S	<u>166°41.921′E</u>	South-east along the
Norfolk Ridge	<u>Ridge</u>				<u>Australian EEZ</u>
West	West Norfolk	Bottom Line	32°28.633′S	168°00.000′E	
Norfolk	Ridge	<u>Bottom Eme</u>	32 20.033 3	100 00:000 L	
Ridge	<u></u>				
West	West Norfolk	Bottom Line	34°12.000′S	168°00.000′E	
Norfolk	Ridge				
<u>Ridge</u>					
<u>West</u>	West Norfolk	Bottom Line	34°12.000′S	167°13.000′E	
<u>Norfolk</u>	<u>Ridge</u>				
<u>Ridge</u>					
<u>West</u>	West Norfolk	Bottom Line	34°00.000′S	<u>167°13.000′E</u>	
Norfolk	Ridge				
Ridge	Mark Novembell	Dattan: Live	24000 000/5	100041 530/5	
West_	West Norfolk	Bottom Line	34°00.000′S	<u>166°41.530′E</u>	
Norfolk Ridge	<u>Ridge</u>				
Three	Three Kings	Bottom Line	30°49.324′S	172°42.880′E	Start on the New Zealand
Kings	Ridge	BOLLOITI LITIC	30 43.324 3	1/2 72.000 L	EEZ
Three	Three Kings	Bottom Line	30°40.115′S	172°42.880′E	
Kings	<u>Ridge</u>				
<u>Three</u>	Three Kings	Bottom Line	30°40.115′S	172°53.295′E	
<u>Kings</u>	<u>Ridge</u>				
<u>Three</u>	Three Kings	Bottom Line	30°16.500′S	<u>172°53.295′E</u>	
<u>Kings</u>	<u>Ridge</u>				
<u>Three</u>	Three Kings	<u>Bottom Line</u>	30°16.500′S	<u>174°20.000′E</u>	
<u>Kings</u>	<u>Ridge</u>				



					1
<u>Three</u>	Three Kings Ridge	<u>Bottom Line</u>	30°40.245′S	<u>174°20.000′E</u>	
<u>Kings</u> Three	Three Kings	Bottom Line	30°40.245′S	174°00.200′E	
Kings	Ridge	BOTTOITI LITTE	30 40.243 3	174 00.200 L	
Three	Three Kings	Bottom Line	30°53.670′S	174°00.200′E	
Kings	Ridge				
<u>Three</u>	Three Kings	Bottom Line	30°53.670′S	173°08.819′E	West along the New
<u>Kings</u>	<u>Ridge</u>				Zealand EEZ to the start
					point
<u>Marion</u>	South Fiji Basin	Bottom Line	28°19.800′S	<u>175°40.370′E</u>	
<u>Marion</u>	South Fiji Basin	<u>Bottom Line</u>	28°19.800′S	<u>175°19.590′E</u>	
<u>Marion</u>	South Fiji Basin	Bottom Line	27°59.155′S	175°19.590′E	
<u>Marion</u>	South Fiji Basin	<u>Bottom Line</u>	27°59.155′S	<u>175°40.370′E</u>	
North Lord	North Lord	Bottom Line	25°59.640′S	160°00.000′E	
<u>Howe Rise</u>	<u>Howe Rise</u>				
North Lord	North Lord	<u>Bottom Line</u>	25°59.640′S	159°00.285′E	
Howe Rise	Howe Rise	D 11 11	25944.050/6	450000 205/5	
North Lord Howe Rise	North Lord Howe Rise	Bottom Line	25°14.950′S	<u>159°00.285′E</u>	
North Lord	North Lord	Bottom Line	25°14.950′S	160°00.000′E	
Howe Rise	Howe Rise	<u>Bottom Emc</u>	23 11.3303	100 00.000 L	
<u>Box 3</u>	South Tasman	Bottom Line	47°21.000′S	<u>149°03.200′E</u>	
Box 3	South Tasman	Bottom Line	47°24.800′S	149°03.200′E	
<u>Box 3</u>	South Tasman	<u>Bottom Line</u>	47°30.320′S	148°57.650′E	
Box 3	South Tasman	Bottom Line	47°30.320′S	<u>148°44.390′E</u>	
<u>Box 3</u>	South Tasman	<u>Bottom Line</u>	47°35.205′S	<u>148°44.390′E</u>	
<u>Box 3</u>	South Tasman	Bottom Line	47°35.205′S	<u>148°37.235′E</u>	
<u>Box 3</u>	South Tasman	Bottom Line	47°24.015′S	<u>148°37.235′E</u>	
<u>Box 3</u>	South Tasman	Bottom Line	47°24.015′S	<u>148°45.610′E</u>	
<u>Box 3</u>	South Tasman	<u>Bottom Line</u>	47°21.000′S	<u>148°45.610′E</u>	
Box 2	South Tasman	Bottom Line	47°05.160′S	<u>148°50.670′E</u>	
Box 2	South Tasman	Bottom Line	47°13.780′S	<u>148°50.670′E</u>	
<u>Box 2</u>	South Tasman	Bottom Line	47°13.780′S	<u>148°24.165′E</u>	
<u>Box 2</u>	South Tasman	Bottom Line	47°05.160′S	<u>148°24.165′E</u>	
<u>Box 1</u>	South Tasman	Bottom Line	47°08.280′S	147°50.200′E	Start on the Australian EEZ
<u>Box 1</u>	South Tasman	Bottom Line	47°17.370′S	<u>147°50.200′E</u>	
<u>Box 1</u>	South Tasman	Bottom Line	47°17.370′S	<u>147°32.300′E</u>	
<u>Box 1</u>	South Tasman	Bottom Line	47°10.197′S	147°32.300′E	East along the Australian EEZ to the start point



Annex 5: List of VME indicator taxa

Taxonomic Level	Common Name	Qualifying taxa
Vulnerable taxa		
Phylum Porifera	<u>Sponges</u>	All taxa of the classes Demospongiae and Hexactinellidae
Phylum Cnidaria		
Class Anthozoa		
Order Scleractinia	Stony corals	All taxa within the following genera: Solenosmilia; Goniocorella; Oculina; Enallopsammia; Madrepora; Lophelia
Order Antipatharia	Black corals	All taxa
Order Alcyonacea	<u>True soft corals</u>	All taxa excluding Gorgonacea
Informal group Gorgonacea	Sea fans octocorals	All taxa within the following suborders: Holaxonia; Calaxonia; Scleraxonia
Order Pennatulacea	<u>Sea pens</u>	All taxa
Order Actiniaria	Anemones	All taxa
Class Hydrozoa		
Order Anthoathecatae		
Family Stylasteridae	<u>Hydrocorals</u>	All taxa
<u>Habitat indicators</u>		
Phylum Echinodermata		
<u>Class Asteroidea</u>		
Order Brisingida	<u>Armless stars</u>	<u>All taxa</u>
<u>Class Crinoidea</u>	Sea lillies	All taxa



Annex 6A: Weight threshold for triggering VME encounter protocol in any one tow for a single VME indicator taxa

Taxonomic Level	Common Name	Weight Threshold (kg)
Vulnerable taxa		
Phylum Porifera	<u>Sponges</u>	<u>50</u>
Phylum Cnidaria		
Class Anthozoa		
Order Scleractinia	Stony corals	<u>250</u>
Order Antipatharia	Black Corals	<u>5</u>
Order Alcyonacea	True soft corals	<u>60</u>
Informal group Gorgonacea	Seafan octocorals	<u>15</u>
Order Actiniaria	<u>Anemones</u>	<u>40</u>

Annex 6B: Weight threshold for triggering VME encounter protocol in any one tow for three or more different VME indicator taxa

Taxonomic Level	Common Name	Weight Threshold (kg)
Vulnerable taxa		
Phylum Porifera	<u>Sponges</u>	<u>5</u>
Phylum Cnidaria		
Class Anthozoa		
Order Scleractinia	Stony corals	<u>5</u>
Order Antipatharia	Black corals	1
Order Alcyonacea	<u>True soft corals</u>	1
Informal group Gorgonacea	Seafan octocorals	1
Order Pennatulacea	<u>Sea pens</u>	1
Order Actiniaria	<u>Anemones</u>	<u>5</u>
Class Hydrozoa		
Order Anthoathecatae		
Family Stylasteridae	<u>Hydrocorals</u>	1
Phylum Echinodermata		
Class Asteroidea		
Order Brisingida	<u>Armless stars</u>	<u>1</u>
Class Crinoidea	<u>Sea lillies</u>	<u>1</u>



<u>Annex 7: Guidelines for the preparation and submission of notifications of encounters with potential VMEs</u>

1. General Information:					
a. Contact details					
b. Nationality					
c. Vessel name					
d. Date of fishing effort and notification					
e. Time of shot start (UTC)					
f. Time of shot end (UTC)					
g. Fishing gear used					
2. Location Information:					
Bottom trawl or mid-water trawl					
a. Start and end position of trawl (to nearest 0.01 decimal degree)					
3. VME Information:					
a. Summary information:					
i. Number of VME Indicator taxa encountered					
ii. Total weight of VME Indicator taxa encountered					
b. Detailed information:					
i. Weight of each VME Indicator taxa in tow (including any under threshold)					



Annex 8: Minimum observer coverage levels

Gear type	Minimum level of observer coverage
Vessels using bottom trawl and mid-water trawl	100% observer coverage
gear	
Bottom line gear	At least 10% observer coverage for the fishing
	<u>year⁷</u>

RECOGNISING that Article 3(1)(a)(i) and (vii) of the Convention on the Conservation and Management of High Seas Fishery Resources in the South Pacific Ocean (the Convention) call on the Commission, in giving effect to the objectives of the Convention, to adopt Conservation and Management Measures (CMMs) that take account of international best practices and protect the marine ecosystem, particularly ecosystems with long recovery times following disturbance:

FURTHER RECOGNISING Article 3(1)(b) and (2) of the Convention which call on the Commission to apply the precautionary approach and ecosystem based approach to fishery resources under the mandate of the Convention;

MINDFUL of Article 31(1) of the Convention that calls on the Commission to cooperate with other regional fisheries management organisations (RFMOs), the Food and Agriculture Organization of the United Nations (FAO), other specialised agencies of the United Nations and other relevant organisations on issues of mutual interest;

RECALLING that in 2007, Participants in the International Consultations on the Establishment of the South-Pacific RFMO adopted voluntary interim management measures, including inter alia, for the management of bottom fisheries in the Convention Area;

NOTING United Nations General Assembly (UNGA) Resolution 61/105 which calls upon RFMOs to assess, on the basis of the best available scientific information, whether individual bottom fishing activities would have significant adverse impacts on vulnerable marine ecosystems, and to ensure that if it is assessed that these activities would have significant adverse impacts, they are managed to prevent such impacts, or not authorised to proceed;

FURTHER NOTING UNGA Resolution 64/72 which calls upon RFMOs to establish and implement appropriate protocols for the implementation of UNGA Resolution 61/105, including definitions of what constitutes evidence of an encounter with a VME, in particular threshold levels and indicator species; and to implement the FAO International Guidelines for the Management of Deep-sea Fisheries in the High Seas (FAO, 2009; FAO Deep-sea Fisheries Guidelines) in order to sustainably manage fish stocks and protect vulnerable marine

⁷ Expressed as the percentage of the total number of observed hooks.



ecosystems (VMEs);

FURTHER NOTING UNGA Resolution 66/68 which encourages RFMOs to consider the results available—from marine scientific research, including those obtained from seabed mapping programmes concerning the identification of areas containing VMEs, and to adopt CMMs to prevent significant adverse impacts from bottom fishing on such ecosystems, consistent with the FAO Deep-sea Fisheries Guidelines, or to close such areas to bottom fishing until such CMMs are adopted, as well as to continue to undertake further marine scientific research, in accordance with international law as reflected in Part XIII of the Convention:

¹ CMM 03 2018 supersedes CMM 03 2017

AWARE of the steps already taken by the Commission to address the impacts of large-scale pelagic driftnets and all deepwater gillnets in the Convention Area, through the implementation of CMM 08 2013 (Gillnetting);

COMMITTED to ensuring that bottom fishing is consistent with the long term sustainability of deep sea fish stocks and the protection of ecosystems;

ADOPTS the following CMM in accordance with Article 8 and Article 20 and with reference to Annex III of the Convention:

OBJECTIVE

To promote the sustainable management of bottom fisheries including target fish stocks as well as non-target species taken as bycatch, in these fisheries, and to protect the marine ecosystems in which those resources occur, including *inter alia*, the prevention of significant adverse impacts on vulnerable marine ecosystems.

GENERAL PROVISIONS

This CMM applies to all fishing vessels flying the flag of a Member or Cooperating non-Contracting Party (CNCP) to the South Pacific Regional Fisheries Management Organisation (SPRFMO) engaging or intending to engage in bottom fishing in the Convention Area.

For the purposes of this CMM, the term "vulnerable marine ecosystem" (VME) means a marine ecosystem that has the characteristics referred to in paragraph 42 and elaborated in the Annex of the FAO International Guidelines for the Management of Deep-Sea Fisheries in the High Seas (FAO, 2009; FAO Deep sea Fisheries Guidelines).

For the purposes of this CMM, the term "bottom fishing" is defined as fishing using any gear type—likely to come in contact with the seafloor or benthic organisms during the normal course of operations.

To assist in the review of this CMM, including inter alia, the development of spatial management arrangements and sustainable catch levels, the Commission requests the Scientific Committee, by no later than the third meeting of the Scientific Committee in 2015, to:

undertake an assessment of the likely impact of specific gear types, particularly trawl, on VMEs, to further inform the definition of bottom fishing;

undertake stock assessments of principal deep sea fishery resources targeted, and, to the extent possible, taken as bycatch and caught incidentally in these fisheries, including straddling resources:

develop and provide advice and recommendations to the Commission on criteria for what constitutes evidence of an encounter with a VME, in particular threshold levels and indicator species:

develop and provide advice and recommendations to the Commission on the most appropriate response to a VME encounter, including inter alia closing particular areas to a particular gear type or types;

review and streamline the SPRFMO Bottom Fishery Impact Assessment Standard (SPRFMO BFIAS) agreed by the Scientific Working Group in 2011 to take account of the latest scientific

information available;

provide advice on the appropriate spatial resolution and time period for footprint mapping; and develop maps of VME distribution in the Convention Area.

For the purpose of this CMM, the term "bottom fishing footprint" means a map of the spatial extent and distribution of historical bottom fishing in the Convention Area of all vessels flagged to a particular Member or CNCP over the period 1 January 2002 to 31 December 2006.

The provisions of this CMM and those of the 2007 Interim Measures for bottom fisheries are not necessarily to be considered precedents for future allocation or other decisions in accordance with Article 21 of the Convention relating to participation in bottom fisheries in the Convention Area and adjacent areas of national jurisdiction in the circumstances provided for in Article 20(4)(ii) and (iii) with the consent of the relevant coastal State Member or Members.

MANAGEMENT OF BOTTOM FISHING AND FISHERIES

In respect of bottom fisheries, Members and CNCPs agree to:

prepare and submit to the Scientific Committee a bottom fishing footprint as defined in paragraph 6, and a bottom fishing impact assessment, in accordance with paragraphs 10 to 15; prohibit vessels flying their flag from participating in bottom fishing activities in the Convention Area, except in accordance with the provisions of this CMM;

except as provided for in paragraphs 16 to 20 below, limit bottom fishing catch in the Convention Area to a level that does not exceed the annual average levels of that Member or CNCP over the period 1 January 2002 to 31 December 2006;

except as provided for in paragraphs 16 to 20 below, restrict bottom fishing to within the bottom fishing footprint of that Member or CNCP established in accordance with sub-paragraph (a); pending the development of an SPRFMO Observer Programme and until the Scientific Committee undertakes the assessments provided for in paragraph 5 (a) and (b) of this CMM: for vessels using trawl gear in the Convention Area, ensure 100 percent observer coverage for vessels flying their flag for the duration of the trip;

for each other bottom fishing gear type, ensure that there is at least a 10 percent level of observer coverage each fishing year;

until the Scientific Committee has developed advice on SPRFMO threshold levels pursuant to paragraph 5(c) of this CMM, establish threshold levels for encounters with VMEs for vessels flying their flag, taking into account paragraph 68 of the FAO Deep-sea Fisheries Guidelines; require vessels flying their flag to cease bottom fishing activities within five (5) nautical miles of any site in the Convention Area where evidence of a VME is encountered above threshold levels established under sub-paragraph (f) in the course of fishing operations, and to report the encounter to the Secretariat of the Commission in accordance with the guidelines at Annex 1, so that appropriate action can be taken in respect of the relevant site;

notwithstanding sub-paragraphs (d) and (g) above, a Member or a CNCP may exclude part of its bottom fishing footprint from the application of sub-paragraph (g) by dividing its footprint into areas open to bottom fishing, areas closed to bottom fishing and areas to which sub-paragraph (g) would apply. These exclusions must have the purpose of preventing significant adverse impacts to VMEs.

Nothing in paragraph 8 shall affect the rights of Members and CNCPs to apply additional or more stringent compatible measures to their flagged vessels conducting bottom fishing.

ASSESSMENT OF BOTTOM FISHING

No Member or CNCP shall authorise their flagged vessels to engage in any bottom fishing within the Convention Area unless they have undertaken an assessment of the impact of their flagged vessels' bottom fishing. Any assessment carried out after 2011 must be done in

accordance with the FAO Deep- sea Fisheries Guidelines, and taking into account the SPRFMO BFIAS and areas identified where VMEs are known or suspected to occur in the area to be fished. When preparing assessments, Members and CNCPs will take into account the information provided pursuant to paragraph 23 of this CMM.

Assessments by Members or CNCPs shall also address whether the proposed activities achieve the objectives described in paragraph 1 of this CMM and Article 2 of the Convention.

The Scientific Committee shall:

assess, on the basis of the best available scientific information, whether the proposed bottom fishing would have significant adverse impacts on VMEs and if it is assessed that these activities would have significant adverse impacts, recommend measures to prevent such impacts, or recommend that the proposed bottom fishing should not proceed:

assess, taking into account, *inter alia*, the cumulative impacts of other fishing occurring in the region where such information is available, whether the proposed activities are consistent with paragraph 1 of this CMM and Article 2 of the Convention;

provide recommendations and advice to the Commission on the assessment.

The Commission shall:

on the basis of these assessments and taking into account the recommendations and advice of the Scientific Committee, consider whether, and if applicable the extent to which, bottom fishing in the region of the Convention Area for which the assessment was conducted, can be authorised and which, if any, measures are required, to prevent significant adverse impacts on VMEs;

make their determinations and any Scientific Committee evaluations publicly available.

Members and CNCPs shall ensure that assessments are updated when a substantial change in the fishery has occurred, such that it is likely that the risk or impacts of the fishery may have changed.

These assessments shall be made publicly available on the SPRFMO website.

FISHING OUTSIDE THE FOOTPRINT OR ABOVE REFERENCE PERIOD CATCH LEVELS

Notwithstanding paragraphs 8(c) and (d), a Member or CNCP may apply to the Commission to either:

undertake bottom fishing in the Convention Area where they do not have a bottom fishing footprint;

undertake bottom fishing in the Convention Area but outside their footprint established in accordance with paragraph 8(a); or

exceed the average level of catch for bottom fishing established in accordance with paragraph 8(c).

The Member or CNCP shall prepare and submit to the Secretariat for consideration by the Scientific Committee 60 days in advance of a Scientific Committee meeting, an application outlining their proposal to commence bottom fishing or their proposal to fish outside their footprint or above reference year catch levels, in accordance with paragraphs 10 and 11. Such an application will take into account the results of any public consultation conducted by that Member or CNCP.

Assessments by Members or CNCPs shall be submitted to the Scientific Committee for review. The Scientific Committee will consider the assessments in accordance with paragraph 12.

The Commission shall consider the assessments in accordance with paragraph 13. These assessments shall be made publicly available on the SPREMO website.

Members and CNCPs shall not permit bottom fishing to occur until it has been authorised in accordance with paragraphs 16 to 19.

The requirements in paragraphs 16 to 20 are in addition to the requirements in any other

measures—adopted under Article 22 of the Convention with respect to new and exploratory fisheries.

VULNERABLE MARINE ECOSYSTEMS

Subject to paragraph 8(h) of this CMM, in respect of areas where VMEs are known to occur or are likely to occur based on the best available scientific information, the Commission shall close such areas to bottom fishing by a particular gear type or types, drawing on advice from the Scientific Committee provided under paragraph 5, unless, based on an assessment undertaken in accordance with either paragraphs 10 to 15 or paragraphs 16 to 19 above, the Commission determines that such bottom fishing will not have significant adverse impacts on VMEs.

Members and CNCPs shall cooperate to identify, on the basis of the best available scientific information, areas where VMEs are known or likely to occur in the Convention Area and to map these sites, and provide such data and information to the SPRFMO Secretariat for circulation to all Members and CNCPs.

MONITORING, CONTROL AND REPORTING OF BOTTOM FISHING

All Members and CNCPs whose vessels participate in bottom fishing shall, *inter alia*: ensure that their vessels are equipped and configured so that they can comply with all relevant SPRFMO CMMs and shall only authorise their vessels to fish in the Convention Area where they are able to exercise their responsibilities as a flag State under the Convention and the CMMs; ensure that vessels meet the level of observer coverage specified in paragraph 8(e) of this CMM to collect data in accordance with this and other CMMs:

prohibit their vessels from participating in bottom fishing if the agreed minimum required data submissions have not been provided in accordance with the agreed subset of the vessel identification data requirements;

require each of their vessels to operate a vessel monitoring system polling once every two hours for the duration of the trip², and report back to its flag state in accordance with the SPRFMO Data Standards or any other relevant CMM;

in respect of each vessel, submit VMS reports in an electronic format to the Secretariat in accordance with any VMS CMM adopted by the Commission; and

report, in an electronic format, the monthly catches of their flagged vessels to the Secretariat within 20 days of the end of each month, in accordance with the SPRFMO Data Standards.

The Executive Secretary shall circulate monthly catch reports (from data provided in accordance with paragraph 24(f)) aggregated by flag State, to all Members and CNCPs as soon as possible, once collated.

COOPERATION WITH OTHER STATES

Members and CNCPs resolve, individually or jointly, to request those States that are undertaking bottom fishing for fishery resources in the Convention Area but are not currently Members of or CNCPs to the Convention to cooperate fully in the implementation of this measure and to consider participating in the work of SPRFMO as a matter of priority.

REVIEW

Noting the work done by the Scientific Committee at its annual meeting in 2017, as well as the information paper presented by Australia and New Zealand at the 2018 annual meetings of the Compliance and Technical Committee and the Commission, this CMM shall apply until the close of the annual Commission meeting in 2019 unless determined otherwise by the Commission. It shall be reviewed at the regular meeting of the Commission in 2019 with the aim of adopting a new bottom fishing CMM. Such review shall take into account, inter alia, the latest advice of the Scientific Committee, including with respect to appropriate catch levels for principal target species and/or appropriate reference periods, in accordance with the objectives described in paragraph 1 of this CMM.

² The term "duration of the trip" commences from the time the vessel departs from port, includes all times that it is in the Convention—Area and concludes once it enters port.



Annex 1

Guidelines for the Preparation and Submission of Notifications of Encounters

with VMEs

GENERAL INFORMATION

Include contact information, nationality, vessel name(s) and dates of data collection

VMELOCATION

Start and end positions of all gear deployments and/or observations

Maps of fishing locations, underlying bathymetry or habitat and spatial scale of fishing

Depth(s) fished

FISHING GEAR

Indicate fishing gears used at each location

ADDITIONAL DATA COLLECTED

Indicate additional data collected at or near the locations fished, if possible

Data such as multibeam bathymetry, oceanographic data such as CTD profiles, current profiles, water chemistry, substrate types recorded at or near those locations, other fauna observed, video recordings, acoustic profiles etc.

VME TAXA

For each station fished, provide details of VME taxa observed, including their relative density, absolute density, or number of organisms if possible