

## CMM 03-2019

### Conservation and Management Measure for the Management of Bottom Fishing in the SPRFMO Convention Area

*(Supersedes CMM 03-2018)*

**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;

*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;

*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;

*FURTHER RECOGNISING* Article 4 of the Convention in which Contracting Parties acknowledge their duty to cooperate to ensure compatibility of (CMMs) 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;

*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 (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;

*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;

*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;

*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 authorising 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;

*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;

*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 08-2019 (Gillnetting);

*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;

*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;

*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 CMM 03a-2019 (Deepwater Species) 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.

## Definitions

2. 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:

- a) "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.
- b) "Mid-water trawl" which is defined as fishing for benthico-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.
- c) "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.

3. 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
4. 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).
5. For the purposes of this CMM, the term "Management Area(s)" means those parts of the Evaluated Area specified in paragraph 13.
6. 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.

## General provisions

7. This CMM applies to the entire Convention Area.
8. This CMM together with CMM 03a-2019 (Deepwater species) are adopted as cautious preliminary CMMs consistent with Article 22(1) of the Convention.
9. This CMM together with CMM 03a-2019 (Deepwater species) 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.
10. 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 CMM 03a-2019 (Deepwater species).
11. Only fishing vessels duly authorised pursuant to Article 25 of the Convention and in accordance with CMM 05-2019 (Record of Vessels) that are flagged to Members and CNCPs shall participate in bottom fishing in the Convention Area.
12. 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 20(d)(i); or
  - b) paragraph 21 applies to the Member or CNCP; or
  - c) approval has been given by the Commission under paragraph 12 of CMM 13-2019 (Exploratory Fisheries).

## Bottom fishing Management Areas



13. 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
14. Bottom fishing in the Convention Area shall occur only in the three Management Areas established in paragraph 13 and in accordance with the terms of this CMM together with CMM 03a-2019 (Deepwater Species). CMM 13-2019 (Exploratory Fisheries) does not apply to bottom fishing in the three Management Areas established in paragraph 13.
15. Notwithstanding paragraphs 10 and 14, 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 proposed to be fished (unless the species has regularly been caught as part of an existing fishery);shall be handled in accordance with CMM 13-2019 (Exploratory Fisheries).
16. Unless a Member or CNCP is fishing in an exploratory fishery established pursuant to CMM 13-2019 (Exploratory Fisheries), 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.
17. 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 concern<sup>1</sup>

18. Members and CNCPs shall require vessels flying their flag and undertaking bottom fishing to implement seabird mitigation measures in accordance with CMM 09-2017 (Seabirds), 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.
19. 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

20. Subject to paragraphs 15 and 21, all proposals to undertake bottom fishing in one of the Management Areas established in paragraph 13 shall be subject to an assessment process, based on the best available scientific 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 will determine if such 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 not authorised to proceed. The assessments shall follow the following procedures:
  - a) Each Member or CNCP proposing to participate in bottom fishing activities shall submit to the Scientific Committee a proposed assessment that meets the SPRFMO Bottom Fishery Impact Assessment Standard (SPRFMO BFIAS<sup>2</sup>) with the best available 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:
    - 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 any proposed or additional mitigation measures would prevent such impacts.
  - c) 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 20(a).
  - d) On the basis of the Scientific Committee's review of the submitted assessment, taking into account any recommendations and advice of the Scientific Committee and in line with the precautionary

<sup>1</sup> "Other species of concern" means the list contained in Annex 14 of CMM 02-2018 (Data standards).

<sup>2</sup> 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>



approach, the Commission shall:

- 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;
- ii. 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 paragraph 10 of CMM 03a-2019 (Deepwater Species), bearing in mind the need to be precautionary.

21. Subject to paragraph 22, 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 20(a) for the 2019 and 2020 fishing season.
22. Members and CNCPs whose bottom fishing proposal has been authorised by the Commission under paragraph 20(d)(i) or to whom paragraph 21 applies shall ensure that a proposed assessment meeting the requirements contained in paragraph 20(a) is submitted to the Scientific Committee and Commission at least every 3 years, and also 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.
23. The Secretariat shall make publicly available on the SPRFMO website all submitted assessments as well as the Scientific Committee's review of such assessments in accordance with its usual procedures, and shall invite comment on assessments.
24. The Scientific Committee shall update the SPRFMO BFIAS no later than 2019 and review every 5 years thereafter to ensure that it reflects, as appropriate, best practice.
25. Members and CNCPs who are engaged in fishing pursuant to paragraph 21 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 20.

## Encounters with potential VMEs

26. For the purposes of this section of the CMM, the term "VME indicator taxa" means any benthic organism listed in Annex 5.
27. 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 28.
28. Where VME indicator taxa are encountered in any one tow at or above the threshold limits in Annex 6(A), or three 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 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;
29. 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 fishing to exchange such data and information as may be relevant to the Scientific Committee's consideration of the encounter area.



30. On receipt of a notification under paragraph 28(b) the Secretariat shall:
  - a) record the location of the encounter area; and
  - b) within three (3) working days of receipt, notify all flag States with fishing vessels participating in bottom fishing in the Convention Area that bottom fishing is suspended in the encounter area in paragraph 28(a).
31. Members and CNCPs shall ensure that vessels flying their flags do not bottom fish in an encounter area notified under paragraph 30(b) unless and until such time as the Commission determines management actions under paragraph 34 that would permit the resumption of bottom fishing in the area.
32. 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 28, a comparison of the encounter with the existing model prediction, and suggested management actions to prevent significant adverse impacts on VMEs<sup>3</sup>.
33. The Scientific Committee, at its next annual meeting, shall review all encounters reported pursuant to paragraph 28(b) and determine whether any encounters were unexpected based on the relevant VME habitat suitability models, and provide advice on management actions proposed by the relevant Member or CNCP under paragraph 32 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 32;
  - 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.
34. 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.
35. 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.
36. At its annual meetings 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

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<sup>3</sup> Relevant outputs from habitat suitability models (e.g. shapefiles of predicted distributions) will be made available to Members.



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

37. 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.
38. 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 28.

## Monitoring and control of bottom fishing activities

39. 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;<sup>4</sup>
    - iii. report tow or set start and end position to 1/100th degree resolution - decimal format, notwithstanding the Annexes of CMM 02-2018 (Data standards).
  - 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 to the Secretariat in accordance with CMM 06-2018 (Commission VMS).

## Observer Coverage

40. 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).
41. 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.

## Electronic Monitoring

42. 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

43. The Commission shall review this CMM in 2021 and at least every 3 years thereafter, and in doing so, take

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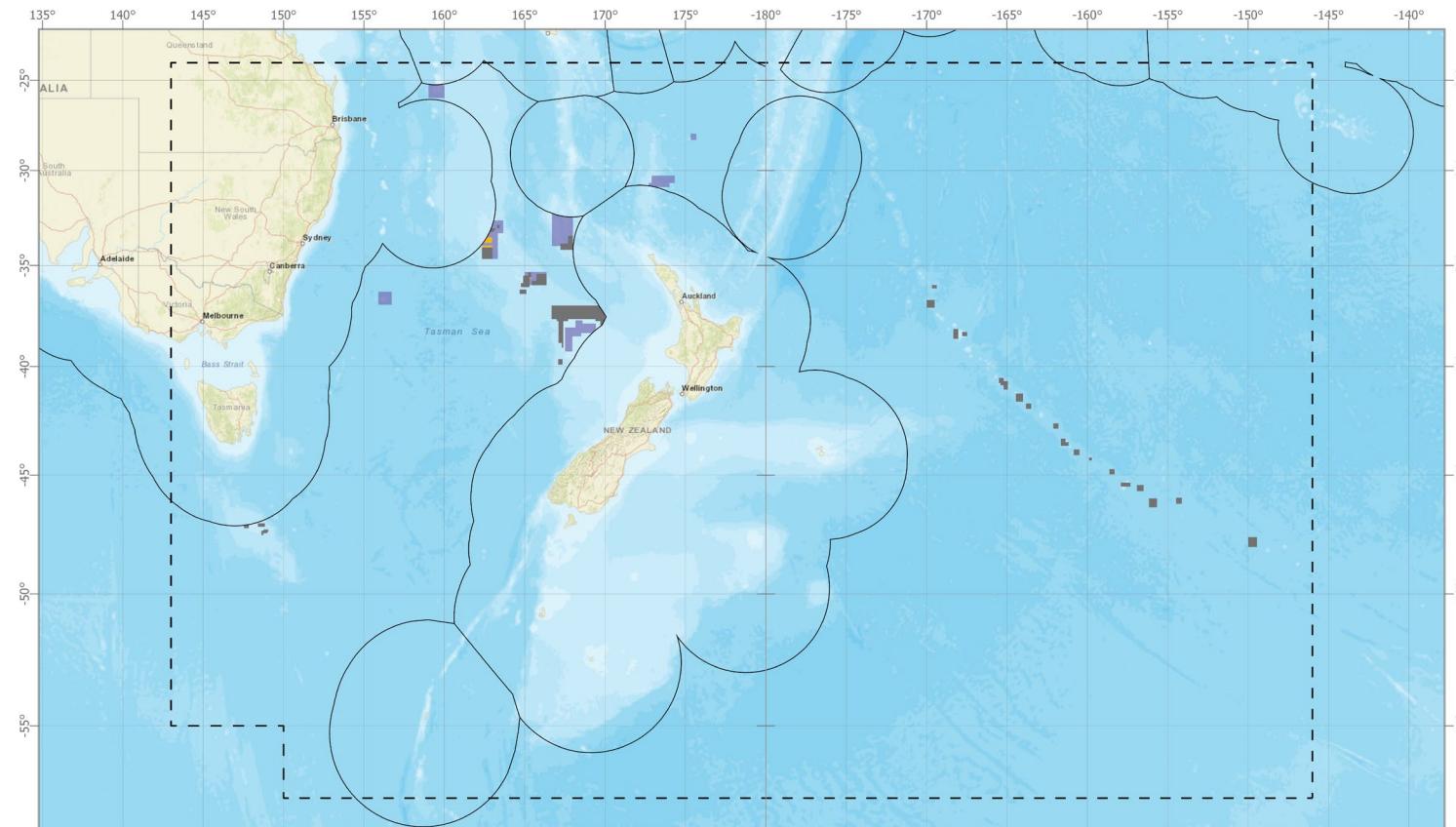
<sup>4</sup> This obligation shall apply to all trips in which the vessel departs port with the intention of entering the Convention Area. The term "duration of the trip" commences from the time the vessel departs from port, includes all times that it is in the Convention Area and concludes once it enters port.



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.



## ANNEX 1: SPRFMO Bottom Fishing Evaluated Area and Bottom Fishing Management Areas



### SPRFMO Management Areas: Overview

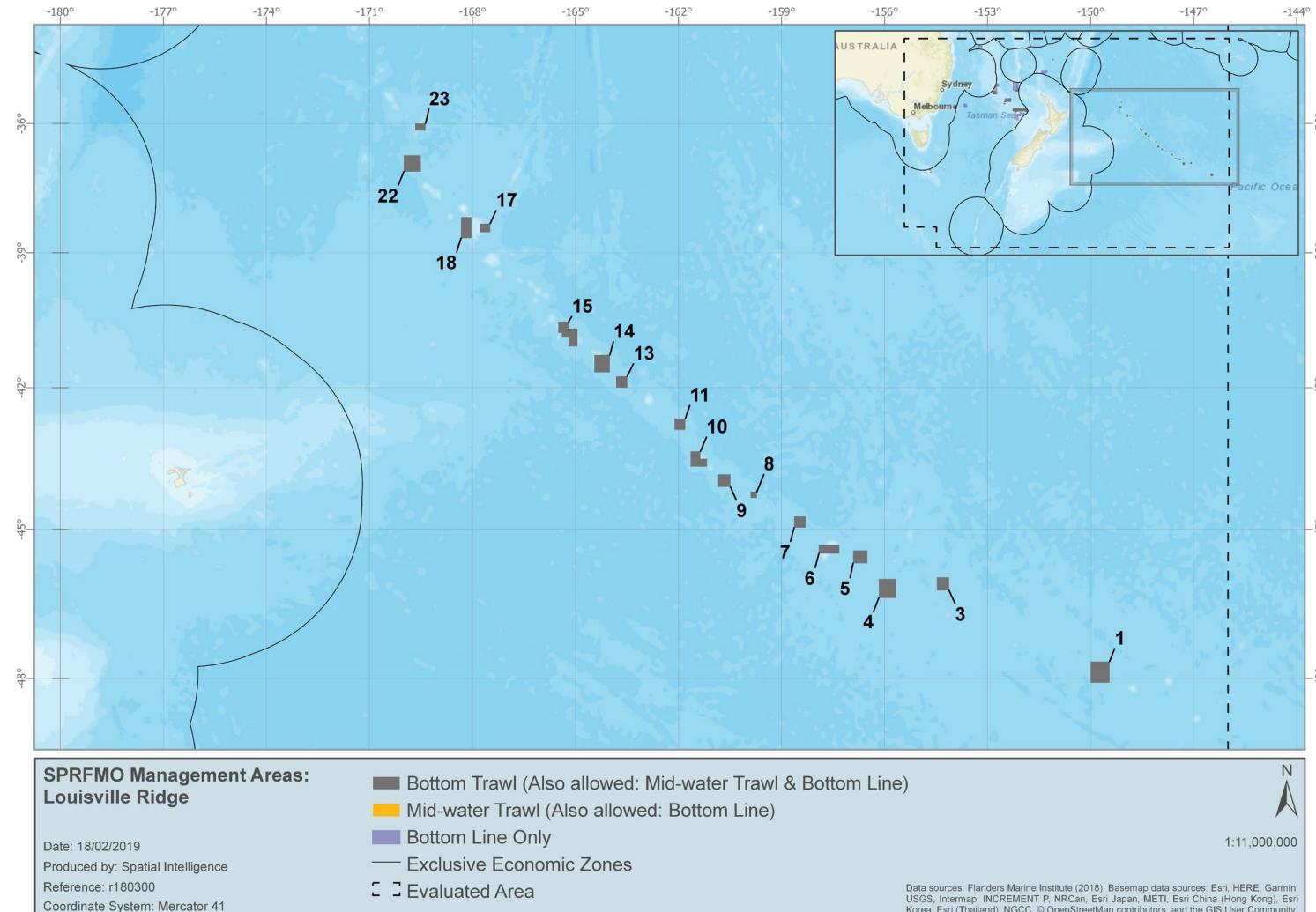
Date: 18/02/2019  
Produced by: Spatial Intelligence  
Reference: r180300  
Coordinate System: Mercator 41

- Bottom Trawl (Also allowed: Mid-water Trawl & Bottom Line)
- Mid-water Trawl (Also allowed: Bottom Line)
- Bottom Line Only
- Exclusive Economic Zones
- □ Evaluated Area

Data sources: Flanders Marine Institute (2018). Basemap data sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, © OpenStreetMap contributors, and the GIS User Community.

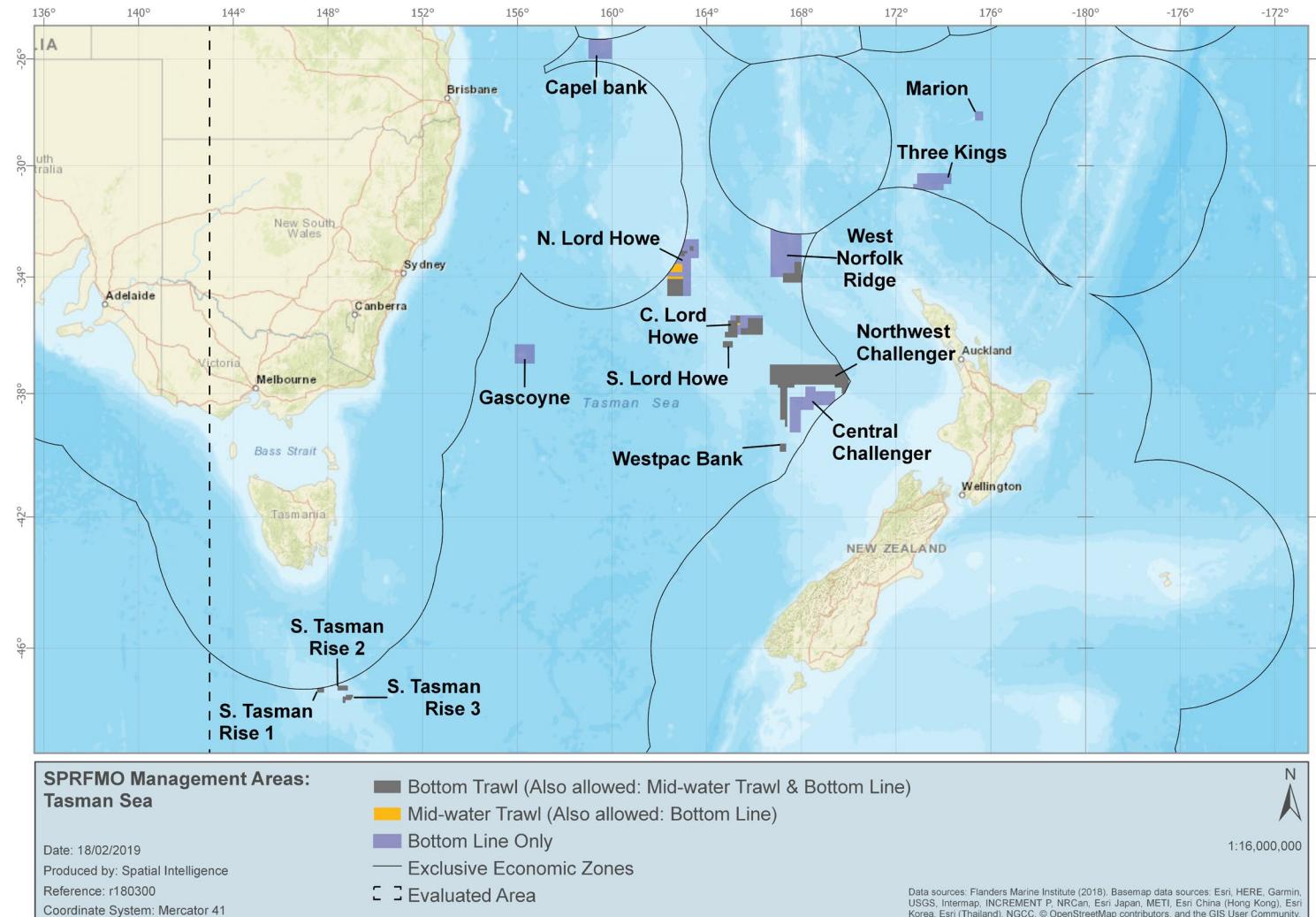


## ANNEX 2: SPRFMO Bottom Fishing Management Areas for the Louisville Ridge





### ANNEX 3: SPRFMO Bottom Fishing Management Areas for the Tasman Sea





## ANNEX 4: Coordinates for each bottom fishing management area<sup>5</sup>

### a) Bottom Trawl Management Area coordinates

| Block Name          | Locality     | Method       | Latitude    | Longitude    | EEZ Direction |
|---------------------|--------------|--------------|-------------|--------------|---------------|
| S. Lord Howe – West | C. Lord Howe | Bottom trawl | 35°21.000'S | 165°13.553'E |               |
| S. Lord Howe – West | C. Lord Howe | Bottom trawl | 35°21.000'S | 165°24.000'E |               |
| S. Lord Howe – West | C. Lord Howe | Bottom trawl | 35°36.000'S | 165°24.000'E |               |
| S. Lord Howe – West | C. Lord Howe | Bottom trawl | 35°36.000'S | 165°18.000'E |               |
| S. Lord Howe – West | C. Lord Howe | Bottom trawl | 36°06.000'S | 165°18.000'E |               |
| S. Lord Howe – West | C. Lord Howe | Bottom trawl | 36°06.000'S | 164°46.000'E |               |
| S. Lord Howe – West | C. Lord Howe | Bottom trawl | 35°54.000'S | 164°46.000'E |               |
| S. Lord Howe – West | C. Lord Howe | Bottom trawl | 35°54.000'S | 164°54.000'E |               |
| S. Lord Howe – West | C. Lord Howe | Bottom trawl | 35°31.000'S | 165°54.000'E |               |
| S. Lord Howe – West | C. Lord Howe | Bottom trawl | 35°31.000'S | 165°13.550'E |               |
| S. Lord Howe – East | C. Lord Howe | Bottom trawl | 35°26.000'S | 165°44.000'E |               |
| S. Lord Howe - East | C. Lord Howe | Bottom trawl | 35°26.000'S | 166°21.915'E |               |
| S. Lord Howe - East | C. Lord Howe | Bottom trawl | 35°47.000'S | 165°26.000'E |               |
| S. Lord Howe - East | C. Lord Howe | Bottom trawl | 35°47.000'S | 165°44.000'E |               |
| S. Lord Howe - East | C. Lord Howe | Bottom trawl | 36°00.500'S | 165°26.000'E |               |
| S. Lord Howe - East | C. Lord Howe | Bottom trawl | 36°00.500'S | 166°21.915'E |               |
| 01                  | Louisville   | Bottom trawl | 47°40.000'S | 149°27.000'W |               |
| 01                  | Louisville   | Bottom trawl | 47°40.000'S | 150°00.000'W |               |
| 01                  | Louisville   | Bottom trawl | 48°05.000'S | 149°27.000'W |               |
| 01                  | Louisville   | Bottom trawl | 48°05.000'S | 150°00.000'W |               |
| 03                  | Louisville   | Bottom trawl | 45°59.000'S | 154°07.224'W |               |
| 03                  | Louisville   | Bottom trawl | 45°59.000'S | 154°28.653'W |               |
| 03                  | Louisville   | Bottom trawl | 46°15.000'S | 154°07.224'W |               |
| 03                  | Louisville   | Bottom trawl | 46°15.000'S | 154°28.653'W |               |
| 04                  | Louisville   | Bottom trawl | 46°01.000'S | 155°40.000'W |               |
| 04                  | Louisville   | Bottom trawl | 46°01.000'S | 156°10.000'W |               |
| 04                  | Louisville   | Bottom trawl | 46°24.000'S | 155°40.000'W |               |
| 04                  | Louisville   | Bottom trawl | 46°24.000'S | 156°10.000'W |               |
| 05                  | Louisville   | Bottom trawl | 45°26.000'S | 156°30.000'W |               |
| 05                  | Louisville   | Bottom trawl | 45°26.000'S | 156°55.000'W |               |
| 05                  | Louisville   | Bottom trawl | 45°42.000'S | 156°30.000'W |               |
| 05                  | Louisville   | Bottom trawl | 45°42.000'S | 156°55.000'W |               |
| 06                  | Louisville   | Bottom trawl | 45°19.500'S | 157°19.000'W |               |
| 06                  | Louisville   | Bottom trawl | 45°19.500'S | 157°55.000'W |               |
| 06                  | Louisville   | Bottom trawl | 45°30.000'S | 157°19.000'W |               |
| 06                  | Louisville   | Bottom trawl | 45°30.000'S | 157°55.000'W |               |
| 07                  | Louisville   | Bottom trawl | 44°43.950'S | 158°18.000'W |               |
| 07                  | Louisville   | Bottom trawl | 44°43.950'S | 158°38.000'W |               |

<sup>5</sup> 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.



| Block Name | Locality   | Method       | Latitude    | Longitude    | EEZ Direction |
|------------|------------|--------------|-------------|--------------|---------------|
| 07         | Louisville | Bottom trawl | 44°57.950'S | 158°18.000'W |               |
| 07         | Louisville | Bottom trawl | 44°57.950'S | 158°38.000'W |               |
| 08         | Louisville | Bottom trawl | 44°13.000'S | 159°43.000'W |               |
| 08         | Louisville | Bottom trawl | 44°13.000'S | 159°54.000'W |               |
| 08         | Louisville | Bottom trawl | 44°21.000'S | 159°43.000'W |               |
| 08         | Louisville | Bottom trawl | 44°21.000'S | 159°54.000'W |               |
| 09         | Louisville | Bottom trawl | 43°51.183'S | 160°29.235'W |               |
| 09         | Louisville | Bottom trawl | 43°51.183'S | 160°50.820'W |               |
| 09         | Louisville | Bottom trawl | 44°07.000'S | 160°29.235'W |               |
| 09         | Louisville | Bottom trawl | 44°07.000'S | 160°50.820'W |               |
| 10         | Louisville | Bottom trawl | 43°22.000'S | 161°21.770'W |               |
| 10         | Louisville | Bottom trawl | 43°22.000'S | 161°39.000'W |               |
| 10         | Louisville | Bottom trawl | 43°31.370'S | 161°10.170'W |               |
| 10         | Louisville | Bottom trawl | 43°31.370'S | 161°21.770'W |               |
| 10         | Louisville | Bottom trawl | 43°41.440'S | 161°10.170'W |               |
| 10         | Louisville | Bottom trawl | 43°41.440'S | 161°39.000'W |               |
| 11         | Louisville | Bottom trawl | 42°40.000'S | 161°48.000'W |               |
| 11         | Louisville | Bottom trawl | 42°40.000'S | 162°07.000'W |               |
| 11         | Louisville | Bottom trawl | 42°54.500'S | 161°48.000'W |               |
| 11         | Louisville | Bottom trawl | 42°54.500'S | 162°07.000'W |               |
| 13         | Louisville | Bottom trawl | 41°45.000'S | 163°29.500'W |               |
| 13         | Louisville | Bottom trawl | 41°45.000'S | 163°49.000'W |               |
| 13         | Louisville | Bottom trawl | 42°00.000'S | 163°29.500'W |               |
| 13         | Louisville | Bottom trawl | 42°00.000'S | 163°49.000'W |               |
| 14         | Louisville | Bottom trawl | 41°17.000'S | 164°00.000'W |               |
| 14         | Louisville | Bottom trawl | 41°17.000'S | 164°27.000'W |               |
| 14         | Louisville | Bottom trawl | 41°40.000'S | 164°00.000'W |               |
| 14         | Louisville | Bottom trawl | 41°40.000'S | 164°27.000'W |               |
| 15         | Louisville | Bottom trawl | 40°32.897'S | 165°12.000'W |               |
| 15         | Louisville | Bottom trawl | 40°32.897'S | 165°30.000'W |               |
| 15         | Louisville | Bottom trawl | 40°42.000'S | 164°56.400'W |               |
| 15         | Louisville | Bottom trawl | 40°42.000'S | 165°12.000'W |               |
| 15         | Louisville | Bottom trawl | 40°48.000'S | 165°24.000'W |               |
| 15         | Louisville | Bottom trawl | 40°48.000'S | 165°30.000'W |               |
| 15         | Louisville | Bottom trawl | 40°54.000'S | 165°12.000'W |               |
| 15         | Louisville | Bottom trawl | 40°54.000'S | 165°24.000'W |               |
| 15         | Louisville | Bottom trawl | 41°06.000'S | 164°56.400'W |               |
| 15         | Louisville | Bottom trawl | 41°06.000'S | 165°12.000'W |               |
| 17         | Louisville | Bottom trawl | 38°20.013'S | 167°29.000'W |               |
| 17         | Louisville | Bottom trawl | 38°20.013'S | 167°47.067'W |               |
| 17         | Louisville | Bottom trawl | 38°32.000'S | 167°29.000'W |               |
| 17         | Louisville | Bottom trawl | 38°32.000'S | 167°47.067'W |               |
| 18         | Louisville | Bottom trawl | 38°11.013'S | 168°01.785'W |               |
| 18         | Louisville | Bottom trawl | 38°11.013'S | 168°20.000'W |               |
| 18         | Louisville | Bottom trawl | 38°40.000'S | 168°01.785'W |               |



| Block Name           | Locality             | Method       | Latitude    | Longitude    | EEZ Direction                       |
|----------------------|----------------------|--------------|-------------|--------------|-------------------------------------|
| 18                   | Louisville           | Bottom trawl | 38°40.000'S | 168°20.000'W |                                     |
| 22                   | Louisville           | Bottom trawl | 36°45.000'S | 169°30.000'W |                                     |
| 22                   | Louisville           | Bottom trawl | 36°45.000'S | 170°00.000'W |                                     |
| 22                   | Louisville           | Bottom trawl | 37°08.000'S | 169°30.000'W |                                     |
| 22                   | Louisville           | Bottom trawl | 37°08.000'S | 170°00.000'W |                                     |
| 23                   | Louisville           | Bottom trawl | 36°00.000'S | 169°22.000'W |                                     |
| 23                   | Louisville           | Bottom trawl | 36°00.000'S | 169°40.000'W |                                     |
| 23                   | Louisville           | Bottom trawl | 36°10.000'S | 169°22.000'W |                                     |
| 23                   | Louisville           | Bottom trawl | 36°10.000'S | 169°40.000'W |                                     |
| N. Lord Howe - South | N. Lord Howe         | Bottom trawl | 34°04.035'S | 162°20.000'E |                                     |
| N. Lord Howe - South | N. Lord Howe         | Bottom trawl | 34°04.035'S | 163°00.000'E |                                     |
| N. Lord Howe - South | N. Lord Howe         | Bottom trawl | 34°40.000'S | 162°20.000'E |                                     |
| N. Lord Howe - South | N. Lord Howe         | Bottom trawl | 34°40.000'S | 163°00.000'E |                                     |
| N. Lord Howe - East  | N. Lord Howe         | Bottom trawl | 32°54.650'S | 163°16.615'E |                                     |
| N. Lord Howe - East  | N. Lord Howe         | Bottom trawl | 32°54.650'S | 163°26.380'E |                                     |
| N. Lord Howe - East  | N. Lord Howe         | Bottom trawl | 33°04.400'S | 163°16.615'E |                                     |
| N. Lord Howe - East  | N. Lord Howe         | Bottom trawl | 33°04.400'S | 163°26.380'E |                                     |
| N. Lord Howe - West  | N. Lord Howe         | Bottom trawl | 33°16.400'S | 162°52.540'E |                                     |
| N. Lord Howe - West  | N. Lord Howe         | Bottom trawl | 33°09.296'S | 162°52.540'E | North-east along the Australian EEZ |
| N. Lord Howe - West  | N. Lord Howe         | Bottom trawl | 33°04.400'S | 162°54.941'E |                                     |
| N. Lord Howe - West  | N. Lord Howe         | Bottom trawl | 33°04.400'S | 163°10.540'E |                                     |
| N. Lord Howe - West  | N. Lord Howe         | Bottom trawl | 33°10.400'S | 163°10.540'E |                                     |
| N. Lord Howe - West  | N. Lord Howe         | Bottom trawl | 33°10.400'S | 163°04.540'E |                                     |
| N. Lord Howe - West  | N. Lord Howe         | Bottom trawl | 33°16.400'S | 163°04.540'E |                                     |
| Northwest Challenger | Northwest Challenger | Bottom trawl | 38°00.000'S | 169°47.848'E |                                     |
| Northwest Challenger | Northwest Challenger | Bottom trawl | 38°00.000'S | 169°42.000'E |                                     |
| Northwest Challenger | Northwest Challenger | Bottom trawl | 37°48.000'S | 169°42.000'E |                                     |
| Northwest Challenger | Northwest Challenger | Bottom trawl | 37°48.000'S | 169°24.000'E |                                     |
| Northwest Challenger | Northwest Challenger | Bottom trawl | 37°42.000'S | 169°24.000'E |                                     |
| Northwest Challenger | Northwest Challenger | Bottom trawl | 37°42.000'S | 167°42.000'E |                                     |
| Northwest Challenger | Northwest Challenger | Bottom trawl | 37°48.000'S | 167°42.000'E |                                     |
| Northwest Challenger | Northwest Challenger | Bottom trawl | 37°48.000'S | 167°24.000'E |                                     |
| Northwest Challenger | Northwest Challenger | Bottom trawl | 39°06.000'S | 167°24.000'E |                                     |
| Northwest Challenger | Northwest Challenger | Bottom trawl | 39°06.000'S | 167°18.000'E |                                     |
| Northwest Challenger | Northwest Challenger | Bottom trawl | 38°52.000'S | 167°18.000'E |                                     |
| Northwest Challenger | Northwest Challenger | Bottom trawl | 38°52.000'S | 167°06.000'E |                                     |
| Northwest Challenger | Northwest Challenger | Bottom trawl | 37°48.000'S | 167°06.000'E |                                     |
| Northwest Challenger | Northwest Challenger | Bottom trawl | 37°48.000'S | 167°00.000'E |                                     |



| Block Name           | Locality             | Method       | Latitude    | Longitude    | EEZ Direction                                    |
|----------------------|----------------------|--------------|-------------|--------------|--|
| Northwest Challenger | Northwest Challenger | Bottom trawl | 37°42.000'S | 167°00.000'E |  |
| Northwest Challenger | Northwest Challenger | Bottom trawl | 37°42.000'S | 166°40.000'E |  |
| Northwest Challenger | Northwest Challenger | Bottom trawl | 37°01.333'S | 166°40.000'E |  |
| Northwest Challenger | Northwest Challenger | Bottom trawl | 37°01.333'S | 169°36.706'E | South-east along the New Zealand EEZ             |
| Northwest Challenger | Northwest Challenger | Bottom trawl | 37°29.902'S | 170°00.000'E | Due south to a point on the New Zealand EEZ      |
| Northwest Challenger | Northwest Challenger | Bottom trawl | 37°41.589'S | 170°00.000'E | South-west along the New Zealand EEZ             |
| Box 1                | S. Tasman Rise 1     | Bottom trawl | 47°08.280'S | 147°50.200'E | Start on the Australian EEZ                      |
| Box 1                | S. Tasman Rise 1     | Bottom trawl | 47°17.370'S | 147°50.200'E |  |
| Box 1                | S. Tasman Rise 1     | Bottom trawl | 47°17.370'S | 147°32.300'E |  |
| Box 1                | S. Tasman Rise 1     | Bottom trawl | 47°10.197'S | 147°32.300'E | East along the Australian EEZ to the start point |
| Box 2                | S. Tasman Rise 2     | Bottom trawl | 47°05.160'S | 148°24.165'E |  |
| Box 2                | S. Tasman Rise 2     | Bottom trawl | 47°05.160'S | 148°50.670'E |  |
| Box 2                | S. Tasman Rise 2     | Bottom trawl | 47°13.780'S | 148°24.165'E |  |
| Box 2                | S. Tasman Rise 2     | Bottom trawl | 47°13.780'S | 148°50.670'E |  |
| Box 3                | S. Tasman Rise 3     | Bottom trawl | 47°21.000'S | 148°45.610'E |  |
| Box 3                | S. Tasman Rise 3     | Bottom trawl | 47°21.000'S | 149°03.200'E |  |
| Box 3                | S. Tasman Rise 3     | Bottom trawl | 47°24.015'S | 148°37.235'E |  |
| Box 3                | S. Tasman Rise 3     | Bottom trawl | 47°24.015'S | 148°45.610'E |  |
| Box 3                | S. Tasman Rise 3     | Bottom trawl | 47°24.800'S | 149°03.200'E |  |
| Box 3                | S. Tasman Rise 3     | Bottom trawl | 47°30.320'S | 148°44.390'E |  |
| Box 3                | S. Tasman Rise 3     | Bottom trawl | 47°30.320'S | 148°57.650'E |  |
| Box 3                | S. Tasman Rise 3     | Bottom trawl | 47°35.205'S | 148°37.235'E |  |
| Box 3                | S. Tasman Rise 3     | Bottom trawl | 47°35.205'S | 148°44.390'E |  |
| S. Lord Howe - West  | S. Lord Howe         | Bottom trawl | 35°31.000'S | 164°54.000'E |  |
| S. Lord Howe - South | S. Lord Howe         | Bottom trawl | 36°13.460'S | 164°40.830'E |  |
| S. Lord Howe - South | S. Lord Howe         | Bottom trawl | 36°13.460'S | 165°06.050'E |  |
| S. Lord Howe - South | S. Lord Howe         | Bottom trawl | 36°26.800'S | 164°40.830'E |  |
| S. Lord Howe - South | S. Lord Howe         | Bottom trawl | 36°26.800'S | 165°06.050'E |  |
| Wanganella           | West Norfolk Ridge   | Bottom trawl | 33°28.000'S | 167°42.000'E |  |
| Wanganella           | West Norfolk Ridge   | Bottom trawl | 33°28.000'S | 168°00.000'E |  |
| Wanganella           | West Norfolk Ridge   | Bottom trawl | 33°52.000'S | 167°13.000'E |  |
| Wanganella           | West Norfolk Ridge   | Bottom trawl | 33°52.000'S | 167°42.000'E |  |
| Wanganella           | West Norfolk Ridge   | Bottom trawl | 34°12.000'S | 167°13.000'E |  |
| Wanganella           | West Norfolk Ridge   | Bottom trawl | 34°12.000'S | 168°00.000'E |  |
| Westpac Bank         | Westpac Bank         | Bottom trawl | 39°39.000'S | 167°05.000'E |  |
| Westpac Bank         | Westpac Bank         | Bottom trawl | 39°39.000'S | 167°21.090'E |  |
| Westpac Bank         | Westpac Bank         | Bottom trawl | 39°55.000'S | 167°05.000'E |  |
| Westpac Bank         | Westpac Bank         | Bottom trawl | 39°55.000'S | 167°21.090'E |  |



b) Mid-water trawl Management Area coordinates

| Block name          | Locality         | Method          | Latitude    | Longitude    | EEZ Direction |
|---------------------|------------------|-----------------|-------------|--------------|---------------|
| S. Lord Howe - East | C. Lord Howe     | Mid-water trawl | 35°26.000'S | 165°44.000'E |               |
| S. Lord Howe - East | C. Lord Howe     | Mid-water trawl | 35°26.000'S | 166°21.915'E |               |
| S. Lord Howe - East | C. Lord Howe     | Mid-water trawl | 35°47.000'S | 165°26.000'E |               |
| S. Lord Howe - East | C. Lord Howe     | Mid-water trawl | 35°47.000'S | 165°44.000'E |               |
| S. Lord Howe - East | C. Lord Howe     | Mid-water trawl | 36°00.500'S | 165°26.000'E |               |
| S. Lord Howe - East | C. Lord Howe     | Mid-water trawl | 36°00.500'S | 166°21.915'E |               |
| S. Lord Howe - West | C. Lord Howe     | Mid-water trawl | 35°21.000'S | 165°13.550'E |               |
| S. Lord Howe - West | C. Lord Howe     | Mid-water trawl | 35°21.000'S | 165°24.000'E |               |
| S. Lord Howe - West | C. Lord Howe     | Mid-water trawl | 35°31.000'S | 164°54.000'E |               |
| S. Lord Howe - West | C. Lord Howe     | Mid-water trawl | 35°31.000'S | 165°13.550'E |               |
| S. Lord Howe - West | C. Lord Howe     | Mid-water trawl | 35°40.383'S | 165°18.000'E |               |
| S. Lord Howe - West | C. Lord Howe     | Mid-water trawl | 35°40.383'S | 165°24.000'E |               |
| S. Lord Howe - West | C. Lord Howe     | Mid-water trawl | 35°54.000'S | 164°46.000'E |               |
| S. Lord Howe - West | C. Lord Howe     | Mid-water trawl | 35°54.000'S | 164°54.000'E |               |
| S. Lord Howe - West | C. Lord Howe     | Mid-water trawl | 36°06.000'S | 164°46.000'E |               |
| S. Lord Howe - West | C. Lord Howe     | Mid-water trawl | 36°06.000'S | 165°18.000'E |               |
| 1                   | Louisville Ridge | Mid-water trawl | 47°40.000'S | 149°27.000'W |               |
| 1                   | Louisville Ridge | Mid-water trawl | 47°40.000'S | 150°00.000'W |               |
| 1                   | Louisville Ridge | Mid-water trawl | 48°05.000'S | 149°27.000'W |               |
| 1                   | Louisville Ridge | Mid-water trawl | 48°05.000'S | 150°00.000'W |               |
| 3                   | Louisville Ridge | Mid-water trawl | 45°59.000'S | 154°07.224'W |               |
| 3                   | Louisville Ridge | Mid-water trawl | 45°59.000'S | 154°28.653'W |               |
| 3                   | Louisville Ridge | Mid-water trawl | 46°15.000'S | 154°07.224'W |               |
| 3                   | Louisville Ridge | Mid-water trawl | 46°15.000'S | 154°28.653'W |               |
| 4                   | Louisville Ridge | Mid-water trawl | 46°01.000'S | 155°40.000'W |               |
| 4                   | Louisville Ridge | Mid-water trawl | 46°01.000'S | 156°10.000'W |               |
| 4                   | Louisville Ridge | Mid-water trawl | 46°24.000'S | 155°40.000'W |               |
| 4                   | Louisville Ridge | Mid-water trawl | 46°24.000'S | 156°10.000'W |               |
| 5                   | Louisville Ridge | Mid-water trawl | 45°26.000'S | 156°30.000'W |               |



| Block name | Locality         | Method          | Latitude    | Longitude    | EEZ Direction |
|------------|------------------|-----------------|-------------|--------------|---------------|
| 5          | Louisville Ridge | Mid-water trawl | 45°26.000'S | 156°55.000'W |               |
| 5          | Louisville Ridge | Mid-water trawl | 45°42.000'S | 156°30.000'W |               |
| 5          | Louisville Ridge | Mid-water trawl | 45°42.000'S | 156°55.000'W |               |
| 6          | Louisville Ridge | Mid-water trawl | 45°19.500'S | 157°19.000'W |               |
| 6          | Louisville Ridge | Mid-water trawl | 45°19.500'S | 157°55.000'W |               |
| 6          | Louisville Ridge | Mid-water trawl | 45°30.000'S | 157°19.000'W |               |
| 6          | Louisville Ridge | Mid-water trawl | 45°30.000'S | 157°55.000'W |               |
| 7          | Louisville Ridge | Mid-water trawl | 44°43.950'S | 158°18.000'W |               |
| 7          | Louisville Ridge | Mid-water trawl | 44°43.950'S | 158°38.000'W |               |
| 7          | Louisville Ridge | Mid-water trawl | 44°57.950'S | 158°18.000'W |               |
| 7          | Louisville Ridge | Mid-water trawl | 44°57.950'S | 158°38.000'W |               |
| 8          | Louisville Ridge | Mid-water trawl | 44°13.000'S | 159°43.000'W |               |
| 8          | Louisville Ridge | Mid-water trawl | 44°13.000'S | 159°54.000'W |               |
| 8          | Louisville Ridge | Mid-water trawl | 44°21.000'S | 159°43.000'W |               |
| 8          | Louisville Ridge | Mid-water trawl | 44°21.000'S | 159°54.000'W |               |
| 9          | Louisville Ridge | Mid-water trawl | 43°51.183'S | 160°29.235'W |               |
| 9          | Louisville Ridge | Mid-water trawl | 43°51.183'S | 160°50.820'W |               |
| 9          | Louisville Ridge | Mid-water trawl | 44°07.000'S | 160°29.235'W |               |
| 9          | Louisville Ridge | Mid-water trawl | 44°07.000'S | 160°50.820'W |               |
| 10         | Louisville Ridge | Mid-water trawl | 43°22.000'S | 161°21.770'W |               |
| 10         | Louisville Ridge | Mid-water trawl | 43°22.000'S | 161°39.000'W |               |
| 10         | Louisville Ridge | Mid-water trawl | 43°31.370'S | 161°10.170'W |               |
| 10         | Louisville Ridge | Mid-water trawl | 43°31.370'S | 161°21.770'W |               |
| 10         | Louisville Ridge | Mid-water trawl | 43°41.440'S | 161°10.170'W |               |
| 10         | Louisville Ridge | Mid-water trawl | 43°41.440'S | 161°39.000'W |               |
| 11         | Louisville Ridge | Mid-water trawl | 42°40.000'S | 161°48.000'W |               |
| 11         | Louisville Ridge | Mid-water trawl | 42°40.000'S | 162°07.000'W |               |
| 11         | Louisville Ridge | Mid-water trawl | 42°54.500'S | 161°48.000'W |               |
| 11         | Louisville Ridge | Mid-water trawl | 42°54.500'S | 162°07.000'W |               |
| 13         | Louisville Ridge | Mid-water trawl | 41°45.000'S | 163°29.500'W |               |
| 13         | Louisville Ridge | Mid-water trawl | 41°45.000'S | 163°49.000'W |               |



| Block name | Locality         | Method          | Latitude    | Longitude    | EEZ Direction |
|------------|------------------|-----------------|-------------|--------------|---------------|
| 13         | Louisville Ridge | Mid-water trawl | 42°00.000'S | 163°29.500'W |               |
| 13         | Louisville Ridge | Mid-water trawl | 42°00.000'S | 163°49.000'W |               |
| 14         | Louisville Ridge | Mid-water trawl | 41°17.000'S | 164°00.000'W |               |
| 14         | Louisville Ridge | Mid-water trawl | 41°17.000'S | 164°27.000'W |               |
| 14         | Louisville Ridge | Mid-water trawl | 41°40.000'S | 164°00.000'W |               |
| 14         | Louisville Ridge | Mid-water trawl | 41°40.000'S | 164°27.000'W |               |
| 15         | Louisville Ridge | Mid-water trawl | 40°32.897'S | 165°12.000'W |               |
| 15         | Louisville Ridge | Mid-water trawl | 40°32.897'S | 165°30.000'W |               |
| 15         | Louisville Ridge | Mid-water trawl | 40°42.000'S | 164°56.400'W |               |
| 15         | Louisville Ridge | Mid-water trawl | 40°42.000'S | 165°12.000'W |               |
| 15         | Louisville Ridge | Mid-water trawl | 40°48.000'S | 165°24.000'W |               |
| 15         | Louisville Ridge | Mid-water trawl | 40°48.000'S | 165°30.000'W |               |
| 15         | Louisville Ridge | Mid-water trawl | 40°54.000'S | 165°12.000'W |               |
| 15         | Louisville Ridge | Mid-water trawl | 40°54.000'S | 165°24.000'W |               |
| 15         | Louisville Ridge | Mid-water trawl | 41°06.000'S | 164°56.400'W |               |
| 15         | Louisville Ridge | Mid-water trawl | 41°06.000'S | 165°12.000'W |               |
| 17         | Louisville Ridge | Mid-water trawl | 38°20.013'S | 167°29.000'W |               |
| 17         | Louisville Ridge | Mid-water trawl | 38°20.013'S | 167°47.067'W |               |
| 17         | Louisville Ridge | Mid-water trawl | 38°32.000'S | 167°29.000'W |               |
| 17         | Louisville Ridge | Mid-water trawl | 38°32.000'S | 167°47.067'W |               |
| 18         | Louisville Ridge | Mid-water trawl | 38°11.013'S | 168°01.785'W |               |
| 18         | Louisville Ridge | Mid-water trawl | 38°11.013'S | 168°20.000'W |               |
| 18         | Louisville Ridge | Mid-water trawl | 38°40.000'S | 168°01.785'W |               |
| 18         | Louisville Ridge | Mid-water trawl | 38°40.000'S | 168°20.000'W |               |
| 22         | Louisville Ridge | Mid-water trawl | 36°45.000'S | 169°30.000'W |               |
| 22         | Louisville Ridge | Mid-water trawl | 36°45.000'S | 170°00.000'W |               |
| 22         | Louisville Ridge | Mid-water trawl | 37°08.000'S | 169°30.000'W |               |
| 22         | Louisville Ridge | Mid-water trawl | 37°08.000'S | 170°00.000'W |               |
| 23         | Louisville Ridge | Mid-water trawl | 36°00.000'S | 169°22.000'W |               |
| 23         | Louisville Ridge | Mid-water trawl | 36°00.000'S | 169°40.000'W |               |
| 23         | Louisville Ridge | Mid-water trawl | 36°10.000'S | 169°22.000'W |               |



| Block name             | Locality             | Method          | Latitude    | Longitude    | EEZ Direction                               |
|------------------------|----------------------|-----------------|-------------|--------------|---|
| 23                     | Louisville Ridge     | Mid-water trawl | 36°10.000'S | 169°40.000'W |   |
| N. Lord Howe - Central | N. Lord Howe         | Mid-water trawl | 33°49.630'S | 162°25.670'E |   |
| N. Lord Howe - Central | N. Lord Howe         | Mid-water trawl | 33°48.622'S | 162°25.670'E | North-east along the Australian EEZ         |
| N. Lord Howe - Central | N. Lord Howe         | Mid-water trawl | 33°32.530'S | 162°38.450'E |   |
| N. Lord Howe - Central | N. Lord Howe         | Mid-water trawl | 33°32.530'S | 162°57.770'E |   |
| N. Lord Howe - Central | N. Lord Howe         | Mid-water trawl | 33°49.630'S | 162°57.770'E |   |
| N. Lord Howe - East    | N. Lord Howe         | Mid-water trawl | 32°54.650'S | 163°16.615'E |   |
| N. Lord Howe - East    | N. Lord Howe         | Mid-water trawl | 32°54.650'S | 163°26.380'E |   |
| N. Lord Howe - East    | N. Lord Howe         | Mid-water trawl | 33°04.400'S | 163°16.615'E |   |
| N. Lord Howe - East    | N. Lord Howe         | Mid-water trawl | 33°04.400'S | 163°26.380'E |   |
| N. Lord Howe - South   | N. Lord Howe         | Mid-water trawl | 33°58.670'S | 162°20.000'E |   |
| N. Lord Howe - South   | N. Lord Howe         | Mid-water trawl | 33°58.670'S | 163°00.000'E |   |
| N. Lord Howe - South   | N. Lord Howe         | Mid-water trawl | 34°40.000'S | 162°20.000'E |   |
| N. Lord Howe - South   | N. Lord Howe         | Mid-water trawl | 34°40.000'S | 163°00.000'E |   |
| N. Lord Howe - West    | N. Lord Howe         | Mid-water trawl | 33°16.400'S | 162°52.540'E |   |
| N. Lord Howe - West    | N. Lord Howe         | Mid-water trawl | 33°09.296'S | 162°52.540'E | North-east along the Australian EEZ         |
| N. Lord Howe - West    | N. Lord Howe         | Mid-water trawl | 33°04.400'S | 162°54.941'E |   |
| N. Lord Howe - West    | N. Lord Howe         | Mid-water trawl | 33°04.400'S | 163°10.540'E |   |
| N. Lord Howe - West    | N. Lord Howe         | Mid-water trawl | 33°10.400'S | 163°04.540'E |   |
| N. Lord Howe - West    | N. Lord Howe         | Mid-water trawl | 33°10.400'S | 163°10.540'E |   |
| N. Lord Howe - West    | N. Lord Howe         | Mid-water trawl | 33°16.400'S | 163°04.540'E |   |
| Northwest Challenger   | Northwest Challenger | Mid-water trawl | 37°01.333'S | 166°40.000'E |   |
| Northwest Challenger   | Northwest Challenger | Mid-water trawl | 37°01.333'S | 169°36.706'E | South-east along the New Zealand EEZ        |
| Northwest Challenger   | Northwest Challenger | Mid-water trawl | 37°29.902'S | 170°00.000'E | Due south to a point on the New Zealand EEZ |
| Northwest Challenger   | Northwest Challenger | Mid-water trawl | 37°41.589'S | 170°00.000'E | South-west along the New Zealand EEZ        |
| Northwest Challenger   | Northwest Challenger | Mid-water trawl | 38°00.000'S | 169°47.848'E |   |
| Northwest Challenger   | Northwest Challenger | Mid-water trawl | 38°00.000'S | 169°42.000'E |   |
| Northwest Challenger   | Northwest Challenger | Mid-water trawl | 37°48.000'S | 169°42.000'E |   |
| Northwest Challenger   | Northwest Challenger | Mid-water trawl | 37°48.000'S | 169°24.000'E |   |
| Northwest Challenger   | Northwest Challenger | Mid-water trawl | 37°42.000'S | 169°24.000'E |   |
| Northwest Challenger   | Northwest Challenger | Mid-water trawl | 37°42.000'S | 167°42.004'E |   |



| Block name           | Locality             | Method          | Latitude    | Longitude    | EEZ Direction                                    |
|----------------------|----------------------|-----------------|-------------|--------------|--|
| Northwest Challenger | Northwest Challenger | Mid-water trawl | 37°48.000'S | 167°42.000'E |  |
| Northwest Challenger | Northwest Challenger | Mid-water trawl | 37°48.000'S | 167°24.000'E |  |
| Northwest Challenger | Northwest Challenger | Mid-water trawl | 39°06.000'S | 167°24.000'E |  |
| Northwest Challenger | Northwest Challenger | Mid-water trawl | 39°06.000'S | 167°18.000'E |  |
| Northwest Challenger | Northwest Challenger | Mid-water trawl | 38°52.000'S | 167°18.000'E |  |
| Northwest Challenger | Northwest Challenger | Mid-water trawl | 38°52.000'S | 167°06.000'E |  |
| Northwest Challenger | Northwest Challenger | Mid-water trawl | 37°48.000'S | 167°06.000'E |  |
| Northwest Challenger | Northwest Challenger | Mid-water trawl | 37°48.000'S | 167°00.000'E |  |
| Northwest Challenger | Northwest Challenger | Mid-water trawl | 37°42.000'S | 167°00.000'E |  |
| Northwest Challenger | Northwest Challenger | Mid-water trawl | 37°42.000'S | 166°40.000'E |  |
| S. Lord Howe - South | S. Lord Howe         | Mid-water trawl | 36°13.460'S | 164°40.830'E |  |
| S. Lord Howe - South | S. Lord Howe         | Mid-water trawl | 36°13.460'S | 165°06.050'E |  |
| S. Lord Howe - South | S. Lord Howe         | Mid-water trawl | 36°26.800'S | 164°40.830'E |  |
| S. Lord Howe - South | S. Lord Howe         | Mid-water trawl | 36°26.800'S | 165°06.050'E |  |
| Box 1                | S. Tasman Rise 1     | Mid-water trawl | 47°08.280'S | 147°50.200'E | Start on the Australian EEZ                      |
| Box 1                | S. Tasman Rise 1     | Mid-water trawl | 47°17.370'S | 147°50.200'E |  |
| Box 1                | S. Tasman Rise 1     | Mid-water trawl | 47°17.370'S | 147°32.300'E |  |
| Box 1                | S. Tasman Rise 1     | Mid-water trawl | 47°10.197'S | 147°32.300'E | East along the Australian EEZ to the start point |
| Box 2                | S. Tasman Rise 2     | Mid-water trawl | 47°05.160'S | 148°24.165'E |  |
| Box 2                | S. Tasman Rise 2     | Mid-water trawl | 47°05.160'S | 148°50.670'E |  |
| Box 2                | S. Tasman Rise 2     | Mid-water trawl | 47°13.780'S | 148°24.165'E |  |
| Box 2                | S. Tasman Rise 2     | Mid-water trawl | 47°13.780'S | 148°50.670'E |  |
| Box 3                | S. Tasman Rise 3     | Mid-water trawl | 47°21.000'S | 148°45.610'E |  |
| Box 3                | S. Tasman Rise 3     | Mid-water trawl | 47°21.000'S | 149°03.200'E |  |
| Box 3                | S. Tasman Rise 3     | Mid-water trawl | 47°24.015'S | 148°37.235'E |  |
| Box 3                | S. Tasman Rise 3     | Mid-water trawl | 47°24.015'S | 148°45.610'E |  |
| Box 3                | S. Tasman Rise 3     | Mid-water trawl | 47°24.800'S | 149°03.200'E |  |
| Box 3                | S. Tasman Rise 3     | Mid-water trawl | 47°30.320'S | 148°44.390'E |  |
| Box 3                | S. Tasman Rise 3     | Mid-water trawl | 47°30.320'S | 148°57.650'E |  |
| Box 3                | S. Tasman Rise 3     | Mid-water trawl | 47°35.205'S | 148°37.235'E |  |
| Box 3                | S. Tasman Rise 3     | Mid-water trawl | 47°35.205'S | 148°44.390'E |  |



| Block name   | Locality           | Method          | Latitude    | Longitude    | EEZ Direction |
|--------------|--------------------|-----------------|-------------|--------------|---------------|
| Wanganella   | West Norfolk Ridge | Mid-water trawl | 33°28.000'S | 167°42.000'E |               |
| Wanganella   | West Norfolk Ridge | Mid-water trawl | 33°28.000'S | 168°00.000'E |               |
| Wanganella   | West Norfolk Ridge | Mid-water trawl | 33°52.000'S | 167°13.000'E |               |
| Wanganella   | West Norfolk Ridge | Mid-water trawl | 33°52.000'S | 167°42.000'E |               |
| Wanganella   | West Norfolk Ridge | Mid-water trawl | 34°12.000'S | 167°13.000'E |               |
| Wanganella   | West Norfolk Ridge | Mid-water trawl | 34°12.000'S | 168°00.000'E |               |
| Westpac Bank | Westpac Bank       | Mid-water trawl | 39°39.000'S | 167°05.000'E |               |
| Westpac Bank | Westpac Bank       | Mid-water trawl | 39°39.000'S | 167°21.090'E |               |
| Westpac Bank | Westpac Bank       | Mid-water trawl | 39°55.000'S | 167°05.000'E |               |
| Westpac Bank | Westpac Bank       | Mid-water trawl | 39°55.000'S | 167°21.090'E |               |



c) Bottom line Management Area coordinates

| Block name           | Locality           | Method      | Latitude    | Longitude    | EEZ Direction                        |
|----------------------|--------------------|-------------|-------------|--------------|--------------------------------------|
| S. Lord Howe         | C. Lord Howe       | Bottom Line | 35°20.000'S | 165°00.000'E |                                      |
| S. Lord Howe         | C. Lord Howe       | Bottom Line | 35°20.000'S | 166°21.915'E |                                      |
| S. Lord Howe         | C. Lord Howe       | Bottom Line | 35°31.000'S | 164°54.000'E |                                      |
| S. Lord Howe         | C. Lord Howe       | Bottom Line | 35°31.000'S | 165°00.000'E |                                      |
| S. Lord Howe         | C. Lord Howe       | Bottom Line | 35°54.000'S | 164°46.000'E |                                      |
| S. Lord Howe         | C. Lord Howe       | Bottom Line | 35°54.000'S | 164°54.000'E |                                      |
| S. Lord Howe         | C. Lord Howe       | Bottom Line | 36°00.500'S | 165°18.000'E |                                      |
| S. Lord Howe         | C. Lord Howe       | Bottom Line | 36°00.500'S | 166°21.915'E |                                      |
| S. Lord Howe         | C. Lord Howe       | Bottom Line | 36°06.000'S | 164°46.000'E |                                      |
| S. Lord Howe         | C. Lord Howe       | Bottom Line | 36°06.000'S | 165°18.000'E |                                      |
| North Lord Howe Rise | Capel bank         | Bottom Line | 25°14.950'S | 159°00.285'E |                                      |
| North Lord Howe Rise | Capel bank         | Bottom Line | 25°14.950'S | 160°00.000'E |                                      |
| North Lord Howe Rise | Capel bank         | Bottom Line | 25°59.640'S | 159°00.285'E |                                      |
| North Lord Howe Rise | Capel bank         | Bottom Line | 25°59.640'S | 160°00.000'E |                                      |
| Central Challenger   | Central Challenger | Bottom Line | 37°45.615'S | 168°35.830'E |                                      |
| Central Challenger   | Central Challenger | Bottom Line | 37°55.230'S | 168°35.830'E |                                      |
| Central Challenger   | Central Challenger | Bottom Line | 37°55.230'S | 169°25.400'E |                                      |
| Central Challenger   | Central Challenger | Bottom Line | 38°13.830'S | 169°25.400'E | South-west along the New Zealand EEZ |
| Central Challenger   | Central Challenger | Bottom Line | 38°23.165'S | 169°11.967'E |                                      |
| Central Challenger   | Central Challenger | Bottom Line | 38°23.165'S | 168°30.780'E |                                      |
| Central Challenger   | Central Challenger | Bottom Line | 38°32.750'S | 168°30.780'E |                                      |
| Central Challenger   | Central Challenger | Bottom Line | 38°32.750'S | 167°57.950'E |                                      |
| Central Challenger   | Central Challenger | Bottom Line | 39°17.180'S | 167°57.950'E |                                      |
| Central Challenger   | Central Challenger | Bottom Line | 39°17.180'S | 167°30.500'E |                                      |
| Central Challenger   | Central Challenger | Bottom Line | 38°06.430'S | 167°30.500'E |                                      |
| Central Challenger   | Central Challenger | Bottom Line | 38°06.430'S | 168°09.833'E |                                      |
| Central Challenger   | Central Challenger | Bottom Line | 37°45.615'S | 168°09.833'E |                                      |
| Gascoyne             | Gascoyne           | Bottom Line | 36°19.950'S | 155°53.630'E |                                      |
| Gascoyne             | Gascoyne           | Bottom Line | 36°19.950'S | 156°43.770'E |                                      |
| Gascoyne             | Gascoyne           | Bottom Line | 36°59.440'S | 155°53.630'E |                                      |
| Gascoyne             | Gascoyne           | Bottom Line | 36°59.440'S | 156°43.770'E |                                      |
| 1                    | Louisville Ridge   | Bottom Line | 47°40.000'S | 149°27.000'W |                                      |
| 1                    | Louisville Ridge   | Bottom Line | 47°40.000'S | 150°00.000'W |                                      |
| 1                    | Louisville Ridge   | Bottom Line | 48°05.000'S | 149°27.000'W |                                      |
| 1                    | Louisville Ridge   | Bottom Line | 48°05.000'S | 150°00.000'W |                                      |
| 3                    | Louisville Ridge   | Bottom Line | 45°59.000'S | 154°07.224'W |                                      |



| Block name | Locality         | Method      | Latitude    | Longitude    | EEZ Direction |
|------------|------------------|-------------|-------------|--------------|---------------|
| 3          | Louisville Ridge | Bottom Line | 45°59.000'S | 154°28.653'W |               |
| 3          | Louisville Ridge | Bottom Line | 46°15.000'S | 154°07.224'W |               |
| 3          | Louisville Ridge | Bottom Line | 46°15.000'S | 154°28.653'W |               |
| 4          | Louisville Ridge | Bottom Line | 46°01.000'S | 155°40.000'W |               |
| 4          | Louisville Ridge | Bottom Line | 46°01.000'S | 156°10.000'W |               |
| 4          | Louisville Ridge | Bottom Line | 46°24.000'S | 155°40.000'W |               |
| 4          | Louisville Ridge | Bottom Line | 46°24.000'S | 156°10.000'W |               |
| 5          | Louisville Ridge | Bottom Line | 45°26.000'S | 156°30.000'W |               |
| 5          | Louisville Ridge | Bottom Line | 45°26.000'S | 156°55.000'W |               |
| 5          | Louisville Ridge | Bottom Line | 45°42.000'S | 156°30.000'W |               |
| 5          | Louisville Ridge | Bottom Line | 45°42.000'S | 156°55.000'W |               |
| 6          | Louisville Ridge | Bottom Line | 45°19.500'S | 157°19.000'W |               |
| 6          | Louisville Ridge | Bottom Line | 45°19.500'S | 157°55.000'W |               |
| 6          | Louisville Ridge | Bottom Line | 45°30.000'S | 157°19.000'W |               |
| 6          | Louisville Ridge | Bottom Line | 45°30.000'S | 157°55.000'W |               |
| 7          | Louisville Ridge | Bottom Line | 44°43.950'S | 158°18.000'W |               |
| 7          | Louisville Ridge | Bottom Line | 44°43.950'S | 158°38.000'W |               |
| 7          | Louisville Ridge | Bottom Line | 44°57.950'S | 158°18.000'W |               |
| 7          | Louisville Ridge | Bottom Line | 44°57.950'S | 158°38.000'W |               |
| 8          | Louisville Ridge | Bottom Line | 44°13.000'S | 159°43.000'W |               |
| 8          | Louisville Ridge | Bottom Line | 44°13.000'S | 159°54.000'W |               |
| 8          | Louisville Ridge | Bottom Line | 44°21.000'S | 159°43.000'W |               |
| 8          | Louisville Ridge | Bottom Line | 44°21.000'S | 159°54.000'W |               |
| 9          | Louisville Ridge | Bottom Line | 43°51.183'S | 160°29.235'W |               |
| 9          | Louisville Ridge | Bottom Line | 43°51.183'S | 160°50.820'W |               |
| 9          | Louisville Ridge | Bottom Line | 44°07.000'S | 160°29.235'W |               |
| 9          | Louisville Ridge | Bottom Line | 44°07.000'S | 160°50.820'W |               |
| 10         | Louisville Ridge | Bottom Line | 43°22.000'S | 161°21.770'W |               |
| 10         | Louisville Ridge | Bottom Line | 43°22.000'S | 161°39.000'W |               |
| 10         | Louisville Ridge | Bottom Line | 43°31.370'S | 161°10.170'W |               |
| 10         | Louisville Ridge | Bottom Line | 43°31.370'S | 161°21.770'W |               |
| 10         | Louisville Ridge | Bottom Line | 43°41.440'S | 161°10.170'W |               |
| 10         | Louisville Ridge | Bottom Line | 43°41.440'S | 161°39.000'W |               |
| 11         | Louisville Ridge | Bottom Line | 42°40.000'S | 161°48.000'W |               |
| 11         | Louisville Ridge | Bottom Line | 42°40.000'S | 162°07.000'W |               |
| 11         | Louisville Ridge | Bottom Line | 42°54.500'S | 161°48.000'W |               |
| 11         | Louisville Ridge | Bottom Line | 42°54.500'S | 162°07.000'W |               |
| 13         | Louisville Ridge | Bottom Line | 41°45.000'S | 163°29.500'W |               |
| 13         | Louisville Ridge | Bottom Line | 41°45.000'S | 163°49.000'W |               |
| 13         | Louisville Ridge | Bottom Line | 42°00.000'S | 163°29.500'W |               |
| 13         | Louisville Ridge | Bottom Line | 42°00.000'S | 163°49.000'W |               |
| 14         | Louisville Ridge | Bottom Line | 41°17.000'S | 164°00.000'W |               |
| 14         | Louisville Ridge | Bottom Line | 41°17.000'S | 164°27.000'W |               |
| 14         | Louisville Ridge | Bottom Line | 41°40.000'S | 164°00.000'W |               |
| 14         | Louisville Ridge | Bottom Line | 41°40.000'S | 164°27.000'W |               |



| Block name           | Locality             | Method      | Latitude    | Longitude    | EEZ Direction  |
|----------------------|----------------------|-------------|-------------|--------------|--|
| 15                   | Louisville Ridge     | Bottom Line | 40°32.897'S | 165°12.000'W |  |
| 15                   | Louisville Ridge     | Bottom Line | 40°32.897'S | 165°30.000'W |  |
| 15                   | Louisville Ridge     | Bottom Line | 40°42.000'S | 164°56.400'W |  |
| 15                   | Louisville Ridge     | Bottom Line | 40°42.000'S | 165°12.000'W |  |
| 15                   | Louisville Ridge     | Bottom Line | 40°48.000'S | 165°24.000'W |  |
| 15                   | Louisville Ridge     | Bottom Line | 40°48.000'S | 165°30.000'W |  |
| 15                   | Louisville Ridge     | Bottom Line | 40°54.000'S | 165°12.000'W |  |
| 15                   | Louisville Ridge     | Bottom Line | 40°54.000'S | 165°24.000'W |  |
| 15                   | Louisville Ridge     | Bottom Line | 41°06.000'S | 164°56.400'W |  |
| 15                   | Louisville Ridge     | Bottom Line | 41°06.000'S | 165°12.000'W |  |
| 17                   | Louisville Ridge     | Bottom Line | 38°20.013'S | 167°29.000'W |  |
| 17                   | Louisville Ridge     | Bottom Line | 38°20.013'S | 167°47.067'W |  |
| 17                   | Louisville Ridge     | Bottom Line | 38°32.000'S | 167°29.000'W |  |
| 17                   | Louisville Ridge     | Bottom Line | 38°32.000'S | 167°47.067'W |  |
| 18                   | Louisville Ridge     | Bottom Line | 38°11.013'S | 168°01.785'W |  |
| 18                   | Louisville Ridge     | Bottom Line | 38°11.013'S | 168°20.000'W |  |
| 18                   | Louisville Ridge     | Bottom Line | 38°40.000'S | 168°01.785'W |  |
| 18                   | Louisville Ridge     | Bottom Line | 38°40.000'S | 168°20.000'W |  |
| 22                   | Louisville Ridge     | Bottom Line | 36°45.000'S | 169°30.000'W |  |
| 22                   | Louisville Ridge     | Bottom Line | 36°45.000'S | 170°00.000'W |  |
| 22                   | 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 |  |
| 23                   | Louisville Ridge     | Bottom Line | 36°00.000'S | 169°22.000'W |  |
| 23                   | Louisville Ridge     | Bottom Line | 36°00.000'S | 169°40.000'W |  |
| 23                   | Louisville Ridge     | Bottom Line | 36°10.000'S | 169°22.000'W |  |
| 23                   | Louisville Ridge     | Bottom Line | 36°10.000'S | 169°40.000'W |  |
| Marion               | Marion               | Bottom Line | 27°59.155'S | 175°19.590'E |  |
| Marion               | Marion               | Bottom Line | 27°59.155'S | 175°40.370'E |  |
| Marion               | Marion               | Bottom Line | 28°19.800'S | 175°19.590'E |  |
| Marion               | Marion               | Bottom Line | 28°19.800'S | 175°40.370'E |  |
| N. Lord Howe         | N. Lord Howe         | Bottom Line | 32°39.630'S | 163°04.415'E | Start on the Australian EEZ                            |
| N. Lord Howe         | N. Lord Howe         | Bottom Line | 32°39.630'S | 163°40.000'E |  |
| N. Lord Howe         | N. Lord Howe         | Bottom Line | 33°20.000'S | 163°40.000'E |  |
| N. Lord Howe         | N. Lord Howe         | Bottom Line | 33°20.000'S | 163°20.000'E |  |
| N. Lord Howe         | N. Lord Howe         | Bottom Line | 34°40.000'S | 162°20.000'E |  |
| N. Lord Howe         | N. Lord Howe         | Bottom Line | 34°40.000'S | 163°20.000'E |  |
| N. Lord Howe         | N. Lord Howe         | Bottom Line | 33°54.773'S | 162°20.000'E | North-east along the Australian EEZ to the start point |
| Northwest Challenger | Northwest Challenger | Bottom Line | 37°01.333'S | 169°36.706'E | South-east along the New Zealand EEZ                   |
| Northwest Challenger | Northwest Challenger | Bottom Line | 37°29.902'S | 170°00.000'E | Due south to a point on the New Zealand EEZ            |
| Northwest Challenger | Northwest Challenger | Bottom Line | 37°41.589'S | 170°00.000'E | South-west along the New Zealand EEZ                   |
| Northwest Challenger | Northwest Challenger | Bottom Line | 38°00.000'S | 169°47.848'E |  |
| Northwest Challenger | Northwest Challenger | Bottom Line | 38°00.000'S | 169°42.000'E |  |



| Block name           | Locality             | Method      | Latitude    | Longitude    | EEZ Direction                                    |
|----------------------|----------------------|-------------|-------------|--------------|--|
| Northwest Challenger | Northwest Challenger | Bottom Line | 37°48.000'S | 169°42.000'E |  |
| Northwest Challenger | Northwest Challenger | Bottom Line | 37°48.000'S | 169°24.000'E |  |
| Northwest Challenger | Northwest Challenger | Bottom Line | 37°42.000'S | 169°24.000'E |  |
| Northwest Challenger | Northwest Challenger | Bottom Line | 37°42.000'S | 167°42.000'E |  |
| Northwest Challenger | Northwest Challenger | Bottom Line | 37°48.000'S | 167°42.000'E |  |
| Northwest Challenger | Northwest Challenger | Bottom Line | 37°48.000'S | 167°24.000'E |  |
| Northwest Challenger | Northwest Challenger | Bottom Line | 39°06.000'S | 167°24.000'E |  |
| Northwest Challenger | Northwest Challenger | Bottom Line | 39°06.000'S | 167°18.000'E |  |
| Northwest Challenger | Northwest Challenger | Bottom Line | 38°52.000'S | 167°18.000'E |  |
| Northwest Challenger | Northwest Challenger | Bottom Line | 38°52.000'S | 167°06.000'E |  |
| Northwest Challenger | Northwest Challenger | Bottom Line | 37°48.000'S | 167°06.000'E |  |
| Northwest Challenger | Northwest Challenger | Bottom Line | 37°48.000'S | 167°00.000'E |  |
| Northwest Challenger | Northwest Challenger | Bottom Line | 37°42.000'S | 167°00.000'E |  |
| Northwest Challenger | Northwest Challenger | Bottom Line | 37°01.333'S | 166°40.000'E |  |
| S. Lord Howe - South | S. Lord Howe         | Bottom Line | 36°13.460'S | 164°40.830'E |  |
| S. Lord Howe - South | S. Lord Howe         | Bottom Line | 36°13.460'S | 165°06.050'E |  |
| S. Lord Howe - South | S. Lord Howe         | Bottom Line | 36°26.800'S | 164°40.830'E |  |
| S. Lord Howe - South | S. Lord Howe         | Bottom Line | 36°26.800'S | 165°06.050'E |  |
| Box 1                | S. Tasman Rise 1     | Bottom Line | 47°08.280'S | 147°50.200'E | Start on the Australian EEZ                      |
| Box 1                | S. Tasman Rise 1     | Bottom Line | 47°17.370'S | 147°50.200'E |  |
| Box 1                | S. Tasman Rise 1     | Bottom Line | 47°17.370'S | 147°32.300'E |  |
| Box 1                | S. Tasman Rise 1     | Bottom Line | 47°10.197'S | 147°32.300'E | East along the Australian EEZ to the start point |
| Box 2                | S. Tasman Rise 2     | Bottom Line | 47°05.160'S | 148°24.165'E |  |
| Box 2                | S. Tasman Rise 2     | Bottom Line | 47°05.160'S | 148°50.670'E |  |
| Box 2                | S. Tasman Rise 2     | Bottom Line | 47°13.780'S | 148°24.165'E |  |
| Box 2                | S. Tasman Rise 2     | Bottom Line | 47°13.780'S | 148°50.670'E |  |
| Box 3                | S. Tasman Rise 3     | Bottom Line | 47°21.000'S | 148°45.610'E |  |
| Box 3                | S. Tasman Rise 3     | Bottom Line | 47°21.000'S | 149°03.200'E |  |
| Box 3                | S. Tasman Rise 3     | Bottom Line | 47°24.015'S | 148°37.235'E |  |
| Box 3                | S. Tasman Rise 3     | Bottom Line | 47°24.015'S | 148°45.610'E |  |
| Box 3                | S. Tasman Rise 3     | Bottom Line | 47°24.800'S | 149°03.200'E |  |
| Box 3                | S. Tasman Rise 3     | Bottom Line | 47°30.320'S | 148°44.390'E |  |
| Box 3                | S. Tasman Rise 3     | Bottom Line | 47°30.320'S | 148°57.650'E |  |
| Box 3                | S. Tasman Rise 3     | Bottom Line | 47°35.205'S | 148°37.235'E |  |
| Box 3                | S. Tasman Rise 3     | Bottom Line | 47°35.205'S | 148°44.390'E |  |



| Block name         | Locality           | Method      | Latitude    | Longitude    | EEZ Direction                                     |
|--------------------|--------------------|-------------|-------------|--------------|---|
| Three Kings        | Three Kings        | Bottom Line | 30°49.324'S | 172°42.880'E | Start on the New Zealand EEZ                      |
| Three Kings        | Three Kings        | Bottom Line | 30°40.115'S | 172°42.880'E |   |
| Three Kings        | Three Kings        | Bottom Line | 30°40.115'S | 172°53.295'E |   |
| Three Kings        | Three Kings        | Bottom Line | 30°16.500'S | 172°53.295'E |   |
| Three Kings        | Three Kings        | Bottom Line | 30°16.500'S | 174°20.000'E |   |
| Three Kings        | Three Kings        | Bottom Line | 30°40.245'S | 174°20.000'E |   |
| Three Kings        | Three Kings        | Bottom Line | 30°40.245'S | 174°00.200'E |   |
| Three Kings        | Three Kings        | Bottom Line | 30°53.670'S | 174°00.200'E |   |
| Three Kings        | Three Kings        | Bottom Line | 30°53.670'S | 173°08.819'E | West along the New Zealand EEZ to the start point |
| West Norfolk Ridge | West Norfolk Ridge | Bottom Line | 32°17.000'S | 166°41.530'E |   |
| West Norfolk Ridge | West Norfolk Ridge | Bottom Line | 32°17.000'S | 166°41.921'E | South-east along the Australian EEZ               |
| West Norfolk Ridge | West Norfolk Ridge | Bottom Line | 32°28.633'S | 168°00.000'E |   |
| West Norfolk Ridge | West Norfolk Ridge | Bottom Line | 34°12.000'S | 168°00.000'E |   |
| West Norfolk Ridge | West Norfolk Ridge | Bottom Line | 34°12.000'S | 167°13.000'E |   |
| West Norfolk Ridge | West Norfolk Ridge | Bottom Line | 34°00.000'S | 167°13.000'E |   |
| West Norfolk Ridge | West Norfolk Ridge | Bottom Line | 34°00.000'S | 166°41.530'E |   |
| Westpac Bank       | Westpac Bank       | Bottom Line | 39°39.000'S | 167°05.000'E |   |
| Westpac Bank       | Westpac Bank       | Bottom Line | 39°39.000'S | 167°21.090'E |   |
| Westpac Bank       | Westpac Bank       | Bottom Line | 39°55.000'S | 167°05.000'E |   |
| Westpac Bank       | Westpac Bank       | Bottom Line | 39°55.000'S | 167°21.090'E |   |



## ANNEX 5: List of VME indicator taxa

| Taxonomic Level                  | Common Name         | Qualifying taxa   |
|----------------------------------|---------------------|---|
| <b><i>Vulnerable taxa</i></b>    |                     |   |
| Phylum Porifera                  | Sponges             | All taxa of the classes Demospongiae and Hexactinellidae  |
| Phylum Cnidaria                  |                     |   |
| Class Anthozoa                   |                     |   |
| Order Scleractinia               | Stony corals        | All taxa within the following genera:<br><i>Solenosmilia</i> ; <i>Goniocorella</i> ; <i>Oculina</i> ; <i>Enallopsammia</i> ; <i>Madrepora</i> ; <i>Lophelia</i> |
| Order Antipatharia               | Black corals        | All taxa  |
| Order Alcyonacea                 | True soft corals    | All taxa excluding Gorgonacea   |
| Informal group Gorgonacea        | Sea fans octocorals | All taxa within the following suborders:<br>Holaxonia; Calaxonia; Scleraxonia   |
| Order Pennatulacea               | Sea pens            | All taxa  |
| Order Actiniaria                 | Anemones            | All taxa  |
| Class Hydrozoa                   |                     |   |
| Order Anthoathecatae             |                     |   |
| Family Stylasteridae             | Hydrocorals         | All taxa  |
| <b><i>Habitat indicators</i></b> |                     |   |
| Phylum Echinodermata             |                     |   |
| Class Asteroidea                 |                     |   |
| Order Brisingida                 | Armless stars       | All taxa  |
| Class Crinoidea                  | 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) |
|---------------------------|-------------------|-----------------------|
| <b>Vulnerable taxa</b>    |                   |                       |
| Phylum Porifera           | Sponges           | 50                    |
| Phylum Cnidaria           |                   |                       |
| Class Anthozoa            |                   |                       |
| Order Scleractinia        | Stony corals      | 250                   |
| Order Antipatharia        | Black Corals      | 5                     |
| Order Alcyonacea          | True soft corals  | 60                    |
| Informal group Gorgonacea | Seafan octocorals | 15                    |
| Order Actiniaria          | Anemones          | 40                    |

**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) |
|---------------------------|-------------------|-----------------------|
| <b>Vulnerable taxa</b>    |                   |                       |
| Phylum Porifera           | Sponges           | 5                     |
| Phylum Cnidaria           |                   |                       |
| Class Anthozoa            |                   |                       |
| Order Scleractinia        | Stony corals      | 5                     |
| Order Antipatharia        | Black corals      | 1                     |
| Order Alcyonacea          | True soft corals  | 1                     |
| Informal group Gorgonacea | Seafan octocorals | 1                     |
| Order Pennatulacea        | Sea pens          | 1                     |
| Order Actiniaria          | Anemones          | 5                     |
| Class Hydrozoa            |                   |                       |
| Order Anthoathecatae      |                   |                       |
| Family Stylasteridae      | Hydrocorals       | 1                     |
| Phylum Echinodermata      |                   |                       |
| Class Asteroidea          |                   |                       |
| Order Brisingida          | Armless stars     | 1                     |
| Class Crinoidea           | Sea lillies       | 1                     |



## ANNEX 7: Guidelines for the preparation and submission of notifications of encounters with potential VMEs

|   |
|---|
| 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 gear | 100% observer coverage   |
| Bottom line gear                                    | At least 10% observer coverage for the fishing year <sup>6</sup> |

<sup>6</sup> Expressed as the percentage of the total number of observed hooks.