



**SPRFMO**  
South Pacific Regional Fisheries Management Organisation

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## 12<sup>TH</sup> MEETING OF THE SPRFMO COMMISSION

*Manta, Ecuador, 29 January to 2 February 2024*

COMM 12 – Obs 02

DSCC Protecting deep-sea biodiversity in the South Pacific

*Deep Sea Conservation Coalition*

# Protecting deep-sea biodiversity in the South Pacific

*12th SPRFMO Commission Meeting, 2024*

29 December 2023

Urgent action is needed to protect marine biodiversity in the South Pacific. The Deep Sea Conservation Coalition (DSCC) is an alliance of 118 organisations globally, working together to ensure the health and diversity of deep-sea life. Currently, vulnerable marine ecosystems (VMEs), including seamounts, hydrothermal vents and cold water corals (UNGA 61/105, 2006) are under threat in the Pacific from bottom trawl fishing. The DSCC recommends that the South Pacific Regional Fisheries Management Organisation (SPRFMO), at its forthcoming 12th meeting, agrees the following key deep-sea priorities for to ensure adequate protection of VMEs, consistent with their obligations under United Nations General Assembly (UNGA) resolutions to prevent significant adverse impacts (SAIs) on VMEs such as the coral communities found on seamounts and features.

## Deep-sea priorities for SPRFMO in 2024

### The closure of VMEs, including all seamounts, to bottom impact fishing by:

1. Listing all known VMEs under paragraph 48 of [CMM 03-2023](#), adding them to Annex 9 and thereby closing them to bottom fishing.
2. Revising the bottom trawling management areas (BTMAs) to ensure exclusion of all areas known or likely to contain VMEs.
3. Triggering of the review provided for in footnote 1 of paragraph 19 of [CMM 03-2023](#), and in the interim preventing SAIs on VMEs by suspending bottom trawling in the Convention area.
4. Preventing new and exploratory bottom trawling on seamounts and features.
5. Supporting Chile's proposal to close the Sala y Gómez - Nazca Ridges area to fishing.

### Sustainable management of fisheries across the Convention area by:

6. Rejecting the proposal to roll over catch limits for orange roughy which would allow up to 3 years' catch to be taken in one year.
7. Adopting precautionary actions to ensure ecosystem resilience to climate change.
8. Rejecting the proposal to charge observers to participate in SPRFMO, to ensure transparency and accountability.

## List all known VMEs and adjust Bottom Trawl Management Areas to exclude them

Agenda item 6a Proposals to amend current CMMs

SPRFMO [CMM 03-2023](#) requires in para 48: “Where the Commission has identified areas as vulnerable marine ecosystems, the Commission shall: (a) Register the VME in Annex 9 of this CMM; and (b) Ensure the Management Area boundaries established in paragraph 14 and Annex 4 of this CMM are updated to exclude the VME from areas open to fishing.”

This has not yet been implemented. Currently Annex 9 remains blank, despite strong evidence of VMEs: the 2020 New Zealand encounter on the Lord Howe Rise is one example. Many other VME locations are apparent from the bycatch information presented in [SC11-DW05](#), submitted by New Zealand. These include locations where:

- Over a tonne of coral has been dragged in a single trawl (in one case, five tonnes) in the North Louisville, Central Louisville and West Norfolk FMAs;
- 50-100% of bottom trawls since 2008 have contained VME indicator taxa in proposed BTMAs in Central Lord Howe, West Norfolk and North and South Louisville FMAs;
- As many as 11 different VME indicator taxa have been brought up as bycatch in West Norfolk FMA (Wanganella BTMA); and
- National agencies (e.g. the New Zealand Department of Conservation<sup>1</sup>) and or international bodies (e.g. the Convention on Biological Diversity) have identified coral or other biodiversity hotspots.

These VMEs have yet to be added to Annex 9, and the management areas have not been updated to exclude the VMEs from areas open to fishing (pursuant to [CMM 03-2023](#) para 48). Instead, all of the above examples (and others in [SC11-DW05](#)) are included in the proposed revised Bottom Trawl Management Areas (BTMAs) that will remain open to bottom trawling under the 70% minimum rule (refer to Appendix 1). If UNGA resolutions were being faithfully applied by SPRFMO they would be closed, being areas in which VMEs are known or likely to occur. As the Intersessional Working Group ([IWG](#)) observed, “Area closures are the only reliable management measures that will prevent SAIs on VMEs from fishing methods with substantial bottom contact.”<sup>2</sup>

Seamounts and similar underwater features are known to be biodiversity hotspots, providing a solid substrate for deep-sea corals, sponges, sea pens and other deep-sea life to attach to, forming vulnerable marine ecosystems. The locations of many of these seamounts and features are already known; some have been listed as Ecologically or Biologically Significant Marine Areas (EBSAs) by the Convention on Biodiversity. All should be added to Annex 9.

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<sup>1</sup> Anderson, O. *et al.* 2023. [Identification of protected coral hotspots using species distribution modelling](#)

<sup>2</sup> SPRFMO [COMM11-Doc07. Report of the Bottom Fishing Intersessional Working Group](#) para 81, p 23

**Table 1: Proposed areas to be included in Annex 9**

Area FMA, BTMA	Coordinates	Depth start, end	Number & weight of VME taxa encountered	Date encountered	Reference
Central Louisville (8), BTMA 13	Cell 348682	Unknown	Scleractinia (stony coral) 3,000 kg	2015	<a href="#">SC11-DW10</a> pp 11, 16, 17
North Lord Howe Rise (5), South	Start: 34.1940 S 162.6529 E End: 34.2085 S 162.6525 E	Unknown	Gorgonian Alcyonacea. Quantity not recorded properly, est. 18-20 kg	2020 NZ reported VME encounter	<a href="#">SC9-DW09_rev1</a>
Central Lord Howe Rise (4), East	Available from NZ Department of Conservation	Various	Modelled coral hotspot	Based on 2023 modelling	<a href="#">NIWA report POP2021-02</a> pp 46 & 47
Central Lord Howe Rise(4), East	Cell 217904	Unknown	Potential cumulative weight of 1,105.8 kg since 2008	78% of 91 trawls since 2008	<a href="#">SC11DW10</a> p16
West Norfolk (6), Wanganella	Whole BTMA, 1 tonne bycatch in cell 185619	Various	11 VME indicator taxa, incl 1,000 kg stony coral in one trawl	50% of 446 trawls since 2008	<a href="#">SC11DW10</a> p13
Northwest Challenger (3)		Unknown	Over 100 kg VME indicator taxa bycatch in one trawl	Date not given	<a href="#">SC11DW10</a> p6
North Louisville (7), BTMA 23	Whole BTMA, seamount summit at 36.05 S 169.31 W	Unknown	8 tonnes of Scleractinia bycatch from 2 trawls	100% of 3 trawls since 2008	<a href="#">SC11DW10</a> p15
North Louisville (7), BTMA 23	Cell 226892	Unknown	3,001 kg Scleractinia bycatch in a single trawl	Date not given	<a href="#">SC11-DW10</a> p15, 17 and Table 8
North Louisville (7), BTMA 23	Cells 227968 and 227969	Unknown	5,001 kg Scleractinia bycatch in a single trawl	Date not given	<a href="#">SC11-DW10</a> p17 and <a href="#">SC6-DW09</a> p14
Louisville Seamount Chain (7 & 8)	Include proposed BTMAs in North, Central Louisville FMAs	Various			Convention on Biological Diversity <a href="#">EBSA</a>
Sala y Gomez Ridge	Between 23°42'S & 29°12'S, and 111°30'W & 86°30'W	Various			Convention on Biological Diversity <a href="#">EBSA</a>
Nazca Ridge	Between 15°00'S & 26°09'S, and 86°30'W & 76°06'W	Various			Convention on Biological Diversity <a href="#">EBSA</a>

Note: Bracketed numbers are the numbers given to FMAs in figure 1 (page 8) of NZ paper [SC11 – DW05](#)

We recommend that at a minimum the sites identified in Table 1 above are added to Annex 9, and a process initiated to continue the identification and listing of VMEs, including seamounts, hydrothermal vents and cold water corals, in the SPRFMO convention area.

This should be a standing Scientific Committee agenda item.

**The DSCC calls on SPRFMO members to recognise these areas as VMEs, add them to Annex 9 and exclude them from BTMAs in Annex 4.**

## **Revise the Bottom Trawling Management Areas to protect all VMEs**

Agenda item 6a Proposals to amend current CMMs

At its 11th meeting in 2023, SPRFMO members agreed by consensus to a proposal which became [CMM 03-2023](#). The CMM's intent is to revise the BTMAs to ensure protection of at least 70% of VMEs. The DSCC does not consider that the measure meets the requirements of UNGA resolutions<sup>3</sup> that commit countries and RFMOs to adopt fisheries management measures that prevent SAIs on all VMEs, or not permit bottom fishing.

The paper [SC11-DW05](#) that New Zealand presented to the SPRFMO Scientific Committee in September 2023 (proposing modification of BTMAs to achieve a 70% protection target for VME indicator taxa) clearly shows that areas containing known VMEs, where bottom trawling has previously caused significant adverse impacts (in some cases, over a tonne of coral bycatch from a single trawl - refer to Appendix 1), will remain open to bottom trawling and therefore be at risk of further significant adverse impacts.

Despite the evidence of VMEs within the modified BTMAs, Australia's proposal [COMM 12 – Prop 10](#) has not amended the BTMA boundaries put forward by New Zealand in September, meaning that bottom trawling would be allowed to continue on VMEs. The result is a proposal that will not prevent SAIs on VMEs as required under UNGA Resolutions and the SPRFMO Convention. As one Member noted at SPRFMO's 11th Meeting, [CMM 03-2023](#) is not consistent with the commitment to prevent significant adverse impacts on VMEs.<sup>4</sup> This is an inconsistency which the proposed BTMAs further compound.

New Zealand is the only country still bottom trawling in the South Pacific. Its decision not to submit or cosponsor the BTMA modifications required by [CMM 03-2023](#) on VMEs, suggests that New Zealand is stepping away from previous commitments. If true, this is an unacceptable departure from its international commitments, shows a lack of respect for the work of other CNCPs that engaged in good faith in the Intersessional Working Group, Scientific Committee

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<sup>3</sup> Including UNGA Resolution 61/105 (2006) para. 83(3) (c) and subsequent resolutions

<sup>4</sup> SPRFMO (2023) 11th Annual Meeting of the Commission [Meeting Report](#), para. 97

and Commission, and signals a lack of dedication to the protection of the marine environment, including VMEs.

The precautionary approach is mandated by the objective of the [SPRFMO Convention](#) in article 2 and elaborated in article 3(2). It provides that SPRFMO “*shall not use the absence of adequate scientific information as a reason for postponing or failing to take conservation and management measures*”. This is exactly what SPRFMO would be doing if [CMM 03-2023](#) were to be weakened (including by not implementing some parts) on the pretext of a Contracting Party proposing the need for more science. In addition, New Zealand would be in breach of this provision of the Convention if it were to continue to permit bottom trawling in the absence of adequate scientific information.

The precautionary approach would be for the Commission to implement a ban on bottom trawling pending the review in the footnote to paragraph 19. That footnote was a response to concern by a number of CNCPs: a recognition that the minimum level of protection (70%) is an interim approach, and providing that notwithstanding paragraph 19, the Commission may, in 2024 or any other year, adopt a different level of protection to prevent SAIs on VMEs. The proposal by Australia presents BTMA modifications drawn up, but now seemingly abandoned, by New Zealand. Those proposed BTMAs contain VMEs. In light of this, the review should now be triggered.

That review should take into account the 2009 FAO Deep Sea Guidelines and the UNGA Sustainable Fisheries resolutions including the resolution [77/118](#) (2022), which followed the August 2022 bottom fishing workshop. These include recognition of the need for more biological information on the species that comprise VMEs, including their associated and dependent species, the assessment of SAIs on VMEs, and protecting and conserving biodiversity, including beyond VMEs, as well as the consistent application of the Guidelines; and noting implementation barriers arising from data availability, particularly in spatial distribution and connectivity of VMEs.

Further details of known and likely VMEs within the revised BTMAs are in the DSCC paper from November 2023; [Response to SPRFMO 11th Scientific Committee Report Recommendation](#).

One related matter must be stated clearly: the Total Allowable Catches (TACs) under [CMM 03a-2023](#) are, under paragraphs 4 and 5 of that measure, dependent on the VME measure CMM 03-2023:

- “4. *All activities conducted under this CMM must be conducted in accordance with CMM 03-2023 (Bottom Fishing).*
5. *This CMM together with CMM 03-2023 (Bottom Fishing) are adopted as cautious preliminary conservation and management measures consistent with Article 22(1) of the Convention.*”

Therefore any weakening of CMM 03-2023 must mean that the TACs must be revised.

**The DSCC calls on SPRFMO to trigger the paragraph 19 footnote, initiating a review of VME protection, and suspend all bottom trawling in the Convention area until it is completed.**

**Whether or not the Commission decides to undertake such a review, all known and likely VMEs must be removed from the BTMAs in Annex 4 and added to Annex 9.**

## **Prohibit bottom trawling on seamounts under New and Exploratory Fishing rules**

Agenda item 6a Proposals to amend current CMMs

Given that seamounts and similar underwater features are known to host VMEs, and that (under para 48, above) VMEs are to be identified and closed to bottom fishing, it follows that new and exploratory bottom fisheries should automatically be excluded on such features. While the proposed amendment to [CMM 13-2021](#) on New and Exploratory Fisheries includes a general reference to exploratory fisheries being obligated to follow all existing CMMS (para 21), the exclusion of bottom fishing on all known VMEs should be made explicit in the CMM, and a reference added to application of the encounter protocol and move-on rules.

**The DSCC calls on SPRFMO members to update [CMM 13-2021](#) to explicitly prohibit new and exploratory fisheries from being conducted on seamounts and similar features, and add a reference to the encounter protocol and move-on rules.**

## **Support members' efforts to protect known VMEs: Salas y Gómez and Nazca Ridges**

Agenda item 6b Proposals for new CMMs

The adoption of the BBNJ Agreement<sup>5</sup> earlier this year has paved the way to protect marine biodiversity in areas beyond national jurisdiction through high seas Marine Protected Areas (MPAs). This answered the ambition of the Kunming-Montreal Global Biodiversity Framework to protect 30% of the ocean by 2030 - a mere 7 years away.

There are numerous areas in the South Pacific where the protection of biodiversity on the high seas through the application of the precautionary and ecosystem approach to fisheries is needed. Such protection has been proposed by Chile in [COMM 12 - Prop 20](#). SPRFMO is uniquely placed to assume the responsibility to safeguard the fragile, vulnerable and

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<sup>5</sup> Agreement under the United Nations Convention on the Law of the Sea on the Conservation and Sustainable Use of Marine Biological Diversity of Areas beyond National Jurisdiction, adopted on 1 August 2023. [Res. 77/321 https://www.un.org/en/ga/77/resolutions.shtml](https://www.un.org/en/ga/77/resolutions.shtml)

ecologically relevant ecosystems of the Salas y Gómez and Nazca Ridges area. Potting and other fishing in these areas should be removed from [Comm 12 - Prop 16](#).

**The DSCC calls on SPRFMO to support Chile's proposal to protect Salas y Gómez and Nazca Ridges and not to allow continued potting or other fishing in these areas.**

## Reject the roll-over and accumulation of orange roughy catch limits

Agenda item 6a Proposals to amend current CMMs

New Zealand has proposed in [COMM12-Prop11](#) that orange roughy total allowable catch (TAC) limits should be allowed to accumulate for multiple years, allowing up to three years of catch to be taken in a single year. The scientific paper New Zealand submitted earlier this year [SC11-DW06](#) indicated that if TACs are accumulated for two, three or four years, the bottom trawl fishing footprint is estimated to increase,<sup>6</sup> with more trawl tows if catch limits are rolled over and taken in a single year. That increase would result in more VME indicator taxa being impacted compared with annual TAC limits. The New Zealand paper specifically advised the Commission that allowing catch accumulation may result in an increase in the overall impact on VME indicator taxa. As reported in [SC11-DW06](#) analysis was not possible for West Norfolk Ridge or North Louisville “*due to insufficient catch data to fill catch limits*”.

In addition, there have yet to be assessments of the impact of taking accumulated catches in one year on finfish (teleosts) or Chondrichthyan (sharks) bycatch species caught while fishing for orange roughy. Sharks have biological characteristics that make them particularly vulnerable to fishing e.g. long lived, slow growing, and low fecundity. Georgeson *et al.*<sup>7</sup> carried out a risk assessment on sharks for SPRFMO which identified that a number of shark species are at high or extreme risk from bottom trawling. These species include prickly shark (*Echinorhinus cookei*), goblin shark (*Mitsukurina owstoni*), prickly dogfish (*Oxynotus bruniensis*) and longnose dogshark (*Spinax fernandezianus*).

The view that there will be no impact on orange roughy stocks of taking multiple years' catch in one year comes with a lot of caveats, and will only be the case if CNCPs accept the assumptions in the simple model used to assess the impact. The history of modelling orange roughy stocks over the last 30 years shows continual surprises and the challenge in assessing sustainability. The more recent evidence of skipped spawning, consistent spawning at nearly

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<sup>6</sup> [SC11-DW06](#) states: “The fishing footprint increased in each Management stock under the current (status quo) scenario, and either current BTMA open areas or proposed PS 70% open areas, reflecting the accumulation of fishing locations over time (Figure 5)” and “For the fishing footprint and wider ecosystem impacts, if fishing follows our assumptions then taking accumulated catches in alternating years was estimated to produce increases in the fished footprint and number of individual VME indicator taxa impacted compared to annual fishing, and this varied with the stock, and number of years accumulated.”

<sup>7</sup> Georgeson, L. *et al.* (2020) [Ecological risks of demersal fishing on deepwater chondrichthyan populations in the Southern Indian and South Pacific Oceans](#)



twice the age previously thought, and longevity over 200 years all show there is a lot more to learn about orange roughy and the conditions under which ecologically sustainable fishing can be undertaken.<sup>8</sup>

**The DSCC calls on SPRFMO not to agree to New Zealand's proposal to allow TAC roll-over, due to the increased risk of SAIs on VME indicator taxa.**

## **Actions needed on climate change**

The DSCC is supportive of the work done by the Scientific Committee to date. Further to [Decision 13-2023](#), the Scientific Committee will work to highlight analyses and data collection programs that best illustrate the potential impacts of climate change. As a result of these discussions the Scientific Committee is requested to make recommendations to the Commission on how existing conservation and management measures (CMMs) could be designed, or proposed new CMMs established for the adaptation and resilience to climate change impacts in the Convention Area.

To avoid possible impacts while waiting for that advice, particularly in light of the growing evidence of climate impacts on the high seas, the Commission can take a more precautionary approach to allowable catches for both targeted and bycatch species, and progress Decision 13-2023 task 1 goal by identifying and registering all known or likely VMEs (to Annex 9, as shown in Table 1 above) and prohibit bottom trawling in these areas. Protecting these VMEs will help build resilience to climate change in the SPRFMO Convention Area.

DSCC recommends that the Commission initiates an intersessional review of CMMs to identify where specific consideration of climate impact should be included, including incorporation of climate impact statements in new CMMs and fisheries plans. The intersessional working group (IWG) could also develop research and monitoring programs, including: the initiation of a network of marine protected areas for biodiversity refugia and ecosystem resilience; proactive and systematic identification of VMEs across the Convention area; and of climate change vulnerable species and habitats. Chile's proposed measure to protect the Nazca and Salas y Gomez Ridges area will contribute to this. The IWG might also review existing cooperative arrangements for opportunities for joint climate change research and response action.

**The DSCC calls on the Commission to implement Decision 13-2023 by: identifying and registering all known or likely VMEs and prohibit bottom fishing on them; initiate an intersessional review of CMMs to identify where specific climate impact should be included; and identify potential area for biodiversity refugia and ecosystem resilience.**

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<sup>8</sup> See: [Horn, P.L. and Ó Maolagáin, C. \(2019\); Fisheries New Zealand Plenary Report Volume 2. May 2023](#); [Dunn, M.R. and Forman, J.S. \(2011\)](#); [Dunn, M.R. et al. \(2022\)](#); [SPRFMO \(2022\) SC10-DW01\\_rev1](#)

## Independent Review

The DSCC supports the Secretariat proposal [Comm12-Prop02](#) and particularly the focus in Part A on analysing progress since the 2019 Performance Review. Beyond ‘gaps’ we suggest highlighting areas where the Organisation could take actions to address those recommendations, as some go beyond “gaps”, and suggest they should also be updated as necessary to take into account developments since 2019.

## Participation of Observers

The DSCC has serious concerns about [COMM12-Prop04](#), Proposal for a Decision on Participation of Observers. While the issue of Spanish translation is an important issue for SPRFMO, it should not be tied to a fee on observer participation.

The proposal for the introduction of an observer fee will negate the strong history of SPRFMO in transparency and act as a disincentive to observers to participate, where participation should be encouraged. Environmental observers do not benefit from participation, but participate in order to improve environmental outcomes and ensure the best available scientific information is being used. Already observers incur very significant expenses in flying to overseas destinations particularly for the Commission and Scientific Committee meetings, and while industry observers may benefit financially, environmental NGOs do not. Observers representing public interest and conservation organisations play a crucial role in monitoring and ensuring effective and accountable sustainable fisheries management. Charging them fees could hinder their ability to fulfil this important function.

Sustainable fisheries management is a global public good, mandated by the SPRFMO Convention, and the participation of environmental observers contributes to the responsible governance of fisheries. Charging fees would discourage their involvement, to the detriment of effective resource management. By continuing its practice of not charging fees to observers SPRFMO is ensuring the inclusivity, transparency required by Convention article 18,<sup>9</sup> and ensuring effective stakeholder participation in the sustainable management of fisheries.

DSCC proposes that Scientific Committee and Commission meetings be made hybrid (online and in-person) as matter of course, to reduce costs and carbon footprints for CNCPs and observers alike. If necessary, a fee for virtual participation could be levied to cover the hybrid participation cost, since people attending virtually would be saving on airfares and hotels.

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<sup>9</sup> The SPRFMO Convention article 18 requires the Commission to promote transparency, requires the rules of procedure of the Commission to provide for observer participation and requires them not be unduly restrictive.

Currently, the commercial fishing industry does not pay for their access to fisheries: If fee structures are to be discussed, a fee for fisheries access should be on the table.

**The DSCC recommends that the Commission rejects the proposal to charge participants a fee and instead reconsiders the current no-cost access to fisheries for fishing vessels.**

**The DSCC proposes that all SPRFMO meetings are made hybrid.**

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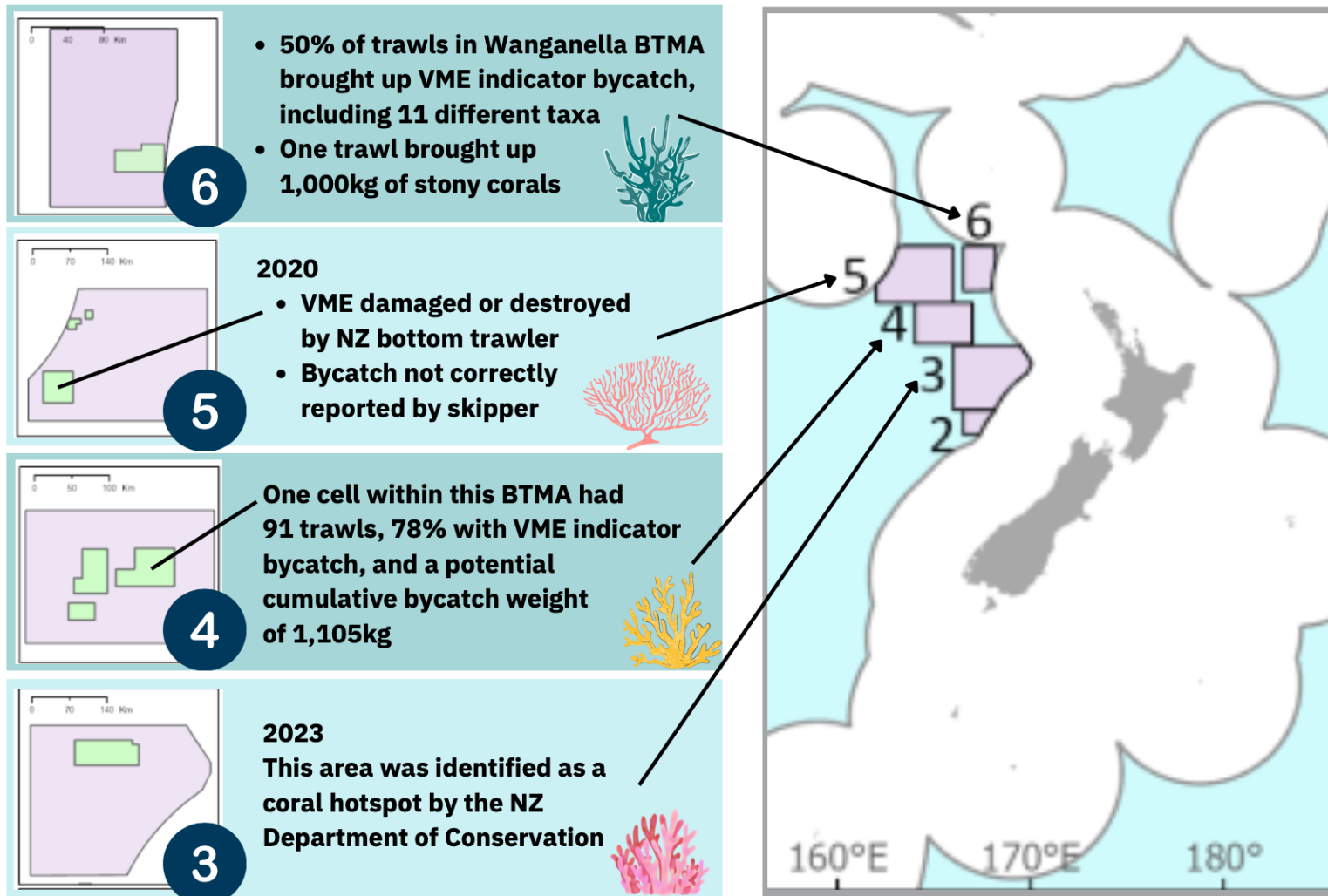
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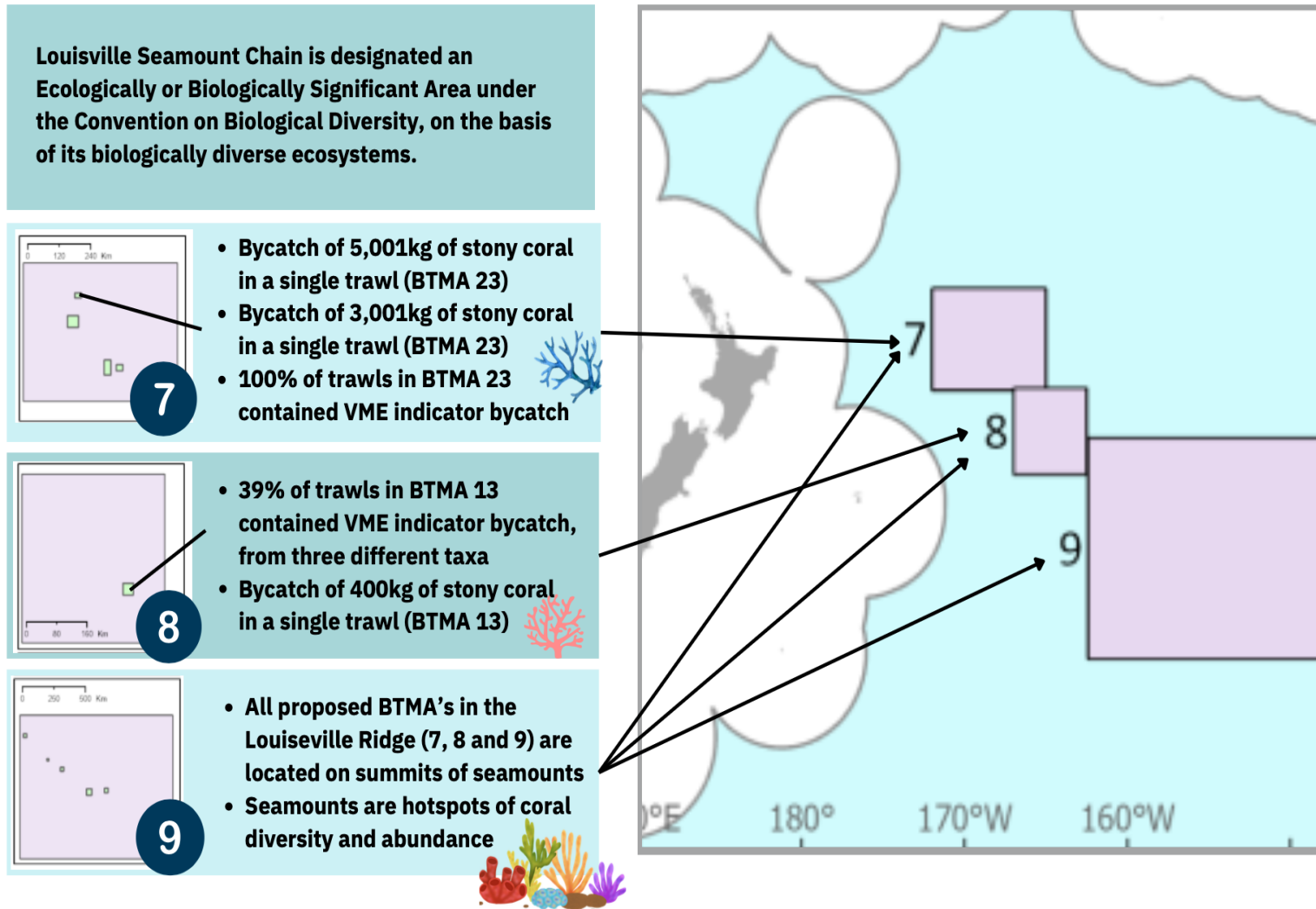
## Appendix 1: What's at risk in the proposed Bottom Trawl Management Areas?

Map 1: VMEs present in the proposed Tasman Sea BTMAs



Note: FMA numbers are those given in figure 1 (page 8) of New Zealand's paper to the Scientific Committee in 2023: [SC11 – DW05](#)

## Map 2: VMEs present in the proposed Louisville Seamount BTMAs



Note: FMA numbers are those given in figure 1 (page 8) of New Zealand's paper to the Scientific Committee in 2023: [SC11 – DW05](#)