

SC-03-06.3(01)

3rd Meeting of the Southern Indian Ocean Fisheries Agreement (SIOFA) Scientific
Committee

20-24 March 2017, Saint Denis, La Reunion

Review of the SIOFA Standard protocol for future protected areas designation

Relates to agenda item: 6.3

Working paper Info paper

Delegation of Australia

Abstract

This paper proposes amendments to the draft *SIOFA Standard protocol for future protected areas designation*, which was adopted at the 2nd meeting of the SIOFA Scientific Committee in March 2017 and by the 4th Meeting of the Parties in June 2017. The paper also proposes a template for the proposal and assessment of protected areas.

As per Annex H of the SC2 report, 'next steps' included to *review these criteria after the first submission of a working paper proposing a protected area recommendation. These criteria will be revised accordingly and agreed as criteria for recommending protected areas. The SC will continue to revise the criteria on an ad-hoc basis thereafter under the principle of continuous improvement.*

Recommendations *(working papers only)*

It is recommended that the SC:

- **amend** if necessary and **accept** the proposed changes to the SIOFA protected areas protocol as detailed in this paper
 - **notify** the Meeting of the Parties that, as per the SC2 report (Annex H) and subsequent adoption of the protected areas protocol by MoP4 in June 2017, a dedicated Protected Areas Working Group will be established to provide guidance and review for protected areas designation
 - **note** that there are different objectives for protected areas, and **agree** that these objectives need to be clearly defined
 - **consider** whether additional guidance is required from the Meeting of the Parties around the objectives for protected areas in the SIOFA Area.
-

Review of SIOFA Protected Areas Protocol

L. Georgeson¹, L. Goldsworthy², S. Nicol¹

¹ Australian Bureau of Agricultural and Resource Economics and Sciences, Australia

² Australian National University, Australia

Recommendations

It is recommended that the SC:

- **amend** if necessary and **accept** the proposed changes to the SIOFA protected areas protocol as detailed in this paper
- **notify** the Meeting of the Parties that, as per the SC2 report (Annex H) and subsequent adoption of the protected areas protocol by MoP4 in June 2017, a dedicated Protected Areas Working Group will be established to provide guidance and review for protected areas designation
- **note** that there are different objectives for protected areas, and **agree** that these objectives need to be clearly defined
- **consider** whether additional guidance is required from the Meeting of the Parties around the objectives for protected areas in the SIOFA Area.

Objective and rationale

This paper reviews the draft *SIOFA Standard protocol for future protected areas designation*, which was adopted at the 2nd meeting of the SIOFA Scientific Committee in March 2017 and by the 4th Meeting of the Parties in June 2017. As part of this review, this paper proposes a template for the proposal and assessment of protected areas.

As per Annex H of the SC2 report, 'next steps' included to *review these criteria after the first submission of a working paper proposing a protected area recommendation. These criteria will be revised accordingly and agreed as criteria for recommending protected areas. The SC will continue to revise the criteria on an ad-hoc basis thereafter under the principle of continuous improvement.*

1.0 Background

The development of 'standard protocols for future protected areas designation (areas which should be closed to fishing)' was a directive to the SC from the Meeting of the Parties through [CMM 2017/01](#) (5d). At SIOFA SC2 the SC agreed to a set of draft criteria for recommending protected/closed areas and agreed that the draft criteria should be reviewed after the SC has considered the first submission of a working paper proposing a protected area. This working paper has been prepared to assist SC3 with this review. We used a preliminary application of the criteria using the information submitted to SC1 by the Cook Islands to support closure of the SIOFA BPAs (SC01-INFO15) as the basis for developing the content of this paper. This paper is structured under four key headers. Sections 2.1 to 2.3 discuss gaps identified in the current protocol. Section 2.4 provides possible revisions to the existing criteria text to improve their clarity. A final appendix includes a clean (no track changes) version of the Protocol with the proposed revisions included.

2.0. Proposed revisions

2.1 Types of protected area recommendations

Information for preparing and evaluating some proposals for protected/closed areas is likely to fall into two broad categories: (1) where there is clearly substantive evidence that criteria have been met; and (2) where the information available is more uncertain and the evidence that criteria have been met less clear. In the later circumstance the SC may wish to also consider the duration of a closure in its recommendations to the MoP. For example, where there is inconclusive information, the SC could recommend interim closures (based on the available information) that are bounded by a time-period for re-evaluation (e.g. within 10 years). This could be accompanied by an information collection plan to be implemented in the period before re-evaluation, which would consequently provide the SC with more definitive information at the time of the re-evaluation. This approach would be consistent with the directive to the SC to apply the precautionary approach in accordance with the FAO Code of Conduct for Responsible Fisheries and the 1995 UN Fish Stocks Agreement, whereby the absence of adequate scientific information shall not be used as a reason for postponing or failing to take conservation and management measures. Table 1 provides a summary of possible recommendation types and suggested closure durations.

Table 1. Possible types of recommendations the SC could make given varying degrees of information uncertainty

Recommendation	Rationale	Review
Support for closure	The proposal documents and provides the necessary data and scientific information to support a closure.	10+ years
Support for temporary closure	The scientific evidence to support a closure is uncertain and may be reliant on information from outside the SIOFA jurisdiction, but the evidence provided justifies a closure.	Within 5-10 years
Support for restricted access until sufficient scientific evidence is available	There is insufficient scientific evidence to determine if any criteria are satisfied (or not). The proposal includes an information collection plan that would generate the appropriate data and evidence for the SC to provide definitive advice to the MoP.	Within 5 years
No support for closure	The scientific information is sufficient to conclude that the proposal does not satisfy any of the criteria.	10+ years

One conclusion from our application of the current criteria was that adequate scientific evidence is likely to be currently lacking for the following elements in the protocol: VME encounters (current criteria 1); bioregional characteristics of the entire SIOFA area (current criteria 2); genetic diversity (current criteria 4); the recovery rates of deepwater benthos (current criteria 4) and connectivity corridors and biological dispersal patterns (other considerations section).

2.2. Process for proposal and review

Although the purpose of the criteria are to provide the SC with guidance and a transparent and repeatable process for reviewing proposals for protected areas, they are likely to also be read by authors of proposals to ensure all relevant information is provided. In this context, it may be appropriate for the SC to include further explanatory text on the process for proposal evaluation and review.

Currently, the SIOFA protected areas protocol includes relevant procedural information as the first set of text under the title. The intent of this text would be clearer if it included a sub-heading. The text in dot points 1 (*Compile the available information regarding incidental by-catch of VME indicator species and respective habitats within SIOFA Convention Area including from: fishery dependent data; survey and research data; other sources of information*) and 3 (*adopt the FAO guidelines to identify VME habitats and define the criteria for identifying protected*

areas designation) refer to VMEs, which may lead readers to an assumption that the primary objective for protected areas is to protect VMEs. This may only be one objective for designation of protected areas. It is proposed that this text is amended to be less specific to this objective. Box 1 below includes a potential revision to this section.

To simplify the process of review by the SC, a template for proposals is also suggested as this may help ensure that proponents include all necessary information for evaluation. It will also help to ensure that proposal and decision making processes are efficient, consistent, transparent, comparable and easily documented.

Box 1 Proposed text to describe the procedure for evaluating protected area proposals

Process for proposal and review

1. All proposals must be submitted to the SIOFA Secretariat at least 30 days prior to the SC meeting. The Executive Secretary will notify SC members of the submission and forward it for consideration.
2. All proposals received should be initially evaluated against the protocol by the Protected Area Working Group (PAWG). Where feasible, members are requested to provide initial comment to the Chair of the PAWG within 2 weeks of receiving the proposal(s) identifying whether any additional information is requested from the proponent(s) for evaluation by the PAWG and SC. The Chair of the PAWG would then compile these comments and request any additional information from the proponent(s).
3. The PAWG will meet in the margins of the SC or immediately prior to the SC to formally evaluate the proposal(s). The PAWG will prepare a report and draft recommendation(s) for the SC Plenary to consider.
4. The SC Plenary will finalise any recommendation(s) to the MoP using the criteria described in this Protocol.
5. Proposals should include the following:
 - i. compilation of all available information to support protected area proposals within the SIOFA area including from: fishery dependent data; survey and research data; and other sources of information. Where information is unable to be referenced to peer-reviewed research or other publications, this information could be supported by mechanisms such as affidavits to support statements made¹. Other supporting information may include video or photographic evidence. Any data used for the proposal should be made available for the evaluation process².
 - ii. Use the agreed template to collate and present the rationale for the proposal against the standard criteria.
6. The SIOFA Secretariat should initially screen all proposals to make sure that all information is included in each proposal.

¹ This idea was discussed by the informal SIOFA protected areas steering committee at its meeting in November 2017 following presentation of the review of the SIOFA-proposed Benthic Protected Areas undertaken by Ms Lynda Goldsworthy AM in 2017.

² The level of data that should be made available to assist in evaluation of protected areas proposals warrants additional discussion. A requirement for comprehensive data to be provided (or, conversely, the lack of a requirement) could have perverse outcomes by which the proposal and evaluation process could be undermined. One suggestion is to amend this statement to 'Any data used for the proposal should be made available for the evaluation process *if requested by the PAWG*'.

2.3 Objectives for protected areas

The current draft protocol does not require objectives of the protected area (or a network of protected areas) to be specified. Different stakeholders may have different objectives, which may result in different and potentially conflicting interpretations of the same proposals.

Example objectives could include:

- a) Protection of biodiversity (biological objective)
- b) Protection of VMEs (biological objective)
- c) Protection of key commercial fish stocks (biological and/or commercial objective)
- d) Protection of rare or endangered species, habitats or ecosystems (biological objective)
- e) Political, strategic or compliance objectives (institutional or commercial objective), for example:
 - compliance with international conservation initiatives such as
 - The UN General Assembly's bottom fishing resolutions e.g. 61/105, 64/72, 66/68, 71/123
 - UN Environment Programme and the Convention on Biological Diversity in terms of the United Nations Decade on Biodiversity's target of Global Marine Protected Area of 10% to be achieved by 2020
 - World Commission on Protected Areas (WCPA)
 - requirements for the fishing industry to demonstrate a commitment to sustainability and responsible fishing practices.

It is proposed that a specific section on Objectives is included as part of the Protocol (see section 2.4)

2.4 Proposed revisions to the criteria

Table 2 includes other minor amendments to the existing criteria based on the issues identified when applying the criteria to the SIODFA BPAs.

Table 2 Suggested amendments to criteria. Proposed revisions in red underlined text and suggested deletions in grey strikethrough text

Current Protocol	Suggested Revision	Justification
Rationale the SC should consider when making recommendations to the MoP on any protected area proposal		
<p>1. VME encounter reported for the area proposed</p> <p>a. Closure may be warranted if there is consistent triggering of VME move-on rules, indicating potential VME.</p>	<p>Downgrade from a criterion into “additional supporting evidence”</p>	<p>This criterion may not be particularly useful because: 1) fishing is generally regarded as a crude indicator of the presence of VMEs or VME indicator species; 2) thresholds that trigger VME move-on rules may be set too high to be consistently triggered; and 3) VME indicator species caught by fishing vessels do not necessarily indicate a ‘VME’.</p>
	<p>1. <u>The objective/s for the protected area is clearly stated and the proposal clearly demonstrates which of the criteria are met</u></p>	<p>Different stakeholders may have different objectives which may result in different and potentially conflicting interpretations of the same proposals. Propose that a statement describing the objective for closure is the first criteria.</p>
<p>2. Bioregional representation</p> <p>a. Area is known to contain unique, rare or distinct habitats or ecosystems that fishing operations will disturb and that are deemed to be desirable and acceptable.</p> <p>b. Area is known to contain unique, rare or distinct, habitats or ecosystems that bottom fishing operations will disturb.</p> <p>c. Area with a comparatively higher degree of naturalness because of the lack of or low level of human-induced disturbance or degradation,</p>	<p>2. Bioregional representation</p> <p>a. — Area is known to contain unique, rare or distinct habitats or ecosystems that fishing operations will disturb and that are deemed to be desirable and acceptable.</p> <p>b.a. Area is known to contain unique, rare or distinct, habitats or ecosystems that bottom fishing operations will disturb.</p> <p>e.b. Area with a comparatively higher degree of naturalness because of <u>due to</u> the lack of or low level <u>zero or a low level</u> of human-induced disturbance or degradation <u>from, for example,</u></p>	<p>Sub-criteria a): there is some ambiguity in the interpretation of what constitutes ‘desirable and acceptable’. Given that sub-criteria b) is a generalisation of sub-criteria a) there is no need for sub-criteria a).</p> <p>Sub-criteria c): there is a level of subjectivity with what constitutes ‘naturalness’, and that a definition of naturalness may assist the SC in its review and determination. A particular period of time in which there has been no fishing could be considered as an indicator of naturalness.</p>

<p>as an example considering historical fishing activities.</p>	<p>as an example considering historical fishing activities activity.</p>	
<p>3. Geographic and/or unique representation</p> <p>a. The area proposed is known to contain unique or unusual geomorphological features that fishing operations may damage.</p>	<p>3. <u>Unique geographic</u> Geographic and/or <u>geomorphological</u> unique representation</p> <p>a. <u>The area provides for important or desirable geographic representation within the SIOFA area.</u></p> <p>a.b. The area proposed is known to contain unique or unusual geomorphological features that fishing operations may damage. <u>Such features may include, but are not limited to, hydrothermal vents and cold seeps.</u></p>	<p>The relationship between the title and sub-criteria a) should be clarified because it is unclear whether this criteria is referring to representation of both geographic (i.e. spatial) and geomorphological (i.e. particular features) aspects. There is a level of subjectivity in the interpretation of 'unique or unusual', and these terms could also potentially be clarified.</p>
<p>4. Biodiversity representation</p> <p>a. The area is known to contain unique, rare (occurs only in few locations) species, populations or communities.</p> <p>b. The area is known to contain high diversity of ecosystems, habitats, communities, or species, or has higher genetic diversity.</p> <p>c. The area is known to contain a relatively high proportion of sensitive habitats, biotopes or species that are functionally fragile (highly susceptible to degradation or depletion by human activity or by natural events) or with slow recovery.</p>	<p>4. Biodiversity representation</p> <p>a. The area is known to contain unique <u>or</u>, rare (occurs <u>occurring in</u> only in a few locations) species, populations or communities.</p> <p>b. The area is known to contain <u>a</u> high diversity of ecosystems, habitats, communities, or species, or has higher genetic diversity.</p> <p>c. The area is known to contain a relatively high proportion of sensitive habitats, biotopes or species that are functionally fragile (highly susceptible to degradation or depletion by human activity or by natural events) or with slow recovery.</p>	<p>Sub-criteria b): there is no definition of an 'ecosystem'.</p> <p>Minor editorial changes</p>
<p>5. Scientific interest</p> <p>a. The area, excluding existing fishing grounds, has a history of scientific research associated with understanding ecosystem and</p>	<p>5. Scientific interest</p> <p>a. The area, excluding existing fishing grounds, has a history of scientific research associated with understanding ecosystem and</p>	<p>No Change</p>

<p>biodiversity processes in the SIOFA region and fishing activities would compromise current and future research.</p>	<p>biodiversity processes in the SIOFA region and fishing activities would compromise current and future research.</p>	
<p>6. Ecosystem hotspot, threatened species a. There is substantive evidence that the area is of special importance for life history stages of species and/or threatened species. E.g. An area containing habitat for the survival and recovery of endangered, threatened, declining species or area with significant assemblages of such species.</p>	<p>6. Ecosystem hotspot, <u>including for threatened or commercially important</u> species <u>a.</u> There is substantive evidence that the area is of special importance for life history stages of species (<u>including commercially important</u>) and/or threatened species. E.g. A <u>b.</u> <u>There is evidence that the area contains</u> n area containing habitat for the survival and recovery of endangered, threatened, declining species or <u>is an</u> area with significant assemblages of such species.</p>	<p>There is ambiguity in the wording as the title ‘Ecosystem hotspot, threatened species’ may not fully accord with the sub-criteria a) insofar as sub-criteria a) notes that ‘the area is of special importance for life history stages of species’ as well as threatened species. An underlying objective or justification for a protected area may be to protect important commercial fish stocks (i.e. species that are not necessarily threatened). Such areas may be important for maintenance of healthy ‘source’ areas for commercial stocks, or to protect certain stocks during important life history stages (such as spawning, for example).</p>
<p>Other principles to be considered in formulating recommendations for fishing closures <u>protected areas</u></p>		
<p>7. All available information should be considered in decision-making and the precautionary principle applied. a. Recommendations must be informed by the available information. All available information should include ecological, environmental, social, cultural and economic aspects of the marine environment that is available without unreasonable cost, effort or loss of timeliness. b. Recommendations to implement spatial management measures should not be postponed because of a lack of full scientific certainty, especially where significant or</p>	<p>7. <u>Information used to support protected area proposals and designation should be sufficiently substantiated, for example through the referencing of available literature and/or research. Where this information is unavailable, mechanisms such as affidavits could be used to support statements, such as those made by skippers and crew. In the absence of information, a precautionary approach should be applied.</u> All available information should be considered in decision-making and the precautionary principle applied.</p>	<p>“All available information” should be revised to ‘Information that is used to support protected area proposals is sufficiently substantiated, for example through referencing of available literature/research. Where this information is unavailable, mechanisms such as affidavits could be used to support statements, such as those made by skippers and crew’. This would avoid concerns about whether all or best information has been considered. Video and photographic evidence may also be a useful mechanism to support protected area proposal and designation.</p>

<p>irreversible damage to ecosystems could occur or indigenous species are at risk of extinction.</p>	<p>a. Recommendations must be informed by the available information. All available information should include ecological, environmental, social, cultural and economic aspects of the marine environment that is available without unreasonable cost, effort or loss of timeliness.</p> <p>b. Recommendations to implement spatial management measures should not be postponed because of a lack of full scientific certainty, especially where significant or irreversible damage to ecosystems could occur or indigenous species are at risk of extinction.</p>	<p>The term 'indigenous' (species) should be deleted. Species at risk of extinction, regardless of whether they are native, endemic or otherwise, warrant consideration for protection.</p>
<p>8. Adverse impacts on existing users should be evaluated.</p> <p>a. Where there is a choice of several sites, which if protected would add a similar ecosystem or habitat to the closure network, and only one, or some of the sites are to be closed, the site(s) recommended should minimise adverse impacts on existing users. Where there is a choice to be made among minimum impact sites, selection may also be guided by:</p> <p>i. ease of management and enforcement; and</p> <p>ii. if there are other benefits such as education or eco-tourism</p>	<p>8. Adverse impacts on existing users should be evaluated.</p> <p>a. Where there is a choice of several sites, which if protected would add a similar ecosystem or habitat to the closure network, and only one, or some of the sites are to be closed, the site(s) recommended should minimise adverse impacts on existing users. Where there is a choice to be made among minimum impact sites, selection may also be guided by:</p> <p>i. ease of management and enforcement; and</p> <p>ii. if there are other benefits such as education or eco-tourism.</p>	<p>No change</p>
<p>9. The rationale used to recommend spatial management measures should be consistent.</p>	<p>9. The rationale used to recommend spatial management measures should be consistent transparent.</p>	<p>The different objectives for protected areas may alter the rationale used for proposing and designating different areas. What is important</p>

		<p>is that the objectives for particular protected areas need to be clearly articulated so that the rationale used for their proposal/designation can be clearly justified and understood by all stakeholders. It is recommended that the word ‘consistent’ is replaced with ‘transparent’.</p>
<p>10. There should be an evaluation of existing closures when making recommendations and explanation as to how a new management measure will assist in achieving MoP objectives.</p> <p>a. An enumeration of spatial management measures should be prepared to assess progress towards achieving the policies.</p>	<p>10. There should be an evaluation of existing closures when making recommendations and explanation as to how a new management measure will assist in achieving MoP objectives.</p> <p>a. An enumeration of spatial management measures should be prepared to assess progress towards achieving the policies.</p>	<p>No Change</p>
<p>Other Considerations for determining boundaries of protected areas</p>		
	<p><u>11.</u> Dimensions of the Area</p> <p>a. The recommended area should, as far as practicable, include continuous contiguous depth.</p> <p>b. Area designation should be based on seafloor features such as geomorphic features</p> <p>c. Where information is available, size and shape should be orientated to account for inclusion of connectivity corridors and biological dispersal patterns within and across closures.</p> <p>a. Where this is unavailable, protected area proposal and designation may consider linkages with adjacent protected areas, or research from other oceans to inform inferences on biological dispersal patterns.</p>	<p>Point a: The term ‘continuous depth’ requires a definition. One interpretation is that this is referring to contiguous depth, i.e. that individual protected areas should not be broken by depth bands. Another interpretation is that multiple protected areas should be designated such that a continuous range of depths are represented.</p> <p>Point c) sufficient information regarding ‘connectivity corridors and biological dispersal patterns’ in the SIOFA area is likely to be absent. Revision of the text to include; “where information is available...” would aid implementation of this consideration.</p>

	<p>d. Boundary lines should be simple, as much as possible following straight latitudinal/longitudinal lines and, where possible, coinciding with existing regulatory boundaries.</p> <p>e. The size and shape of each area should be set to minimise socio-economic costs.</p>	
<p><u>Additional supporting evidence</u></p>		
	<p><u>12. VME encounter reported for the area proposed</u></p> <p><u>a. Closure may be warranted if there is consistent triggering of VME move-on rules, indicating potential VME.</u></p>	<p>This may not be particularly useful as a criterion because: 1) fishing is generally regarded as a crude indicator of the presence of VMEs or VME indicator species; 2) thresholds that trigger VME move-on rules may be set too high to be consistently triggered; and 3) VME indicator species caught by fishing vessels do not necessarily indicate a 'VME'.</p>

SIOFA Protected Area designation template

Name	<i>This field will contain the name of the proposed protected area</i>
Details of the proponent/s	<i>This field should contain details of the proponent/s³</i>
Geographic description	<i>This field should contain the coordinates of the proposed area's spatial boundaries. It may also contain maps showing the spatial area and/or bathymetry, or other spatial information of relevance to the proposal</i>
Objectives	<i>This field will explicitly detail the objective/s that designation of the proposed protected area would address (i.e., the primary reason/s for protection)</i>
Criteria that the protected area meets	<p><i>This field would contain the specific criteria that the protected area meets, structured against the SIOFA Standard protocol for protected areas designation. This field will also contain evidence in support of each criteria that the area meets.</i></p> <p><i>This evidence may include, but is not limited to:</i></p> <ul style="list-style-type: none"> - <i>Information from scientific or other surveys</i> - <i>References to peer-reviewed literature</i> - <i>Photographs, graphs and figures supporting the proposal</i> - <i>Fishing data analysis to support the proposal</i> - <i>Appropriately substantiated reports and/or statements from skippers or observers to justify the proposal.</i>
Social, cultural and economic interests	<i>This section would consider existing fisheries interests and possible adverse impacts of Protected Area designation on those interests. This section may also consider potential future interests. Any social or cultural interests or values should also be included. This section should be backed up by data, formal statements and references in the literature.</i>
Proposed activities to be restricted or prohibited	<i>This section should contain detailed information on the scope of the Protected Area designation in terms of what activities would be restricted or prohibited. If the proposal is that some activities are restricted, this section should contain information on how these activities will be monitored.</i>
Review periods	<i>This section should contain an anticipated review period to review whether the Protected Area is achieving its objectives, including consideration of whether any new information has become available that may enhance or degrade the justification for protection.</i>
Outline of monitoring and/or research needed	<i>This section will contain an outline of monitoring and/or research needed to maintain, update or review the Protected Area.</i>

³ The SC may wish to consider whether this field could require details of any perceived or actual conflicts of interest

Compliance	<i>This section should consider any compliance-related issues relating to the proposed Protected Area, including whether specific compliance regulations or rules will apply to activities that are restricted or prohibited</i>
------------	--

Appendix 1. Clean version of the *SIOFA Standard protocol for future protected areas designation* incorporating all proposed changes

SIOFA Standard protocol for future protected areas designation

PROCESS FOR PROPOSAL AND REVIEW

1. All proposals must be submitted to the SIOFA Secretariat at least 30 days prior to the SC meeting. The Executive Secretary will notify SC members of the submission and forward it for consideration.
2. All proposals received should be initially evaluated against the protocol by the Protected Area Working Group (PAWG). Where feasible, members are requested to provide initial comment to the Chair of the PAWG within 2 weeks of receiving the proposal(s) identifying whether any additional information is requested from the proponent(s) for evaluation by the PAWG and SC. The Chair of the PAWG would then compile these comments and request any additional information from the proponent(s).
3. The PAWG will meet in the margins of the SC or immediately prior to the SC to formally evaluate the proposal(s). The PAWG will prepare a report and draft recommendation(s) for the SC Plenary to consider.
4. The SC Plenary will finalise any recommendation(s) to the MoP using the criteria described in this Protocol.
5. Proposals should include the following:
 - a. compilation of all available information to support protected area proposals within the SIOFA area including from: fishery dependent data; survey and research data; and other sources of information. Where information is unable to be referenced to peer-reviewed research or other publications, this information could be supported by mechanisms such as affidavits to support statements made. Other supporting information may include video or photographic evidence. Any data used for the proposal should be made available for the evaluation process.
 - b. Use the agreed template to collate and present the rationale for the proposal against the standard criteria.
6. The SIOFA Secretariat should initially screen all proposals to make sure that all information is included in each proposal.

CRITERIA FOR EVALUATING PROTECTED AREA PROPOSALS

- a) The objective/s for the protected area is clearly stated and the proposal clearly demonstrates which of the criteria are met
- b) Bioregional representation
 - a. Area is known to contain unique, rare or distinct, habitats or ecosystems that bottom fishing operations will disturb.

- b. Area with a comparatively higher degree of naturalness due to zero or a low level of human-induced disturbance or degradation from, for example, historical fishing activity.
- c) Unique geographic and/or geomorphological representation
 - a. The area provides for important or desirable geographic representation within the SIOFA area
 - b. The area proposed is known to contain unique or unusual geomorphological features that fishing operations may damage. Such features may include, but are not limited to, hydrothermal vents and cold seeps.
- d) Biodiversity representation
 - a. The area is known to contain unique or rare (occurring in only a few locations) species, populations or communities.
 - b. The area is known to contain a high diversity of ecosystems, habitats, communities, or species, or has higher genetic diversity.
 - c. The area is known to contain a relatively high proportion of sensitive habitats, biotopes or species that are functionally fragile (highly susceptible to degradation or depletion by human activity or by natural events) or with slow recovery.
- e) Scientific interest
 - a. The area, excluding existing fishing grounds, has a history of scientific research associated with understanding ecosystem and biodiversity processes in the SIOFA region and fishing activities would compromise current and future research.
- f) Ecosystem hotspot, including for threatened or commercially important species
 - a. There is evidence that the area is of special importance for life history stages of species (including commercially important) and/or threatened species.
 - b. There is evidence that the area contains habitat for the survival and recovery of endangered, threatened, declining species or is an area with significant assemblages of such species.

Other principles to be considered in formulating recommendations for protected areas

- g) Information used to support protected area proposals and designation should be sufficiently substantiated, for example through the referencing of available literature/research. Where this information is unavailable, mechanisms such as affidavits could be used to support statements, such as those made by skippers and crew. In the absence of information, a precautionary approach should be applied.
 - a. Recommendations must be informed by the available information. All available information should include ecological, environmental, social, cultural and economic aspects of the marine environment that is available without unreasonable cost, effort or loss of timeliness.

- b. Recommendations to implement spatial management measures should not be postponed because of a lack of full scientific certainty, especially where significant or irreversible damage to ecosystems could occur or species are at risk of extinction.
- h) Adverse impacts on existing users should be evaluated.
 - a. Where there is a choice of several sites, which if protected would add a similar ecosystem or habitat to the closure network, and only one, or some of the sites are to be closed, the site(s) recommended should minimise adverse impacts on existing users. Where there is a choice to be made among minimum impact sites, selection may also be guided by:
 - i. ease of management and enforcement; and
 - ii. if there are other benefits such as education or eco-tourism.
- i) The rationale used to recommend spatial management measures should be transparent.
- j) There should be an evaluation of existing closures when making recommendations and explanation as to how a new management measure will assist in achieving MoP objectives.
 - a. An enumeration of spatial management measures should be prepared to assess progress towards achieving the policies.

Considerations for determining boundaries of protected areas

- k) Dimensions of the area
 - a. The recommended area should, as far as practicable, include contiguous depth.
 - b. Area designation should be based on seafloor features such as geomorphic features
 - c. Size and shape should be orientated to account for inclusion of connectivity corridors and biological dispersal patterns within and across closures.
 - a. Where this is unavailable, protected area proposal and designation may consider linkages with adjacent protected areas, or research from other oceans to inform inferences on biological dispersal patterns.
 - d. Boundary lines should be simple, as much as possible following straight latitudinal/longitudinal lines and, where possible, coinciding with existing regulatory boundaries.
 - e. The size and shape of each area should be set to minimise socio-economic costs.

Additional supporting evidence

- l) VME encounter reported for the area proposed
 - a. Closure may be warranted if there is consistent triggering of VME move-on rules, indicating potential VME.

GUIDANCE FOR SC RECOMMENDATIONS TO THE MEETING OF THE PARTIES

The SC should make a recommendation to the MoP based on the following:

Recommendation	Rationale	Review
Support for closure	The proposal documents the necessary data and scientific information to support a closure.	10+ years
Support for temporary closure	The scientific evidence to support a closure is uncertain and may be reliant on information from outside the SIOFA jurisdiction, but the evidence provided justifies a closure.	Within 5-10 years
Support for limited access until sufficient scientific evidence is available	There is insufficient scientific evidence to determine if any criteria are satisfied (or not). The proposal includes an information collection plan that would generate the appropriate data and evidence for the SC to provide definitive advice to the MoP.	Within 5 years
No support for closure	The scientific information is sufficient to conclude that the proposal does not satisfy any of the criteria.	10+ years

SIOFA PROTECTED AREAS PROPOSALS AND DESIGNATION TEMPLATE

Name	<i>This field will contain the name of the proposed protected area</i>
Details of the proponent/s	<i>This field should contain details of the proponent/s</i>
Geographic description	<i>This field should contain the coordinates of the proposed area's spatial boundaries. It may also contain maps showing the spatial area and/or bathymetry, or other spatial information of relevance to the proposal</i>
Objectives	<i>This field will explicitly detail the objective/s that designation of the proposed protected area would address (i.e., the primary reason/s for protection)</i>
Criteria that the protected area meets	<p><i>This field would contain the specific criteria that the protected area meets, structured against the SIOFA Standard protocol for protected areas designation. This field will also contain evidence in support of each criteria that the area meets. This evidence may include, but is not limited to:</i></p> <ul style="list-style-type: none"> - <i>Information from scientific or other surveys</i> - <i>References to peer-reviewed literature</i> - <i>Photographs, graphs and figures supporting the proposal</i> - <i>Fishing data analysis to support the proposal</i> - <i>Appropriately substantiated reports and/or statements from skippers or observers to justify the proposal.</i>
Social, cultural and economic interests	<i>This section would consider existing fisheries interests and possible adverse impacts of Protected Area designation on those interests. This section may also consider potential future interests. Any social or cultural interests or values should also be included. This section should be backed up by data, formal statements and references in the literature.</i>
Proposed activities to be restricted or prohibited	<i>This section should contain detailed information on the scope of the Protected Area designation in terms of what activities would be restricted or prohibited. If the proposal is that some activities are restricted, this section should contain information on how these activities will be monitored.</i>
Review periods	<i>This section should contain an anticipated review period to review whether the Protected Area is achieving its objectives, including consideration of whether any new information has become available that may enhance or degrade the justification for protection.</i>
Outline of monitoring and/or research needed	<i>This section will contain an outline of monitoring and/or research needed to maintain, update or review the Protected Area.</i>
Compliance	<i>This section should consider any compliance-related issues relating to the proposed Protected Area, including whether specific compliance regulations or rules will apply to activities that are restricted or prohibited</i>