

Establishing new protected areas in Papua New Guinea

PNG Protected Area Management Guideline No.PA2 version 1 November 2019







Title

Establishing new protected areas in Papua New Guinea.

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Note: This document has been developed prior to finalisation of the Protected Area Bill and revision is needed once the Bill is passed.

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Executive summary

Papua New Guinea has committed to expanding its network of protected areas, and its Policy on Protected Areas clearly outlines the guidelines and targets for the network. Work over recent years has defined some priorities for selecting areas for a comprehensive reserve system, and in addition many landowners wish to conserve their land and waters.

This document outlines the process of proposal, assessment, negotiation and declaration for new protected areas in Papua New Guinea. The process needs to be meet legislative requirements but must be as efficient and streamlined as possible and should not cause unnecessary delays.

The process consists of five major steps, which are not carried out strictly in order but are often happening in parallel. These are:

- 1. **Making the proposal**: An Expression of Interest is required for all proposals, followed by a more detailed proposal for national protected areas.
- 2. **Getting agreement**: Agreement of customary landowners is vital, with support also preferable from other rightsholders, stakeholders, and all levels of government. Where possible, support from a non-government organisation is also sought.
- 3. **Assessing the proposal**: Expressions of Interest are registered and assessed by CEPA followed by review by the relevant round table. Technical advice will be sought where needed.
- 4. **Approving and declaring the protected area**: Processes are prescribed by legislation and may include a public comments phase.
- 5. Establishing the protected area: Management planning (an interim statement of management intent) and a benefit sharing agreement are required for declaration, and more detailed management planning will be undertaken after gazettal. Management committees or boards need to be established, and the framework for effective management progressively setup.

Throughout the process, collaboration, efficiency and transparency should be ensured.

1. Introduction and background

The Government of Papua New Guinea (PNG) is committed to declaring and supporting more protected areas in PNG¹, with a focus on relevance and benefits to its people. There is an urgency to expand the network and to protect areas that are threatened now.

Important areas for conservation at a national and international scale have been defined through a number of scientific studies². In addition, many customary landholders are keen to protect and look after areas of importance to them for reasons including protection of customs and livelihoods as well as nature. The PNG Policy on Protected Areas (PA Policy)³ stresses that these wishes should be supported by governments.

This document addresses the process of proposal, assessment, negotiation and declaration for new protected areas in PNG. Existing protected areas would also go through this process if they wish to change their protected area type from the 'default' type prescribed in the legislation⁴. Substantial expansions of existing protected areas would also require new applications.

Much of this process is already detailed in the PA Policy and the draft legislation: this document outlines how to meet legislative requirements and yet make the process workable.

The process of expanding the protected area network needs to be:

- Efficient no unnecessary hold-ups,
- Transparent and consistent,
- ➤ Thorough protected areas require big resources and have a lot of social implications, so we have a 'duty of care' to make sure they are in the right places and for the right reasons,
- Collaborative wherever possible getting agreement and cooperation through the process, and
- ➤ Adaptable different levels of 'proof' are needed for large and internationally significant protected areas versus small areas most relevant to local communities.

Where technical reference groups and round tables are involved, their primary purpose is to provide positive and knowledgeable oversight of the growth of the protected area network, not to establish more costly and time-consuming processes.

¹ For example, through the Convention on Biological Diversity CBD COP 10 (2010) Decision X/2, Strategic Plan for Biodiversity 2011-2020 and the Aichi Biodiversity Targets. Convention on Biological Diversity http://www.cbd.int/decision/cop/?id=12268.

² The most recent study is the land-sea assessment of priorities: Adams, V. M., et al. (2017) Land-sea conservation assessment for Papua New Guinea. A report on the work undertaken to fulfil the terms of the project Review and Integration of the Terrestrial and Marine Program of Works on Protected Areas. University of Queensland, PNG Conservation and Environment Protection Authority.

³ Independent State of Papua New Guinea. (2014) Papua New Guinea Policy on Protected Areas. (ed Conservation and Environment Protection Authority), Waigani, National Capital District, Papua New Guinea.

⁴ For guidance on this transition process, see Leverington, F., et al. (2019c) Transitions for Papua New Guinea's existing protected areas, PNG Protected Area Management Guideline No.PA3 version 1. Conservation and Environment Protection Authority, Port Moresby.

1.1 Desired outcomes, objectives and principles for new protected areas

The PA Policy clearly spells out the principles for the protected area network (Pillar four).

Desired outcome

The **PNG Protected Area Network** is relevant to the PNG people, represents the diversity of life, landscapes and seascapes, and forms a well-connected, adequate and resilient system.

Objectives

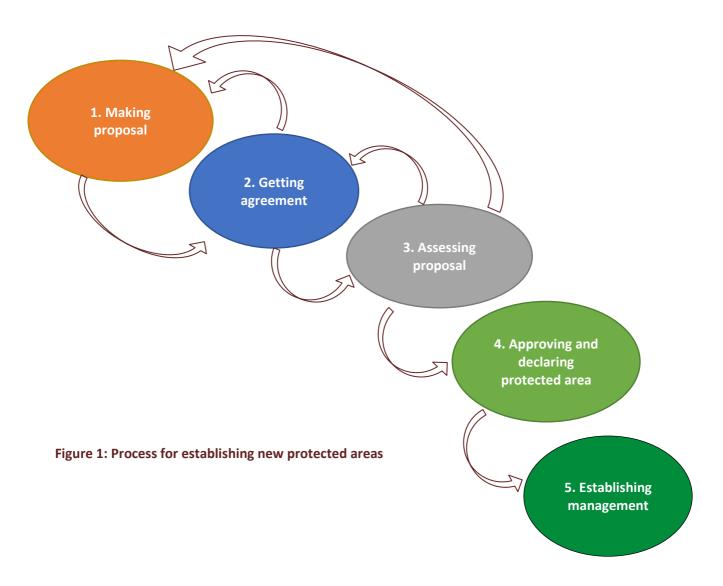
- Establish a PNG Protected Area Network according to the guiding principles and the range of reserve types outlined in this Policy.
- Establish a relevant, comprehensive, adequate, representative and resilient PNG Protected area Network according to the range of reserve types and network design principles established in this Policy.
- Ensure a smooth transition from the 2014 protected area types to the updated Network, with no loss of values.

1.2 Basic principles for establishment process

- Customary landowners have to be identified and support or agree with the proposal. In some cases this might require social mapping work. Short-cutting this process might actually lead to more delays. Free, prior and informed consent is a legislative requirement.
- National protected areas should make a significant contribution to the Comprehensive, Adequate, Representative and Resilient (CARR) system for PNG, as defined under the PA Policy.
- ➤ Regional protected areas only need to make a contribution to local communities and meet more basic standards of ecological integrity i.e. there is not such a rigorous process to assess their values and communities wishing to protect their land and water will be supported where possible.
- A short response time is needed for processing proposals, and people should be regularly informed of progress.

1.3 Steps for establishing new protected areas

Five main steps are discussed in this document (Figure 1), though of course each can be complicated and may take a long time. The process is not likely to be straightforward in one direction – for example, getting agreement will continue throughout the whole process, and making the proposal will often be at least a two-step process.



2. Step one: Making the proposal

2.1 The idea to conserve

Every protected area starts with someone or a group of people wanting to look after or protect a place, a thing (such as plant, animal or cultural/ historic item), or a site (such as a sacred site or tambu area). At this early stage, people will discuss the idea and start to work out what area would be looked after to protect the place, thing or site, and whether a protected area is the best way to do it. The idea would need to be socialised with customary landowners and other people, and will gradually take shape and be documented.



Early documentation can be in many forms: film or mobile phone recordings, maps, drawings and written ideas.

Some passionate landowners, non-government organisations (NGOs), scientists and supporters work hard to sell their ideas through stories, films and lobbying in addition to the official approval process. Finding champions for the idea is important, both within the community and from outside. Some people start to seek funding and high-level support right at the beginning, while others start more slowly.

2.2 Who makes the proposal?

Proposals for protected areas can be made or 'driven' by any interested party: customary landowners, CEPA, other levels of government, NGOs, scientists or private industry (for a private protected area). In this document, we will call these people the proponent.

The best process will be collaborative, where a number of these groups work together. The sooner this collaboration can be established, the easier the process will be.



A proposal will be completed for each proposed new protected area. As this will take considerable resources to prepare, the process will be broken into two phases for national protected areas:

- An expression of interest (Form A) proposal can be developed for initial discussion with customary landowners and other stakeholders (Section 2.2.1).
- A more detailed (Form B) proposal is then developed for potential national protected areas only (Section 2.2.2).

The phased approach allows for resources and advice to be sought for more detailed proposals. This will be particularly helpful when a customary landowner or local group seeks support to develop a proposal and does not have the resources to compile the information.

While the proposal phase is important, it should not be prohibitively expensive or difficult and customary landowners should not be discouraged from submitting proposals. For example, information about known species should be included, but exhaustive fauna surveys are not required. Maps of approximate boundaries are essential, but formally surveyed boundaries are not necessary as surveys are too costly and take too long to complete.

2.2.1 **Preparing an Expression of Interest**

The Expression of Interest (Form A) clearly establishes:

- Who supports the protected area
- What area is being discussed (preliminary map)
- What kind of protected area is intended (if known)
- The purpose of the protected area (the key values)
- Ideas about the management and governance of the area.

The outline proposal needs to be on the Expression of Interest form but some of the questions can be answered by oral recordings, photos, drawings and videos, for example of customary landowners talking.



rotected areas in PNG

Some details can be finalised at a later stage – for example discussed when getting agreement or in the detailed proposed.

There are two versions of the Expression of Interest form: one can be printed and taken as a hard copy in the field. This can be filled out by hand and submitted without need for a computer version.

There is also a digital (electronic) version: the file is divided into Form A and Form B to avoid repetition, but only the first part needs to be filled out at this stage.

In most cases, customary landowners will have been involved and given in-principle support before the Expression of Interest is completed. However, there may be occasions where the form is completed by other proponents such as NGOs and submitted before all customary landowners are supportive. This process could be used, for example, to secure funds for the social mapping or tenure resolution that is needed before agreement is reached.

Form B is only required for national protected areas, and there will



already be an approval process through CEPA before it is needed (see Section 3). This form asks for more details about the proposed protected area, seeking to assess its potential contribution to the PNG protected area network. These questions are based closely on the criteria set in the PA Policy. This form is quite challenging and most customary landowners and communities would need some assistance to complete it. Assistance may be available from trained staff from CEPA or from Provincial Governments, or from staff or volunteers from NGOS or universities.

It is important that a 'risk management approach' is taken at this stage and CEPA may not insist on all the details being completed. For example, if an area has already been identified as a priority by expert process and the landholders are keen, the lack of some detailed information should not delay approval of a proposal. The most important things are to clarify landholder approval and the role of the area in the expanded protected area network. Other details about biodiversity values can be researched over time.

2.3 Deciding on a protected area type

While the proposals are being developed and evaluated, the proponent and CEPA, along with other stakeholders and levels of government, need to decide what type of protected area is most appropriate. This decision will take into consideration many factors, but the most important will be:

- The intended objectives of management in the future: if strict protection for an endangered species is sought then a special management area might be most suitable; while if the community want to maintain customary controls on fishing then a locally managed marine area will be best.
- Wishes of customary landowners, in particular their vision for the protected area and planned activities, and how they plan to use the land or water in the future.
- The 'fit' of the proposed area with criteria for each protected area type. Details of the different types need to be carefully considered. Often it will be a choice between two or three types and this will need to be discussed by the customary landholders and others.
- The values and the existing or potential contribution of the area to the principles for
 establishing the protected area network. This is an important consideration: a highly
 significant area on the national or international scale will be most likely to be supported as a
 national protected area; while areas of more local significance will be regional protected
 areas.
- Size and configuration of the area: while there are no strict rules, there are expectations that some types such as national parks usually will be large areas.
- *Current uses and commitments*: Where there are significant existing uses of the land and water, these need to be taken into consideration.

Assistance with this decision is available from CEPA, and proponents can refer to the Protected Area Management Guideline⁵ about protected area types to gain a better understanding of the different roles they play in PNG's network. The decision tree (

Figure 2) gives a broad framework for this decision.

⁵ Leverington, F. (2017) A Guide to Protected Area Types, Papua New Guinea. SPREP/ CEPA/UNDP, Samoa.

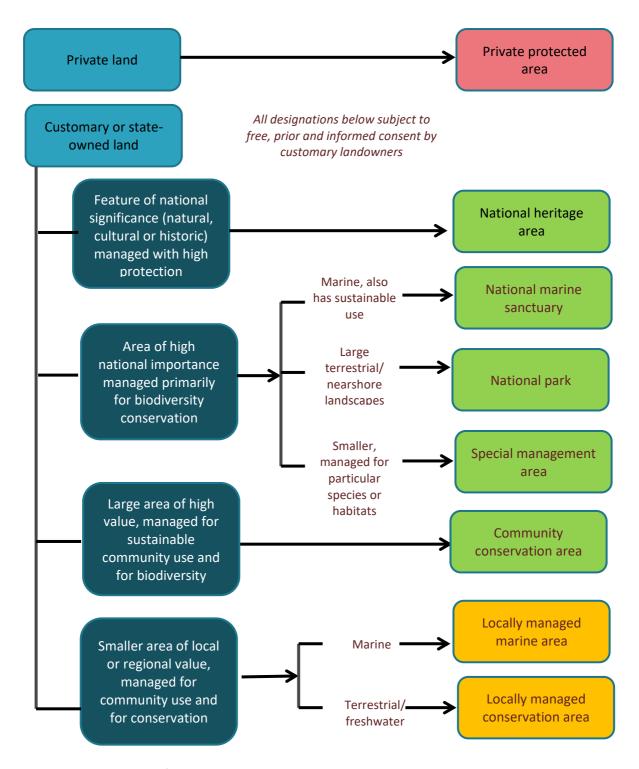


Figure 2: Decision tree for deciding on a protected area type

2.4 Benefit sharing agreement

A requirement of the new Protected Area legislation⁶ is that a benefit sharing agreement should be submitted with the proposal before declaration of a protected area. It is recommended that proponents should begin work on this agreement early in the process, so it can be ready to submit during the approval phase (section 5) and implement once the protected area is established (Section 6).

2.5 Statement of management intent

The Protected Area Bill also requires a management plan to be submitted before declaration. CEPA has developed a proforma for a statement of management intent: the first stage of a detailed management plan. This statement must have the support of customary landowners and the following information:

- The story of and vision for the proposed area
- The area's values and their condition
- Key targets for management and the goals for each
- Threats to the area and opportunities for the community
- Broad strategies to achieve the goals, mitigate the threats, make the most of the opportunities and improve community livelihoods.

The second, more detailed part of the management plan can be developed after declaration during the establishment phase (Section 6).

⁶ At the time this report was completed, the new Protected Area Bill was still in final draft and was not yet enacted. This report has been prepared with the best available knowledge, but will need to be revised after the legislation has been finalised.

3. Step two: Getting agreement – working with communities and stakeholders

As discussed, the stage of 'socialising' the idea and getting agreement will cycle throughout the proposal process and should begin early. How it is handled will vary with the proponent: customary landowners initiating proposals may seek agreement from their whole community and outside support and help; while proponents from outside the community (such as CEPA and scientists) will first need to gain community entry and present their ideas to landowners for their consideration, which may take time.

3.1 Gaining free, prior and informed consent

Free Prior and Informed Consent from customary landowners is a requirement before any new protected area can be declared, and before any changes can be made to the protected area type or size. This reflects the commitment that landowners' rights and wishes will always be respected throughout the protected area network.

The provincial government, CEPA and the round tables need to be sure that the customary landowners signing their agreement are the right people and have full authority to speak on behalf of the landowners. The protected area legislation says they must have legal advice or representation. It is noted that occasions arise where there are conflicts about who has the right to speak, and where people signing away land do not have full authorisation —from their community, especially women and older people with limited literacy. For assistance with this work, see the community engagement toolkit Wide Bay Conservation Association, (2018).

The Expression of Interest normally should be either prepared by customary landowners *or* taken to them for their endorsement. In some cases, some landowners might be involved in the preparation and then need to discuss with other clans or families. The proponent could prepare a draft Expression of Interest and use this as a starting point to begin discussions.

However, there may be cases where an Expression of Interest is submitted but notes that there is still work to do in gaining cohesive support from customary landowners, and requests support to undertake further work. This may be the case where the proponents — such as CEPA or the provincial government, scientists, NGOS or a smaller group of landowners — have not had time or resources to fully engage the customary landowners, or where disagreements within the community mean it is difficult to reach a consensus. In these cases, there may be tentative approval recognising the value of the potential protected areas, and further discussions with landholders proceed on this basis.

3.2 Other rightsholders and stakeholders

Other community members, especially those who live on or use the proposed protected area, should also be consulted. In addition, others with interests in the protected area need to be consulted at some stage, including industries with plans to use the area or operate in the vicinity. Their approval may not be essential, but their opposition might hold up the process and create conflict. Often early engagement is desirable, but local experts will give the best advice about who should be consulted and the best timing and process. In some cases, this consultation is best conducted at very high level and might be deferred until other approvals are confirmed. Governments at local level, provincial and national level will all be involved to some extent so their agreement and support should also be sought, both through the official approval process and through less formal means.

4. Step three: Assessing the proposal

While all protected areas discussed in this guideline are part of the PNG Protected Area Network, not all require national-level approval for their gazettal. Therefore, the assessment paths for the two groups differ.

4.1 Considering the Expression of Interest

The Expression of Interest is sent to CEPA for registration and an initial assessment, and CEPA staff may ask a technical person or group to help them evaluate the Expression of Interest. Assessors will review the Expression of Interest form and consider the evidence and arguments that the proposer has compiled. All reviewers⁷ should complete Form PA3 and may also provide a report or write notes on a copy of the Expression of Interest. They will need to check that the right people have signed off on the form – i.e. the customary landowners are genuinely happy.

The assessors will consider:

- Has enough information been provided?
- Does the information appear to be correct?
- Is the area of sufficient quality to be a protected area of the kind recommended?

CEPA will consider whether the protected area should be considered as a national protected area or a regional protected area.

For **national protected areas**, the proponent will be requested to complete Form B, with more details about the area's values and threats. Consideration of the detailed form is discussed in Section 4.3.

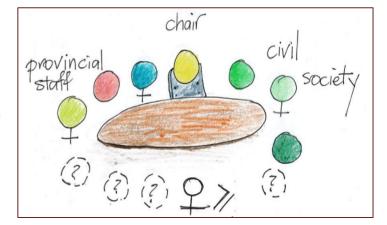
For **regional protected areas**, the proposal is now sent to the Regional Protected Area Round Table (RPART) for further assessment.

4.2 Regional protected area assessment

Regional protected areas may be approved and gazetted through provincial or local level government legislation or by using one of the PA Bill mechanisms. Regional protected areas do *not* need to demonstrate that they are a critical component of the national protected area network, as their significance can be at a local and regional level.

The RPART considers the proposal along with the recommendations of CEPA. For details of the RPART's functions, see the

management guideline on Sharing Governance⁸.



⁷ Form PA3 should be completed by CEPA, technical reviewers and the round tables for consistency.

⁸ Wolnicki, M., et al. (2019) Sharing governance in PNG's protected areas, a guide to the governance arrangements in the PNG Protected Areas Bill. PNG Protected Area Management Guideline No.PG2 version 1. Conservation and Environment Protection Authority, Port Moresby.

Within two months of receipt of the completed proposal, the RPART rates and evaluates the proposal according to the principles outlined in the PA Policy. This is undertaken in conjunction with relevant provincial and local level governments. Additional advice and information can be sought as necessary, especially from the proponents and customary landowners. If considered necessary, the proposal may also be evaluated by technical experts⁹.

The RPART either:

- supports the proposal as a protected area, and recommends the most suitable protected area type:
- recommends that the proposal be delayed or resubmitted (such as where there are still major conflicts), or
- rejects the proposal if the area is really unsuitable.

Reasons for each decision are clearly documented.

If endorsed, the proposal now enters the approval phase. The NPART or RPART informs the CEPA Protected Area Management Branch of its decision. If required, CEPA undertakes public notification of the intention to establish a new protected area.

4.3 National protected areas

Once the Expression of Interest has been endorsed, proponents proposing national protected areas now need to complete Form B, and may require some assistance (as discussed in Section 2.2.2). When the form is complete, it is submitted to CEPA for registration and assessment. Assessment is then conducted at the national level.

After registering and acknowledging the form, CEPA will first need to check that the right people have signed off on the form. The detailed proposal is sent to a technical person or group¹⁰ for assessment as soon as possible (this may be done through the NPART or directly by CEPA). Assessors will use the proposal form and review the ratings and evidence that the proponent has compiled. They then score the proposal on the form by filling out a summary table, identical to that filled out by the proponent, with their independent ratings and comments.

The assessors consider also consider:

- Has enough information been provided?
- Does the information appear to be correct?
- Is the area of sufficient quality to be a protected area of the kind recommended?

The technical advisor or group will score the proposal and will recommend:

- a) Whether the proposal should be supported
- b) Whether the proposal is of national or local/regional importance
- c) Appropriate protected area type/s
- d) Priority for consideration and establishment
- e) Any other matters that are relevant.

⁹ A formal RPART Technical Working Group may be formed, or the process may be less formal.

¹⁰ A formal NPART Round Table Technical Working Group may be formed, or the process may be less formal. This will be decided at a later date. The important thing is that an independent expert assessment should be undertaken as quickly as possible.

The technical group may request additional information or clarification before a proposal is forwarded to the next stage.

The proposal with the independent assessment and recommendation is then forwarded to the National Protected Area Round Table (NPART). Within two months of receipt of a completed proposal, the NPART rates and evaluates it, also according to the principles outlined in the PA Policy and with full consideration of other proposals that have been received to avoid duplication. Additional advice and information can be sought as necessary.

The NPART either:

- supports the proposal as a national protected area, and recommends the most appropriate protected area type;
- requests further information and evidence; or
- recommends that provincial governments evaluate it as a potential regional protected area.

If the NPART decides that a submission does not meet the criteria for a National Protected Area, it may decide to approve the application as a Regional Protected Area. In this case it informs CEPA, which then informs the relevant RPART and the applicant¹¹.

If the proposed protected area will make a very significant contribution to the national interest, the NPART may agree for the protected area to be established as a matter of priority on the condition that: i) additional information be provided within a set period; or ii) an evaluation of the management of the protected area be conducted within a set period; OR the NPART may agree that *prior* to the establishment of the protected area: i) additional information be provided within a set period; and ii) evaluation of the management of the protected area be conducted within a set period.

Reasons for each decision are clearly documented.

If supported, the proposal then enters the Approval stage.

¹¹ The other option is that the NPART informs the RPART, who then tables the submission at the RPART meeting. This provides the RPART with an opportunity to comment on the proposed Regional Protected Area but protracts the decision-making process.

5. Step Four: Approving and declaring the protected area

5.1 Regional protected areas

Where endorsed by the RPART, the proposal and conservation and benefit sharing agreement are finalised, signed by the customary landowners, and prepared for sign-off and gazettal by the provincial and local level governments. Regional protected areas may be protected under local or provincial government law, so the endorsed applications should be forwarded to the relevant level of government for final approval and declaration.

The provincial and local level governments, with the assistance of CEPA, where necessary, seek support for the proposal from other relevant government sectoral agencies, recognising the implications for future resource development. Negotiations with other sectors can be undertaken at any stage.

If the provincial government is to approve the protected area, it needs to be forwarded to the Provincial Executive Council.

Where necessary, additional regulations are passed at provincial and local level to enable management of the new protected area.

If there is no local or provincial government law, a protected area may be agreed under the PA Act where CEPA enters into a deed of agreement with either:

- Provincial Government (PG) (PA Act Schedule 5 for agreement with a Provincial Government)
- Local Level government (LLG) (PA Act Schedule 6 for agreement with LLG)
- Incorporated Land Group (ILG) PA Act Schedule 7(7.1)
- Clan groups or individuals (PA Act Schedule 7(7.3) for an agreement with clan groups or individuals)
- Private Land Owner (PA Act Schedule 8 for an agreement for a private protected area)

There can also be regional or national protection by agreement between unincorporated customary landowners. This option involves two steps. It allows unincorporated members of clans and other groups to jointly manage land under custom by entering an agreement in the form of a deed and then securing the agreed area as a protected area via a deed with CEPA:

- Step 1: PA Act Schedule 7(7.2) for agreement between unincorporated customary landowners
- Step 2: PA Act Schedule 7(7.3) for an agreement between CEPA and clan groups or individuals

Note: If the protected area is a sacred site, ples masalai or tambu area, then protection can be ensured before reaching this point using the PA Act Regulations form Reg.Sec 11(3) Form 6.

5.2 National protected areas

Once the proposal has been endorsed by the NPART, CEPA then seeks support for the proposal from other relevant government sectoral agencies, recognising the implications for future resource development. Negotiations with other sectors can be undertaken at any stage. Where such support is not given, the proposal should still proceed to a final decision at National Conservation Council (NCC) level.

The NCC considers and reviews the NPART decision for all new national protected areas and for regional protected areas that are more than 120,000 ha in area as well as any comments received by CEPA during the formal public notification period. Both approved and rejected proposals are presented to the NCC with full information about consultation and recommendations. The NCC reviews proposals on a quarterly basis and may, where necessary, request additional information.

Where a proposal has been rejected for a national-level protected area, the proponent and the relevant provincial government is informed. The proposal can then be considered for further evaluation as a potential regional-level proposal. The proponent of the proposal has the right to appeal and resubmit a revised proposal directly to the NCC at any stage.

Where endorsed by the NCC, the proposal, statement of management intent and Conservation and Benefit Sharing Agreement are finalised, signed by the customary landowners, and prepared for sign-off by the Minister and gazettal.

5.3 Notification and registration

Upon gazettal, all parties including customary landowners, provincial and local level governments and CEPA are notified immediately, and the area is entered into the National Register of Protected Areas.

The new protected area is to be added to the Protected Area Network Register by the registrar in CEPA.

A regional protected area protected under a law other than the PA Act may be added to the register immediately following the end of the formal public notification period.

Any National Protected Area entered in the PNG Protected Area Network Register may be notified in the National Gazette. Any Regional Protected Area may be notified in a Provincial Gazette.

6. Step five: Establishing the protected area

There are many factors in establishing a new protected area, and many of these can and should be initiated well before the final declaration. Gaining and maintaining support among customary landowners, other rightsholders and stakeholders, governments and potential donors will be critical. Some lessons about establishing protected areas have been documented for YUS and other protected areas in PNG¹². These stress the need to consider communities and their livelihoods as integral to the protected area process, not as an add-on to be considered later.

The protected area legislation mandates several key aspects:

Establishing a management committee or board: establishing the governance arrangements should be well underway by the time the protected area is declared. The legislation includes details about who should be on the committee, and how it should function. For guidance about early steps in working with management committees, see the PNG Protected Area Management Guideline MC1¹³ and for suggestions about building capacity refer to the capacity building report¹⁴.

Management planning

To ensure future management of the protected area has been considered, proponents are asked to prepare a statement of management intent before declaration. This is the basis of a future management plan, but is much simpler and does not require full community participation.

It is recommended a more complete management planning process is undertaken as soon as practical after declaration. Guidelines and templates are available¹⁵.

Benefit sharing agreements

These agreements are also required as part of the declaration process. No templates are yet available, but it is suggested that they could start simply and be added to over time.

Other vital aspects of an 'established' protected area to be considered include resourcing (funds, infrastructure and equipment); technical advice; learning and training plans; staff or voluntary workforce; education and awareness campaigns; and community relations.

¹² Wells, Z., et al. (2013) Establishing a Conservation Area in Papua New Guinea—Lessons Learned from the YUS Conservation Area. In: *Lessons Learned from the Field: Achieving Conservation Success in Papua New Guinea* (eds Beehler, B. M., Kula, G. and Kirkman, A. J.). Conservation International, Arlington, VA, USA.

¹³ Leverington, F., et al. (2019a) Working with protected area management committees in PNG. . In: *PNG Protected Area Management Guideline No. MC1 version 1*. Conservation and Environment Protection Authority, Port Moresby.

¹⁴ Peterson, A., et al. (2019) Capacity Building for Protected Area Management in Papua New Guinea. Part 6: Protected area management committee members. In: *PNG Protected Area Management Guideline No.CB6 version1*. Papua New Guinea Conservation and Environment Protection Authority, Port Moresby.

¹⁵ Leverington, F., et al. (2019b) Papua New Guinea protected areas: Living management plans template, November 2019. In: *PNG Protected Area Management Guideline No.MP1 version 1*. PNG Conservation and Environment Protection Authority, Port Moresby.

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8. Attachment one: Assessment form for an Expression of Interest

FORM PA3 - Assessment for an Expression of Interest for a protected area

Name and number of proposal (CEPA to fill)

Click or tap here to enter text.

Date received

Click or tap to enter a date.

Date review submitted

Click or tap to enter a date.

Name of reviewer

Click or tap here to enter text.

Role and qualifications

Click or tap here to enter text.

Has Form A been fully completed or are there significant gaps?

Click or tap here to enter text.

If clarification or more information is needed for any section of the form, please detail.

Click or tap here to enter text.

Please enter *your* ratings with justification for the key features of the proposed protected area in the table below. Section numbers relate to the sections of the EOI

Please enter information in the text boxes.

Criteria ¹⁶	Rating (low to very high)	Summary (very brief)
Support from customary landholders (Section 4)	Choose an item.	Enter brief comments here.
Support from government (Section 5).	Choose an item.	Enter brief comments here.
Support from other stakeholders (Section 5).	Choose an item.	Enter brief comments here.
Cultural (protecting cultural and historic values, knowledge systems, social relations etc)	Choose an item.	Enter brief comments here.
Contribution to the national or local network of protected areas	Choose an item.	Enter brief comments here.
Overall rating for proposal	Choose an item.	Enter brief comments here.

¹⁶ These criteria are based on the PNG Protected Area Policy

Your recommendation for the proposal

Choose an item.

If you have endorsed it with qualification or conditions, please details these Click or tap here to enter text.

What type or types of protected area would you recommend? Click or tap here to enter text.

Please add any other overall comments about your assessment and recommendation Click or tap here to enter text.

9. Attachment Two: Assessment form for detailed proposals

FORM PA4 (required for national protected areas)

Name and number of proposal (CEPA to fill)

Click or tap here to enter text.

Date received

Click or tap to enter a date.

Date review submitted

Click or tap to enter a date.

Name of reviewer

Click or tap here to enter text.

Role and qualifications

Click or tap here to enter text.

Has Form B been fully completed or are there significant gaps?

Click or tap here to enter text.

If clarification or more information is needed for any section of the form, please detail.

Click or tap here to enter text.

Please enter *your* ratings with justification for the key features of the proposed protected area in the table below. Section numbers relate to the sections of the proposal forms

Please enter information in the text boxes.

Criteria ¹⁷	Rating (low to very high)	Summary (very brief)
Relevant to all PNG people		
Support from customary landholders (Section 4)	Choose an item.	Enter brief comments here.
Support from government (Section 5).	Choose an item.	Enter brief comments here.
Support from other stakeholders (Section 5).	Choose an item.	Enter brief comments here.
Possible economic benefits (Section 7)	Choose an item.	Enter brief comments here.
Ecosystem services (Section 8)	Choose an item.	Enter brief comments here.
Cultural (protecting cultural and historic values, knowledge systems, social relations etc) (Section 9)	Choose an item.	Enter brief comments here.
Importance to nature conservation		
Protecting priority ecoregion/s (Section 10)	Choose an item.	
Animal species (Section 11)	Choose an item.	Enter brief comments here.

¹⁷ These criteria are based on the PNG Protected Area Policy

Criteria ¹⁷	Rating (low to very high)	Summary (very brief)
Plant species (Section 12)	Choose an item.	Enter brief comments here.
Important ecosystems (Section 13)	Choose an item.	Enter brief comments here.
Landscapes and geological features (Section 14)	Choose an item.	Enter brief comments here.
Climate change resilience and refuges (Section 15)	Choose an item.	Enter brief comments here.
Contribution to the national or local network of protected areas (Section 16)	Choose an item.	Enter brief comments here.
Management issues		
Current condition (Section 17)	Choose an item.	Enter brief comments here.
Threat level (Section 18)	Choose an item.	Enter brief comments here.
Close to or joining other bush or protected waters. Shape and design (Section 19)	Choose an item.	Enter brief comments here.
Overall rating for proposal	Choose an item.	Enter brief comments here.

Your recommendation for the proposal

Choose an item.

If you have endorsed it with qualification or conditions, please details these Click or tap here to enter text.

What type or types of protected area would you recommend? Click or tap here to enter text.

Please add any other overall comments about your assessment and recommendation Click or tap here to enter text.

10. Attachment three: PNG's protected area network policy

Information in this section is copied directly from the PA Policy¹⁸, Pillar four.

The National Protected Area Network will consist of existing and new protected areas brought together under new legislation. The aim is for a protected area network that is **Relevant and CARR**

- Relevant to all PNG people,
- Comprehensive and representative of the diversity of life, landscapes and seascapes; and
- Adequate, resilient and viable into the future to withstand and recover from stresses including climate change.

The CARR network is based on the CAR (comprehensive, adequate and representative) protected area system concept developed in Australia, but with an increased emphasis on the relevance to the community and on developing resilience to climate change. Guidelines for the development of the CARR protected area network in PNG area are outlined below (see Figure 3Error! Reference source not found.). It should be noted that guidelines and priorities will be applied with different emphasis to different types of protected area: for example national parks will be selected with priority for biodiversity conservation, but community conservation areas will have an emphasis on relevance to customary landowners.

Lack of information and of a completely mapped classification system on land and sea is not a reason to delay action on the development of the protected area network. The priority should be to establish areas that have already been identified as high priority, where there is willingness from customary landowners. As further information on biodiversity and cultural values becomes available, this data will be incorporated into future reserve planning.

Relevant to all PNG people

- Support and involvement of cusomary landholders and other community members
- Protection of cultura values and places
- Benefits from ecosystem services
- Local livelihoods respected
- Potential social and economic benefits

Comprehensive and representative of the diversity of life, landscapes and seascapes

- Comprehensive at ecoregion and ecosystem level
- Representative of ecosystems accross their range, of species especially threatened or endemic, and of geologica features, wetlands and freshwater ecosystems

Adequate, resilient and viable into the future

- Adequate well-designed PAs and network (size, shape and connectivity)
- •The protected area network as a whole, as well as individual protected areas, will be designed to maximise resilience
- Managable
- Available: PA declaration can be negotiated with CLOs, resource sectors and all stakeholders

Figure 3: Summary of the principles for establishing the protected area network

¹⁸ Independent State of Papua New Guinea. (2014) Papua New Guinea Policy on Protected Areas. (ed Conservation and Environment Protection Authority), Waigani, National Capital District, Papua New Guinea.

10.1 Guidelines for the building of the CARR Protected Area Network

Protected areas selection will be relevant to the community

- 1. **Support and involvement of customary landowners is essential.** People are an integral part of the PNG landscape and seascape, and nature is the basis of culture. Thus protected areas must be seen to be relevant and acceptable to customary landowners, other stakeholders and the nation as a whole. Local level, district and provincial governments also play an important role in decision-making relating to new protected areas.
 - a) Protected areas will be designed and established with the agreement and full
 involvement of local customary landowners, with consideration for their local needs
 and resource uses.
 - b) Where possible, boundaries of protected areas will take into account language and cultural groupings.
 - c) Where customary landowners take the initiative to propose new protected areas or to strengthen existing protected areas, the area should be assessed and their efforts supported even where the area is not a national priority for reservation for its biodiversity values.
- 2. **Cultural values and places will be protected**. Protected areas will be selected where possible to be culturally relevant and to provide protection to places of cultural and historic importance, including tambu areas of significance to customary landowners.
- 3. **Benefits from ecosystem services will be maximised.** Protected areas will be selected and designed to maximise protection of ecosystem services and resource sustainability for landowners, villages and towns, and to protect settlements from natural disasters. A host of ecosystem services can be derived from protected areas including buffering against the impacts of natural disasters (e.g. mangroves buffering against sea level rise events, safeguarding and providing clean water (fresh water security), providing bush and sea foods (food security) and stabilizing local climate.
- 4. The need for sustainable rural livelihoods will be respected

 Most protected areas in PNG will continue to supply customary landowners and other
 community members with their basic needs for food, water, building materials and other
 resources. This continued supply will be necessary to allow continued occupation and
 management of the land and sea. Protected area types, management plans, zonings and
 management regimes will respect the needs of customary landowners.
- 5. Potential social and economic benefits will be sought.
 - The REDD+ Framework for PNG (Reduced Emissions from Deforestation and Degradation) and emerging markets for payments for ecosystem services such as Carbon, Biodiversity and Water Credits create opportunities for payments to landowners who protect and manage their customary lands. In addition to these, conservation compatible business enterprises can be considered. Potential employment opportunities through tourism, research assistance and protected area management will be maximised.

The protected area network will include the diversity of life, landscapes and seascapes

6. The protected area network will be comprehensive in conserving the range of ecosystems. The protected area network will to be developed with the primary focus of including as much of PNG's landscape and biological diversity as possible.

- a) Comprehensiveness will be achieved first through conserving examples of the full range of natural terrestrial, freshwater and marine habitats and ecosystems, based on a consistent national approach to ecoregional and ecosystem classification. This classification will include representative geophysical settings that are the basis for regional biodiversity regardless of climate. This will help PNG maintain the capacity to support a diversity of life in the future, even if habitats are altered by climate change.
- b) Conservation Priority Areas identified through the analysis of land systems, forest inventory management units and restricted range endemic species with consideration of climate change refugia will be used to guide priorities for establishing terrestrial protected areas¹⁹.
- c) In the **marine** environment, the marine representative system should be used as a basis for setting priorities²⁰.
- d) Rare and restricted habitats and ecosystems should be included in the protected area network wherever possible.
- 7. **The protected area network will be representative.** Representativeness is the sampling of the full range of biodiversity at a finer scale than comprehensiveness, within the units of classification and including more specific elements of natural systems.
 - a) Within broad habitats and bioregions, the protected area system will include the greatest possible **diversity of plants and animals**, especially where they occur across climatic gradients.
 - b) Special consideration will be given to endemic, rare and threatened species, and efforts will be made to prevent extinctions of populations and species. Priority will be given to places where concentrations of threatened and endemic species occur, to centres of endemism and to important places for migratory species including flyways. The protected area system will, as far as practical, include representation of the variety of geological features, freshwater ecosystems and wetlands. In addition to ecosystems and species, the protected area system will include examples of landscapes including geological features (such as cliffs, sand-dunes, caves, peaks, rock formations and fossils) and of freshwater and wetland systems (such as rivers, lakes, freshwater and saline wetlands, ephemeral swamps and springs).

Protected areas and the network as a whole will be viable into the future

- 8. Individual protected areas and the network as a whole will be adequate in area and design to be sustained in the long term. Adequacy in the protected area network will be ensured at two levels:
 - a) Across the whole network and within bioregions, adequate areas of each ecosystem will be conserved to allow for the survival and plants and animals which depend on these

¹⁹ Lipsett-Moore, G., et al. (2010) Interim National Terrestrial Conservation Assessment for Papua New Guinea: Protecting Biodiversity in a Changing Climate. In: *Pacific Island Countries Report No. 1/2010*. Papua New Guinea Department of Environment and Conservation, The Nature Conservancy, UNDP; Adams, V. M., et al. (2017) Land-sea conservation assessment for Papua New Guinea. A report on the work undertaken to fulfil the terms of the project Review and Integration of the Terrestrial and Marine Program of Works on Protected Areas. University of Queensland, PNG Conservation and Environment Protection Authority

²⁰ Government of Papua New Guinea. (2015) National Marine Conservation Assessment for Papua New Guinea Conservation and Environment Protection Authority; Adams, V. M., et al. (2017) Land-sea conservation assessment for Papua New Guinea. A report on the work undertaken to fulfil the terms of the project Review and Integration of the Terrestrial and Marine Program of Works on Protected Areas. University of Queensland, PNG Conservation and Environment Protection Authority

- habitats. The protected area network will be well connected and will maximise the natural connections used by plants and animals
- b) Individual protected areas will be adequate in size and be designed using good design principles wherever possible, as summarised in Table 1.

Table 1: Design guidelines for protected areas

	General guidelines for protected area design	Less desirable	Application in PNG
1	- More desirable Larger	Smaller	No lower size limit will be set, but in general larger areas have better conservation potential. Balance with other considerations including costs and logical boundaries.
2	Includes whole catchment	Much of catchment in areas outside PA management control or influence	Including the catchments of waterways means that managers have more control over water quality and also over invasive species.
3	Boundaries coincide with natural boundaries eg rivers, mountain ranges	Boundary is in a place that is difficult to mark or recognised	Natural boundaries are easier to manage and save money in boundary marking. Balance with guideline below.
4	Boundaries coincide with cultural and administrative boundaries	PA includes a large number of different customary land owner groups, especially where relationships are not cooperative	In PNG the boundaries of customary owner groups or larger clan groups may be logical PA boundaries enabling easier negotiations and management
5	Shape is closer to round than linear	Shape is long and thin or with a very convoluted boundary.	The boundary to area ratio should be as low as possible to reduce 'edge effects' of invasive plants and animals. However, this is balanced with principles 3 and 4.
6	Roads and other infrastructure are outside PA, so there is minimal internal fragmentation	Natural areas are highly fragmented by internal roads and communication facilities	In PNG many Pas will include villages and local roads, and local communities aspire to better access and communications. Some access tracks are also desirable for management. However, major roads can cause high rates of road kill, prevent natural wildlife movement, and allow invasion of weeds, and are not desirable within protected areas.
7	Most of the area is in good to very good condition	Most of the area is in poor or fair condition, requiring major rehabilitation works	Ratings according to standard terminology. Exceptions where rehabilitation is desirable or where some area used for community gardens or hunting areas.
8	High level of connectivity to other natural areas	Isolated from other natural areas; no ability for wildlife to move in natural patterns	Includes flyways as well as terrestrial, freshwater and marine environments.

- 9. The protected area network as a whole, as well as individual protected areas, will be designed to maximise resilience to climate change impacts and other threats, by recognising new threats to the system, by increasing connectivity at both local and broad scales, and by identifying and protecting refugia areas.
 - a) Potential wildlife refugia against climate change climate change can be on a large scale, such as high mountain ranges, or a small scale, such as a small caverns and rocky slopes. Protected areas should where possible include:
 - Ecological refugia, such as where it is higher, cooler or wetter than surrounding lands, or where species can shelter in rocks, caves or deeper water
 - Evolutionary refugia , where many endemic species continue to survive as the surrounding landscape and seascape changes

- Human-induced refugia, areas of natural habitat where surrounding areas have been cleared or altered
- "Trigger points", habitats from which climate-adapted species may spread in the future.
- b) Restricted Range Endemic species those species with limited geographic and climatic ranges most vulnerable to climate change will be given special consideration.
- c) The protected area network will strive to maintain where possible continuous connectivity along natural gradients across climatic zones, montane slopes, river basins, and from offshore to onshore and tidal areas.
- d) Protected areas with similar habitats and wildlife will be duplicated where possible to reduce the risk of species extinctions at a single site and to provide 'insurance' against natural and manmade disasters.
- 10. Protected areas and the network will be manageable and available. Preference will be given to selecting protected areas where management can be practical, culturally appropriate and affordable. Where possible, a clear capacity for future management has been negotiated between customary landowners, governments and other partners such as NGOs and donors. The declaration of the protected area must be able to be negotiated with customary landowners and with other sectors such as the mining, forestry and plantation industries.

10.2 Targets for the protected area network

PNG is a signatory to the CBD, and the Program of Work for Protected Areas. Target 11 of the CBD Strategic Plan states that "By 2020, at least 17 per cent of terrestrial and in land water areas and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well-connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscape and seascape" (CBD COP 10 Decision X/2 2010).

The Terrestrial Programs of Works on Protected Area (PoWPA) (Lipsett-Moore, Game et al. 2010) worked with targets of 10% of ecosystems for biological representation and 20% to add better climate change resilience. When software solutions were used to plot this representation across all vegetation types and land systems and to include the restricted range species, about 15% of the country would be needed to reach the 10% representation, the area needed will be approximately 22% of the country for the 10% coverage, and 33% for the 20% coverage. These figures will be higher when the needs of the community and administrative boundaries are taken into account.

While these aspirational targets are important for biodiversity conservation, it will be very challenging for PNG to reach them in the timeframe, and this Policy does not support the reservation of areas solely to meet the target, without proper consideration of their values and of the wishes of the customary landowners. Aspirational targets for the protected area network are listed in Table 2.

Table 2: Targets for protected areas in PNG

	Target	Notes
1	CBD targets as above are supported noting that they include areas under effective management not necessarily within formal protected areas.	Other forms of protection such as restrictions on clearing primary forests (e.g. under the Forestry Act) and ensuring sustainable fishing will complement the formal protected area network.
2	10% of territorial waters and the coastline within a variety of marine protected areas by 2025 (CBD targets). Minimum of one million ha (2050 vision)	
3	25% of target 2 (ie 2.5% of territorial waters) under a combination of no-take zones and zones which allow fishing only by customary landowners for subsistence use by 2025	Needs of local community fishing to be taken into account, but to be protected from outside exploitation of resources.
4	10% of offshore areas outside territorial waters but within the EEC will be included in national marine sanctuaries by 2025.	To be managed in cooperation with neighbouring countries to maximise conservation of turtles and other marine life.
5	Any priority identified terrestrial and wetland areas that are not subject to resource use by customary landowners to become national parks by 2020, along with other high montane areas considered of value to the CARR system.	To maintain connectivity and increase their value, establishment of community conservation areas adjacent to these national parks may be of particularly important.
6	At least one major, well-managed national park in each of the nine terrestrial ecoregions by 2025. These should be adequate in size and should include some of the most valuable areas of endemism and biodiversity in the country. Priority identified areas to be given preference. Twenty national reserves, wilderness areas and national parks (2050 vision)	Depending on the resource use and aspirations of the customary landowners, national parks may not be an appropriate protected area type in all bioregions, and community conservation areas with some high protection zones will be an acceptable alternative.
7	80% of all identified vegetation types and landforms to be included in protected areas to at least a 5% level by 2020 and a 10% level by 2025.	A variable level of protection is acceptable as small (rare) ecosystems will require a higher proportion within protected areas. This related to the CBD target of protected areas being ecologically representative.
8	All rare and threatened and restricted range vertebrate species have at least 30% of their habitat in some form of protected area by 2025.	