



ADVANCING GUIDANCE ON OTHER EFFECTIVE AREA-BASED CONSERVATION MEASURES

**REPORT OF THE SECOND MEETING OF THE IUCN-WCPA TASK FORCE ON
OTHER EFFECTIVE AREA-BASED CONSERVATION MEASURES**

**INTERNATIONAL ACADEMY OF NATURE CONSERVATION, ISLE OF VILM, GERMANY 30 JUNE
– 4 JULY 2016**



**ADVANCING GUIDANCE ON OTHER EFFECTIVE AREA-BASED CONSERVATION MEASURES:
REPORT OF THE SECOND MEETING OF THE IUCN-WCPA TASK FORCE ON OTHER EFFECTIVE
AREA-BASED CONSERVATION MEASURES**

Citation: Jonas H. and K. MacKinnon (Editors) 2016. *Advancing Guidance on Other Effective Area-based Conservation Measures: Report of the Second Meeting of the IUCN-WCPA Task Force on Other Effective Area-based Conservation Measures*. Bundesamt für Naturschutz: Bonn

Acknowledgements: The Co-Chairs thank: the German Federal Agency for Nature Conservation (BfN) and the Swiss Federal Department of the Environment for their financial contributions to the work of the Task Force; Gisela Stolpe and Bettina Ohnesorge (BfN) for their logistical support in organising and supporting the meeting; and all the meeting participants for their active participation, many of whom acted as rapporteurs, with special mention of Dan Laffoley for his work on the screening tool and guidance outline.

Contacts: harry@naturaljustice.org and kathy.mackinnon@iucn.org

CONTENTS

1.	Background	4
2.	Opening.....	5
3.	Draft Screening Tool	6
4.	Case Studies	10
5.	Working Group on Potential Types of OECMs.....	10
6.	Working Group on Similarities and Differences Between Protected Areas and OECMs.....	15
7.	Working Group on a Filter for Aichi Targets	16
8.	Working Group on Governance and Culture	17
9.	Working Group on Assessment, Monitoring and Reporting	19
10.	Working Group on Recognizing and Strengthening OECMs.....	20
11.	Vilm Work Plan	21
12.	Preliminary Outline of Guidance.....	22

Annex I: Workshop Agenda

Annex II: Participants List

Annex III: Consideration of OECMs at SBSTTA-20

Annex IV: Canadian Council on Ecological Areas Guidance on OECMs

Annex V: Case Studies

Annex VI: Aichi Targets Most Relevant to OECM Debate

1. BACKGROUND

Aichi Target 11 of the CBD Strategic Plan on Biodiversity (2010) states that:

*By 2020 at least 17 % of terrestrial and inland water, and 10 % 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.*

While substantial progress has been made on expanding national and global protected area systems over the past six years, it has not been matched in terms of better defining what would 'count' as other effective area-based conservation measures (OECMs). In response, the IUCN World Commission on Protected Areas (WCPA) set up a Task Force in September 2015 to provide guidance on this issue and a first international meeting was held in January 2016 in Cambridge, UK. Subsequently at the twentieth meeting of the Subsidiary Body on Scientific, Technical and Technological Advice of the Convention on Biological Diversity (SBSTTA-20, April 2016, Montreal), Parties discussed progress on priorities in the Strategic Plan on Biodiversity - including the need for greater progress on defining and reporting on OECMs and called on the Executive Secretary of the CBD to support further work on OECMs - such as through the collection of relevant case studies. The work of the WCPA Task Force on OECMs in this regard was formally acknowledged and encouraged.

At the Cambridge meeting, a range of criteria relevant to defining OECMs were discussed, namely:

- Purpose and conservation objectives of the area,
- Duration and permanence of conservation management regime,
- Relative importance of conservation objectives to other management objectives (whether primary objective or one of main objectives),
- Conservation outcomes, and
- Strength of conservation measures - e.g., legal or other instruments that recognize the area.

The conclusion from discussion of these criteria was that examples of potential OECMs occur in two main situations and fall between four categories:

1. Area meets all elements of the IUCN definition of a protected area, except for official recognition because:
 - a. The relevant government agency does not recognize it as a protected area,
 - b. The governance authority does not want the area to be recognized/listed/designated as a protected area by the relevant national government.
2. Area does not meet one or more other elements of the IUCN definition of a protected area, but does conserve nature/biodiversity through:
 - a. Secondary voluntary conservation, i.e. conservation outcomes are achieved even though it is not the primary management objective.
 - b. Ancillary conservation, i.e. areas that deliver conservation outcomes as a by-product of management activities with no conservation intent or through a lack of any management activities (Borrini-Feyerabend and Hill, 2015).

The Vilm meeting provided a useful opportunity to build on the Cambridge discussions, collate case studies from around the world and review those potential OECM case studies

against criteria and categories. Participants at the meeting were drawn from diverse geographical and institutional backgrounds, reflecting the breadth of conservation efforts in the wider land- and seascapes.

2. OPENING

Kathy MacKinnon (Chair, World Commission on Protected Areas and Task Force Co-Chair) introduced the workshop's aims, provided an overview of the agenda (**Annex I**) and thanked the Bundesamt für Naturschutz (German Federal Agency for Nature Conservation) for their financial contribution, and in particular Gisela Stolpe and Bettina Ohnesorge for their logistical support. She also thanked the Swiss government for their continued financial backing of the Task Force's work.

After a round of introductions from participants (**Annex II**), Harry Jonas (Task Force Co-Chair) presented the Task Force's mandate, set out the ideas that emerged from the Cambridge meeting (Jonas and Mackinnon, 2016), provided an overview of the outcomes of Parties deliberations on OECMs at SBSTTA-20 (set out in **Annex III**) and proposed core areas on which the meeting's participants should focus.

David MacKinnon, Canadian Council on Ecological Areas (CCEA), noted that several national initiatives are already underway to better define appropriate criteria for OECMs and presented on the CCEA's work on OECMs in the Canadian context. He provided an overview of a national-level screening tool which can be used to identify protected areas and OECMs as well as to identify gaps areas may have in conservation effectiveness that, if addressed, could qualify areas as protected areas or OECMs. The CCEA guidance identifies key traits and thresholds of effectiveness required of conservation areas and mechanisms to achieve the *in-situ* conservation of biodiversity; defined as "the conservation of ecosystems and natural habitats and the maintenance and recovery of viable populations of species in their natural surroundings". The guidance primarily addresses potential effectiveness of tools, based on their traits, rather than realized effectiveness 'on the ground' (MacKinnon et al. 2015 – **See Box A** and **Annex IV** for more detail).

Box A: CCEA guidance on identifying OECMs ('OEABCMs' in the Canadian context)

The guidance address five main areas:

- **Purpose:** Areas included under Target 11 as OECMs must have an expressed purpose to conserve nature (biodiversity). We understand that this purpose might be achieved as a co-benefit of other management purposes or activities.
- **Duration:** Areas included under Target 11 as OECMs must be managed for the long-term to be effective. We accept a working definition of long-term to mean there is an expectation that conservation will continue indefinitely.
- **Conservation objective primacy:** In areas included under Target 11 as OECMs, in cases of conflict with other objectives, nature conservation objectives shall not be compromised.
- **Nature conservation outcomes:** OECMs should result in effective and significant nature (biodiversity) conservation outcomes. When there are existing measures/areas that are to be considered as OECMs, evidence of conservation outcomes should be used as part of the screening process.
- **Strength of conservation measures reported as OECMs:** Areas included under Target 11 as OECMs should have a management regime that, through one or more measures that are effective alone or in combination, can reasonably be expected to be strong enough to ensure effective conservation, and if there are gaps, these will be addressed over time.

3. DRAFT SCREENING TOOL

Dan Laffoley (WCPA) underscored that while the deliberations relating to the specific elements of OECMs is a technical task, the final guidance should be easily accessible. In that context, he set out an illustrative approach for a simple, globally relevant five-point screening tool. This was subsequently refined as it was tested against the case studies presented during the meeting. The refining focused on the precision of language and expression, and the mode of application (e.g. insertion of two pre-conditions) - the final version of the illustrative screening tool developed at Vilm is presented in **Box B** below.

Box B: Illustrative Screening Tool

Must pass two preconditions and all five tests to be considered as an OECM. Must first pass simultaneously ALL four on 'essential character', and then the fifth one on 'degree of control'.

Preconditions:

The area is not already recognised as, or within, a (M)PA, and Target 11 is the **most relevant** Aichi target.

Tests:

1. The fact that **nature conservation** (meaning ecosystems, natural habitats and the maintenance and recovery of viable populations of species in their natural surroundings (ref. CBD) **lies at the heart of the area's outcome** –implicit or explicit.
2. **The fact that it is a discrete geographical area** – wider measures for species and/or environment are different and not explicitly 'area-based' in the context, writing and spirit of Aichi 11 and so fail this test.
3. The fact that the area is **recognised and respected** for particular biodiversity values, and that the resultant biodiversity benefit is demonstrable over time.
4. The fact that **commitment to and/or the delivery of conservation** through whatever route is **long-term** – expected or intended in perpetuity.
5. **'Degree of control'** – the **probability** of the conservation **outcome** being sustained under normal circumstances, AND the **fundamental ability** to uphold the whole conservation outcome (directly or indirectly) when challenged.

The screening tool accepts that areas, having passed these tests, would be identified as OECMs, and measures may vary from delivering strict protection to certain forms of sustainable management, subject to specific guidance.

- **Accessibility:** The tool recognizes that the starting point for OECMs is different from 'conventional' protected areas and is geared to be simple and accessible, whilst safeguarding that the outcome (if two preconditions and all five tests are passed) equates to an equivalent final conservation outcome.
- **Preconditions:** It became immediately evident that it is necessary to meet two preconditions before applying the tool. The first of these is to check that the location in question was not already a (marine/terrestrial) protected area or included within one. This is to avoid double-counting. Some of the case studies considered at the meeting were already recognized as protected areas. The second pre-condition is to ensure the consideration of relevance to other Aichi targets before applying the tool. Again, it became clear in testing the tool that some measures being considered as potential OECMs could be better mapped against other Aichi targets – e.g. sustainable fisheries measures under Target 6 rather than Target 11.
- **Simultaneous application of all four 'essential character' tests (tests 1-4):** The word 'simultaneous' is important to ensure that all aspects of essential character are met at the time the location is being considered as an OECM. This is to avoid 'applicants' ignoring one or more of the tests or assuming that one or other is more important.
- **Degree of control and 'normal' conditions:** This is to be applied only after all four essential characters have been met

CASE STUDIES

In advance of the meeting, participants were requested to develop case studies of potential OECMs. **Annex V** provides the full set of case studies that were submitted. Participants used the draft screening tool to assess each of the case studies presented.

Dan Laffoley (WCPA) presented two marine-related case studies, namely: Clarion Clipperton Zone in the Pacific, located in the international seabed Area of the Eastern Central Pacific between Mexico and Hawaii) and Scapa Flow off the coast of Scotland. Scapa Flow is a good example of an area that has no *a priori* conservation objective but because of its protection and management provides ancillary conservation.

Hesti Widodo (Coral Triangle Centre, Indonesia) presented on Ay and Rhun Islands, located in Eastern Indonesia. She explained that the Coral Triangle Centre has been supporting the local communities to revitalize *Sasi* (traditional wisdom) to protect the islands. She suggested that the area was currently a potential OECM but is in the process of being recognized as a formal protected area (post issuance of Law No. 23/2014 on Local Government).

Alkaly Doumbouya (National Fisheries Research Centre of Boussoura, Guinea) presented on Corail Island, which is located in coastal waters off Guinea near the Loos Islands Wildlife Sanctuary and involves community conservation efforts by a range of ethnic groups. Although this area meets many of the qualifications of an OECM, it is already included within a designated protected area.

Clara Lucia Matallana Tobón (Humboldt Institute, Colombia) presented two case studies. The first explored collective territory of Afro-Colombian communities, in the north west of the Risaralda department, which is part of the Choco Biogeographic Region. The area is not a protected area but is considered to be a 'special management area' and therefore perhaps an OECM. The second focused on the Bitá River in the Colombian Orinoco Basin, which has recently been designated a 'Protected River', through a conservation agreement, as part of an Ecological Integrity Approach to preserve the continuity of the entire riverine system.

Onkemetse Nteta (WWF – World Wildlife Fund, South Africa) presented on the Mgundeni Community Property, owned by the Mgundeni Community Trust, which was identified in 2006 as a pilot site within the KwaZulu-Natal Biodiversity Stewardship Programme. Following a detailed biodiversity assessment on the property, an area was identified as qualifying as a nature reserve. However, due to the landowners' desire to continue with commercial livestock grazing, it was agreed to pursue a Biodiversity Agreement for a portion of the property, and this latter area could be a potential OECM. This example highlights how OECMs may be helpful in promoting connectivity across landscapes.

Brent Mitchell (QLF Atlantic Centre for the Environment, USA) presented on two private conservation-related schemes, the American Conservation Reserve Program - which pays farmers to retire land from agriculture to support conservation, and conservation easements that are now the fastest growing national conservation tool in the USA. Some, but not all, areas under each scheme may be OECMs but would have to be assessed on an individual basis.

Agus Budi Utomo (Burung Indonesia) presented on Hutan Harapan, which is 90,000 hectares of land held under an Ecosystem Restoration Concession (ERC). At least 75% of an ERC must

be dedicated to conservation and there are now 14 ERCs in Indonesia, many of which may justify nomination as OECMs.

Andrew Rhodes (National Commission on Natural Protected Areas, Mexico) presented on certified forests (with sustainable use of forest resources) and fishing refuge areas which are defined areas under federal jurisdiction. The latter have the primary purpose of conserving and contributing to the development of fishery resources and protecting the surrounding environment. These areas of sustainable use may include areas considered to be OECMs.

Ny Aina Andrianarivelo (Blue Ventures, Madagascar) presented on the experience of locally managed marine areas (LMMAs) in Madagascar and increasingly in East Africa. Some LMMAs are already recognized or would qualify as protected areas, or could be recognised as OECMs (under Target 11) while a number of other single species measures may more appropriately contribute to other Aichi targets, e.g. Aichi Target 6 (see **Annex VI**).

Sabine Jessen (Canadian Parks and Wilderness Society) presented two case studies from Canada. She described the Strait of Georgia Glass Sponge Reef Fishing Closures, British Columbia (Canada), where full, legal, bottom-contact fishing closures were put in place to protect nine glass sponge reefs. The fishing closures prohibit all bottom contact fishing activities, including bottom trawling, bottom long line, and trap fisheries (prawn and crab), within 150m off the reefs. However, activities other than fishing (such as anchoring) are not addressed through the fishing closures, leaving the glass sponge reefs at risk. The second case study, related to 164 Rockfish Conservation Areas (RCAs) established along the British Columbia coast to protect a number of species of rockfish that are in decline. However, based on studies to date, the effectiveness of RCAs to even protect the species they are established for is questionable, and their broader effectiveness in the conservation of biodiversity is unlikely. Both examples describe fishery closure areas. Neither example currently would be considered an OECM, although the glass sponge reef closures might qualify with additional restrictions.

4. WORKING GROUP ON POTENTIAL TYPES OF OECMs

The group focused on the four different types of potential OECMs, namely:

- A. Area meets all elements of the IUCN definition of a protected area, except for official recognition because:
 1. The relevant government agency does not recognize it as a protected area,
 2. The governance authority does not want the area to be recognized/listed/designated as a protected area by the relevant national government.
- B. Area does not meet one or more other elements of the IUCN definition of a protected area, but does conserve nature/biodiversity through:
 1. Secondary voluntary conservation, i.e. conservation outcomes are achieved even though it is not the primary management objective.
 2. Ancillary conservation, i.e. areas that deliver conservation outcomes as a by-product of management activities with no conservation intent or through a lack of any management activities (Borrini Feyerabend and Hill, 2015).

The group's discussion touched on a range of issues, including:

- Target 11 is about *in situ* conservation whereas several other Aichi targets focus on sustainable use-related activities (**Annex VI**).

- OECMs are not ‘a measure’ but a category that can include a number of different types of measures.
- OECMs should be seen as an incentive for governments and stakeholders to recognize, protect and maintain areas using innovative approaches that deliver conservation outcomes.
- Recognizing and reporting OECMs will provide a useful indicator of ecosystem health and promote conservation planning to ensure greater ecological representation.
- OECMs are a pragmatic approach to extend conservation beyond protected areas.

A range of potential examples of OECMs were raised by the group, including: areas of high biodiversity value in Indonesia (such as Important Bird Areas) under active governance; some kinds of LMMAs in Madagascar that are not protected areas; sacred sites or taboo areas in Papua New Guinea; and forests conserved primarily to secure the integrity of a watershed.

5. WORKING GROUP ON SIMILARITIES AND DIFFERENCES BETWEEN PROTECTED AREAS AND OECMs

IUCN defines a protected area as: *A clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values.* IUCN provides guidance on interpreting the definition’s constituent elements in *Guidelines for Applying Protected Area Management Categories* (Dudley, 2008). Participants were asked to review the elements of IUCN’s guidance on protected areas against the following questions, namely:

- What are the similarities and differences between protected areas and OECMs?
- Could the same PA guidance also apply to OECMs?
- If the same general advice applies, should the wording be modified?
- If same general guidance does not apply, what alternative guidance is needed?

A small group first discussed the general parameters of the issues, after which three groups focused on a number of the specific issues addressed below. Following a discussion of the groups’ work, the rapporteurs and a number of other participants worked further on the table to render the following results.

It should be noted that this exercise was intended to highlight the similarities and differences between protected areas and OECMs and not to equate OECMs and protected areas.

	PA Guidance	Draft OECM Guidance
Objectives	For IUCN, only those areas where the main objective is conserving nature can be considered protected areas; this can include many areas with other goals as well, at the same level, but in the case of conflict, nature conservation will be the priority.	<p>Considerations:</p> <p># Consideration of OECMs shifts the focus from achieving management objectives to acknowledging/recognizing conservation outcomes.</p> <p># The protected areas guidance assumes that at least one of the objectives will be conservation, whereas for OECMs there must be <i>in situ</i> conservation of biodiversity, regardless of objective.</p> <p># If an activity impacts significantly the conservation outcomes of an OECM, it may cease to be an OECM, regardless of the area's stated objectives.</p> <p>Suggested element: '<i>... regardless of objectives</i>' ...</p>
Effectiveness	Implies some level of [conservation] effectiveness. Although the PA category will still be determined by the objectives, management effectiveness will progressively be recorded on the World Database on Protected Areas and over time will become an important contributory criterion in identification and recognition of protected areas.	<p>Considerations:</p> <p># The area must deliver effective conservation outcomes, with clear links to the definition of conservation and the practical steps of assessment, monitoring and reporting.</p> <p>Suggested element: '<i>... achieves in situ conservation of biodiversity ...</i>'</p>
Recognized	Implies that protection can include a range of governance types, including declaration by the state or other parties as well as under traditional ownership or private conservation, but that such sites should be recognised in some way (in particular through reporting to the World Database on Protected Areas – WDPA).	<p>Considerations:</p> <p># A legitimate governance authority should recognize the area's conservation values, even if the area is not managed for conservation objectives.</p> <p># Should this be part of the core criteria or related to broader guidance about OECMs?</p> <p>Suggested element: '<i>... recognized/acknowledged by a legitimate governance authority ...</i>' or simply '<i>... governed ...</i>'</p>
Dedicated	Implies specific binding commitment to conservation in the long-term, through e.g.: <ul style="list-style-type: none"> ● International conventions and agreements ● National, provincial and local law ● Customary law ● Covenants of NGOs ● Private trusts and company policies ● Certification schemes. 	<p>Considerations:</p> <p># Linked to 'legal or effective means', it was felt that there should be a binding commitment to objectives that <i>deliver effective conservation outcomes</i> in the long-term, regardless of whether the objective is explicitly for conservation - including by the instruments set out for protected areas.</p> <p># The fact that an area is ecologically intact does not automatically make it an OECM. This means that areas that are 'ecologically important ('intact')', but</p>

	PA Guidance	Draft OECM Guidance
		<p>where governance exhibits no effective degree of control, should not be considered OECMs.</p> <p># No agreement among working group participants on whether dedication should be a core requirement or secondary guidance.</p> <p>Suggested element: '... committed ...'</p>
Managed	<p>Assumes some active steps to conserve the natural (and possibly other) values for which the protected area was established; note that "managed" can include a decision to leave the area untouched if this is the best conservation strategy.</p>	<p>Considerations:</p> <p># Because the focus on OECMs is on conservation outcomes as opposed to management objectives, this element is less important.</p> <p># The protected areas guidance is useful/relevant, but this should not be part of OECMs' defining criteria.</p> <p>Suggested element: '... regardless of management objectives ...'</p>
Legal or Effective Means	<p>Means that protected areas must either be gazetted (that is, recognised under statutory civil law), recognized through an international convention or agreement, or else managed through other effective but non-gazetted means, such as through recognized traditional rules under which community conserved areas operate or the policies of established non-governmental organizations.</p>	<p>Considerations:</p> <p># Linked to 'dedicated', the area does not have to be dedicated to conservation, but must be governed according to an effective means that delivers conservation outcomes, regardless of objective.</p> <p># It was suggested that the means should be at least as difficult to reverse as to establish.</p> <p># As above, this is a relevant consideration but may not be required to be a core element of the definition, and may be better placed in the overall guidance.</p> <p># Maybe 'legal' is redundant as 'effective' is a catch-all term.</p> <p>Suggested element: '... effective means ...'</p>
Long-term and permanence	<p>Protected areas should be managed in perpetuity and not as a short-term or temporary management strategy. Temporary measures, such as short-term grant-funded agricultural set-asides, rotations in commercial forest management or temporary fishing protection zones are not protected areas as recognized by IUCN.</p>	<p>Considerations:</p> <p># The group suggested that 'long-term' was an important criterion, but did not agree a formulation for the definition of long-term, but 'over 25 years' or 'in perpetuity' or 'durable' were discussed.</p> <p># It was argued that some seasonal arrangements (e.g. sites for migratory bird species) might be acceptable if the overall habitat-based conservation management framework was 'long-term' and the area generated measurable conservation outcomes, but no</p>

	PA Guidance	Draft OECM Guidance
		<p>agreement was reached.</p> <p># It would be useful, as per the protected areas guidelines, to set out kinds of areas that would likely not meet the definition of an OECM.</p> <p>Suggested element: ‘... long-term and permanent conservation outcomes ...’</p>
Conservation	<p>In the context of this definition conservation refers to the <i>in-situ</i> maintenance of ecosystems and natural and semi-natural habitats and of viable populations of species in their natural surroundings and, in the case of domesticated or cultivated species (see definition of agrobiodiversity in the Appendix), in the surroundings where they have developed their distinctive properties.</p> <p>NB: Protected areas should improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity” (Goal C, Strategic Plan for Biodiversity 2011-2020)</p>	<p>Considerations:</p> <p># The group agreed to use the CBD (1992) definition of ‘conservation’, as OECMs are defined in Target 11 of the Strategic Plan.</p> <p>Suggested element: ‘... <i>in situ</i> conservation ...’</p>
Nature	<p>In this context nature <i>always</i> refers to biodiversity, at genetic, species and ecosystem level, and often <i>also</i> refers to geodiversity, landform and broader natural values.</p>	<p>Considerations:</p> <p># It makes sense to retain the same definition of ‘nature’.</p> <p># This includes its ‘structure, function and naturalness.’</p> <p># It should be noted that OECMs are not single species measures.</p> <p>Suggested element: ‘... of nature ...’</p>
Associated ecosystem services	<p>Means here ecosystem services that are related to but do not interfere with the aim of nature conservation. These can include provisioning services such as food and water; regulating services such as regulation of floods, drought, land degradation, and disease; supporting services such as soil formation and nutrient cycling; and cultural services such as recreational, spiritual, religious and other non-material benefits.</p>	<p>Considerations:</p> <p># Perhaps ‘services’ could be changed to ‘functions’.</p> <p>Suggested element: ‘... and associated ecosystem functions ...’</p>
Cultural values	<p>Includes those that do not interfere with the conservation outcome (<i>all</i> cultural values in a</p>	<p>Considerations:</p> <p># This should be retained.</p>

	PA Guidance	Draft OECM Guidance
	protected area should meet this criterion), including in particular: <ul style="list-style-type: none"> - those that contribute to conservation outcomes (e.g. traditional management practices on which key species have become reliant); - cultural practices that may themselves be under threat. 	Suggested element: '... and cultural values ...'
ADDITIONAL CRITERIA		
Not a PA		Considerations: <ul style="list-style-type: none"> # The guidance should clearly state that protected areas and OECMs are necessarily mutually exclusive designations, i.e. OECMs are not protected areas, and vice versa. It would be possible for an OECM to become a PA when all the requirements are met. # Both PAs and OECMs have value for biodiversity conservation and some OECMs may eventually be recognized as protected areas. Suggested element: '... an area cannot be considered a protected area and an OECM simultaneously ...'
Degree of control		Considerations: <ul style="list-style-type: none"> # The CCEA's screening tool includes reference to the degree of control of the measure, including: <ul style="list-style-type: none"> - Power of the measure to exclude harmful activities; - Mechanism compels the authority to act.
Site specific		Considerations: <ul style="list-style-type: none"> # It was suggested that many potential OECMs would need to be assessed on a site-by-site basis. # For example some ICCAs and LMMAs may qualify as protected areas, some as OECMs and others more appropriately reported under other targets, such as Target 6 or 7.
Single species		Considerations: <p>Single-species measures that are not achieved through conservation of biodiversity as a whole should not be considered to be OECMs.</p>
Size		Considerations: <ul style="list-style-type: none"> # Should size of area be a factor i.e. larger areas are generally more likely to maintain biodiversity values? # Can we assume that size is adequate if

	PA Guidance	Draft OECM Guidance
		there are measurable conservation outcomes?
Quality		<p>Considerations:</p> <ul style="list-style-type: none"> # Should the 'quality' of the biodiversity be a consideration (i.e. rarer rather than widespread species and habitats), and if so what guidance should be provided? # What guidance is provided regarding protected areas in this regard? # The KBA Standards, among others, could be used to identify biodiversity value?

A range of broader points were made, including:

- Will OECMs cause problems in countries already struggling with their protected areas network, undermining their terrestrial and marine systems, or will it enhance them?
- Clear guidance is needed on how to interpret and implement the OECM guidelines, which should be as simple as possible, including “date-stamped” examples, in case their conservation outcome changes over time.
- It would be useful to identify countries that are interested in OECMs and begin to work with them more closely.
- IUCN should facilitate cross-learning between countries who are doing innovative work on identifying OECMs.
- What happens after 2020 on OECMs? How do OECMs relate to future targets post-2020?
- It is assumed that OECMs have the same governance types and management categories as protected areas.

6. WORKING GROUP ON A FILTER FOR AICHI TARGETS

Meeting participants identified a need in the guidance to clarify which kinds of conservation measures are best counted under Aichi Target 11 and which would be better mapped against the Aichi Targets (**Annex VI**). The participants recognized that much attention is being paid to the numerical aspect of Target 11; it is becoming a 'headline' target, in part because percentage targets are easier to measure. Participants felt the guidance would benefit from a discussion of the differences between and relationships among the Aichi Targets, particularly those related to Target 11, and should include a tool to assist in the determination of which Aichi Target a particular measure, or area was best reported against.

The working group reviewed all Aichi Targets and identified many with relationships to Target 11. In some cases, measures called for under another target were identified as a means to achieving Aichi Target 11; conversely meeting Target 11 will also contribute to achievements of other targets (see Woodley et al., 2012). An example would be the establishment of financial incentives to secure the long-term conservation of land, which would be a Target 3 measure that can also produce a Target 11 outcome. Target 11 measures to protect critical habitats will be critical contributions to conservation of threatened species (Target 12). Permanent no-harvest set-asides embedded within sustainable use plans for wider landscapes and seascapes contribute Targets 6 and 7 but may also contribute to permanent conservation outcomes under Target 11.

The group also identified some specific measures suggested as potential OECMs, but which may map better to other targets, primarily because they do not achieve the long-term *in-situ* conservation of biodiversity as a whole. Such measures could include forests and agricultural areas certified for sustainable management (Target 7), fishery management areas with measures in place to conserve or rebuild stocks (e.g. temporary, seasonal, or partial fishing closures) or measures designed to prevent habitat destruction (e.g. area-based restrictions on certain fishing practices or gear types) (Target 6), and certain areas designated to provide ecosystem services primarily through active ecosystem management (e.g. some water supply areas) (Target 14).

Further work is needed to prepare a table showing the relationship of other Aichi Targets to Target 11, and showing how Target 11 measures can contribute to achievement of other Targets. This could identify examples of area-based measures which do not result in the long-term *in-situ* conservation of biodiversity (Target 11) but which contribute to achievement of other Aichi Targets.

7. WORKING GROUP ON GOVERNANCE AND CULTURE

The group began by asking the following questions:

- Are OECMs only about biodiversity, or are they also about culture? Since they may be the result of social/cultural practices, perhaps both are relevant. How does this compare with guidance on protected areas?
- As with protected areas, will the cultural/social dimensions of OECMs be fully understood by the oftentimes scientific/western methods and worldviews that inform conservation policy and practice?
- OECMs are not created or established but rather identified, recognized and - ideally - supported appropriately.

Participants then made the following points, with particular focus on OECMs that are governed and/or managed by indigenous peoples and local communities:

- There exists a diverse cultural understanding of 'biodiversity'.
- Protected areas governance principles (Borrini-Feyerabend et al., 2014) should apply to OECMs.
- External engagement and recognition of OECMs should take into account and reinforce customary tenure systems.
- OECMs and adjacent protected areas can contribute to more resilient governance of a (larger) overall area.
- OECMs are often demarcated by natural features, not signage or technology. The use of participatory mapping by community or landholders can be a locally appropriate approach to defining boundaries.
- In recognizing OECMs, external actors should accommodate culturally appropriate roles for local and traditional authorities at all stages of process.
- Strong local community governance structures provide effective enforcement, protect biodiversity and build internal resilience, including in relation to powerful interests, such as infrastructure projects and extractive industries.
- In 'recognizing' OECMs, it is important to ensure that customary or existing governance structures are not replaced by other arrangements, but are instead strengthened and reinforced.

- OECMs should not be viewed as a path to the area becoming a protected area, but as complementary means of delivering conservation outcomes.
- Some OECMs would benefit from greater legal status. New forms of status may be beneficial, but this should always follow genuine consultation.
- Nature may co-exist and indeed depend on cultural values. Therefore, recognition and support of OECMs must include the cultural dimensions of biodiversity and nature conservation.
- *De jure, de facto, 'de emotere'* conservation were raised to highlight the fact that it is important to recognize the motivating factors for stewardship and to maintain and cultivate these motivations.
- Places 'protected' for sacred values may have ancillary conservation outcomes.
- Traditional knowledge, ritual, foodways, mental maps, spiritual practices may contribute to conservation outcomes.
- OECMs will likely provide greater biodiversity benefits if linked through "well connected systems of protected areas and OECMs", as per the wording of Target 11.

8. WORKING GROUP ON ASSESSMENT, MONITORING AND REPORTING

The group made a number of points regarding availability of evidence of conservation outcomes and reporting:

- By definition, OECMs must be effective in achieving the *in-situ* conservation of nature in order to be reportable against Aichi Target 11.
- However, in many instances, there may be no direct evidence to support a decision one way or the other. Where direct evidence is available, it should be considered in the process to screen a potential OECM.
- Where direct evidence is not available, the mechanism(s) - by their characteristics - should have high 'potential effectiveness', i.e. a high likelihood (based on allowed and prohibited activities and other traits, and on "comps" - comparative OECMs with demonstrable effectiveness) to achieve the *in-situ* conservation of biodiversity over the long term.
- Areas submitted as OECMs on the basis of potential effectiveness should be subject to evidence-based confirmation of effective biodiversity conservation outcomes over time.
- There are many approaches to documenting conservation outcomes. Some management effectiveness evaluation tools include evaluation of conservation outcomes, including the Green List process.ⁱ Guidance can also be found in the Biodiversity Outcomes work of the IUCN WCPA/SSC Joint Task Force on Biodiversity and Protected Areas.ⁱⁱ

On monitoring, the group suggested the following:

- Biodiversity outcomes monitoring can include simple remote-based monitoring of forest cover, species population monitoring, and monitoring of well-thought-out and efficient indicators of ecological integrity, and can incorporate different kinds of approaches to 'knowing', including scientific methods and traditional ecological knowledge.

- It may sometimes be possible to collaborate with or piggyback on other kinds of ecological monitoring programs occurring in the region in which an OECM occurs.

The group made a number of points on reporting, including:

- OECMs should be reported as separate polygons, by zone if appropriate.
- There should be no overlap between protected areas and OECM polygons; each polygon should be only one or the other.
- Confusion between designations or labels that recognize conservation value (such as Important Bird Areas (IBAs), Key Biodiversity Areas (KBAs), Ramsar sites, and Biosphere Reserves) should be resolved.
- Some KBAs, IBAs, Indigenous Peoples' and community conserved territories and areas (ICCAs), Locally Managed Marine Areas (LMMAs), and many other types of 'recognized' or 'managed' areas may be protected areas, OECMs, or may be more appropriately reported under another Aichi Target.
- There will be some information management issues to work through, for example, to ensure that overlaps between protected areas and OECMs are not double-counted and that the measures that give effect to OECMs are recorded. There is some risk of double-counting, for example, of ICCAs which are within protected areas or OECMs.
- For the purpose of reporting on Aichi Target 11, data should be stored in such a way that ICCAs, LMMAs, KBAs, and other areas having some form of recognition of conservation value, and which are also protected areas or OECMs, should be separable from those which are not.

9. WORKING GROUP ON RECOGNIZING AND STRENGTHENING OECMs

The group suggested that a number of keywords were immediately relevant, including: *securing, nurturing, recognizing, strengthening, supporting, promoting, inspiring, and emulating*. Under the following headings, they made a number of points:

1. Recognize

- Do no harm.
- Work towards biodiversity and other outcomes (social, cultural) by adopting a holistic approach.
- Encourage bottom-up approaches.
- The 'recognizing entity' will most likely be (initially at least) - but may not necessarily always be - a government body. Therefore, it is important to allow for self-recognition, acknowledged by third parties, including by government, peers, leaders or others.
- Finding ways to communicate the benefits of OECM recognition to the respective governance authority is a practical challenge that must be addressed.
- Just as some governance authorities do not want places recognized as protected areas, they similarly may not want areas recognized as OECMs.

2. Secure

- External actors should respect and support the governance authority's own rules and means of enforcement and respect alternative governance structures that may be unfamiliar.
- Threats may also be internal, e.g., erosion of social foundations of customary governance structures.
- 'Security' includes the physical safety of individuals, such as activist OECM stewards.
- Importantly, requirements of recognition should not become an onerous burden on the governance authority.

3. Strengthen

- Build on what has led to demonstrated conservation outcomes.
- Appropriately increase the governance authority's know-how in the face of environmental or other changes.
- Support governance authorities' access to tools and advice.
- Avoid distorting local approaches, including by providing guidance to and building awareness among donors to avoid unintended consequences;

4. Promote, Inspire, Emulate

- Move beyond existing forms of recognition through promoting OECM-related success stories.
- Promote networking and exchanges between the governance authorities of OECMs.
- OECMs can be spaces/means by which to revitalize cultural connections, including by recovering lost knowledge and attachments.
- OECMs can be sites of learning on sustainability.
- One size does not fit all, therefore, it is important to uphold and celebrate the diversity of methods leading to conservation outcomes.

There was consensus that 'other effective area based conservation measures', 'OEABCMs' and 'OECMs' are all problematic terms when trying to communicate what these areas are and particularly their local/global importance. Notwithstanding this point, the Co-Chairs advised that, in line with the Task Force's mandate, the deliberations would continue to use the full phrase or 'OECMs' as an abbreviation, for the time being.

10. VILM WORKPLAN

Based on progress, the participants adopted the 'Vilm workplan' as follow up to the meeting:

2016

- **September:** Present progress at the World Conservation Congress, Hawai'i at an event on 5 September in the Protected Planet Pavilion.
- **October:** Submit an update to the CBD of the Task Force's progress as part of the IUCN's formal submission to the thirteenth Conference of the Parties (COP13, December, Mexico).

- **October-November:** Further develop the draft guidance and submit a working draft to the CBD to be circulated to parties as an information ('INF') document for consultation prior to CBD COP-13.
- **December:** Present the Task Force's progress and draft guidance at a side event at the CBD COP-13 in Mexico.

2017

- **February:** Task Force meeting in British Columbia, Canada, to further collate and test case studies and refine the draft guidance.
- **Over the year:** Refine and test the draft guidance, including consultations with national parties through the CBD process. Engaging with the BIOPAMA and governance assessment-related initiatives, and conduct outreach and communications.
- Finalize guidance.

2018

- Host technical clinics with the Secretariat of the CBD, funding permitting.

11. PRELIMINARY OUTLINE OF GUIDANCE

Participants agreed a preliminary draft outline for the guidance as set out in **Box 3**.

Box C: Draft Outline of Guidance on OECMs

Title
Preface
Index
Acronyms
(Glossary of terms)

1. Introduction

1.1 Introduction
1.2. Background and application

2. Definition, description of key elements and screening tool

2.1. Definition, terminology and approach
2.2 Screening for OECMs
2.3 'Conventional' (M)PAs and OECMs

3. OECMs and Aichi Targets

3.1 OECMs and Aichi targets
3.2 Detailed considerations

4. Practical considerations

4.1 Recognizing OECMs
4.2 Assessing, monitoring and reporting considerations

5. Case Studies

6. Conclusions

References

Appendices

12. REFERENCES

- Auster, P. (2015). Can Fishery Closed Areas Be Considered OECMs (Other Effective Conservation Measures) for Conservation of Biological Diversity: A Case Study From the Western Gulf of Maine (NW Atlantic). Working Paper.
- Borrini-Feyerabend, G., and R. Hill (2015). 'Governance for the Conservation of Nature', in G.L. Worboys, M. Lockwood, A. Kothari, S. Feary and I. Pulsford (eds.) *Protected Area Governance and Management*, pp.169-206, ANU Press, Canberra.
- Butchart, S., M. Clarke, R. Smith, R. Sykes, J. Scharlemann, M. Harfoot, G. Buchanan, A. Angulo, A. Balmford, B. Bertzky, T. Brooks, K. Carpenter, M. Comeros-Raynal, J. Cornell, G. Ficetola, L. Fishpool, R. Fuller, J. Geldmann, H. Harwell, C. Hilton-Taylor, M. Hoffmann, A. Joolia, L. Joppa, N. Kingston, I. May1, A. Milam, B. Polidoro, G. Ralph, N. Richman, C. Rondinini, D. Segan, B. Skolnik, M. Spalding, S. Stuart, A. Symes, J. Taylor, P. Visconti, J. Watson, L. Wood, & N. Burgess (2015). Shortfalls and Solutions for Meeting National and Global Conservation Area Targets. *Conservation Letters*, September/October 2015, 8(5), 329–337
- Canadian Council on Ecological Areas (2013). *Interpreting Aichi Biodiversity Target 11 in the Canadian Context: Towards Consensus on "Other Effective Area-based Conservation Measures"*. Summary and Results CCEA.
- Dudley, N. (ed.) (2008). *Guidelines for Applying Protected Area Management Categories*. Gland, Switzerland: IUCN.
- Jonas, H. and Lucas, S. (2013). *Legal Aspects of the Aichi Biodiversity Target 11: A Scoping Paper*. International Development Law Organization: Rome.
- Jonas H.D., V. Barbuto, H.C. Jonas, A. Kothari, F. Nelson (2014). "New Steps of Change: Looking Beyond Protected Areas to Consider Other Effective Area-based Conservation Measures." *PARKS 20.2*. IUCN: Gland.
- Jonas H. and K. MacKinnon (2015). Framing the Issues: Discussion Paper 1 of the Task Force on Other Effective Area-based Conservation Measures. IUCN: Gland.
- Jonas H. and K. MacKinnon (2016). *Co-Chairs' Report of the First Meeting of International Experts: Task Force on Other Effective Area-based Conservation Measures*. IUCN/WCPA: Gland.
- Laffoley, D., and D. MacKinnon, 2015. A Brief Examination of 'Other Effective Area-based Conservation Measures' and what they mean for Protected Areas'. *MPA News* Volume 16 Number 5.
- Lopoukhine, N., and de Souza Dias, B. F. (2012). 'Editorial: What does Target 11 really mean?' *PARKS 18(1)* 5.
- MacKinnon, D. C. J. Lemieux, K. Beazley, S. Woodley, R. Helie, J. Perron, J. Elliott, C. Haas, J. Langlois, H. Lazaruk, T. Beechey, and P. Gray (2015). Canada and Aichi Biodiversity Target 11: understanding 'other effective area-based conservation measures' in the context of the broader target. *Biodiversity Conservation*, DOI 10.1007/s10531-015-1018-1.
- Watson J., E. Darling, O. Venter, M. Maron, J. Walston, H. Possingham, N. Dudley, M. Hockings, M. Barnes and T. Brooks (2015). Bolder Science Needed Now for Protected Areas. *Conservation Biology*, doi: 10.1111/cobi.12645.

Woodley, S., Bertzky, B., Crawhall, N., Dudley, N., Londono, J.M., MacKinnon, K., Redford K., and Sandwith, T. (2012). 'Meeting Aichi 11: What Does Success Look Like For Protected Area Systems?' *PARKS* 18(1) 23.

ANNEX I: WORKSHOP AGENDA

DAY 1 - 30 JUNE

INTRODUCTIONS & OVERVIEW

12,00 noon	Meet at Hauptbahnhof, (main station) Berlin to travel to Vilm
18:30	Dinner
After dinner	Introductory session, including an overview of Vilm Island Icebreaker session

DAY 2 - 1 JULY

7.30-9:00	Breakfast
9:00-9:30	Opening and Introductions (Kathy MacKinnon)
9:30-10:30	Presentation by Harry Jonas and discussion on the framework paper, outcomes of the Cambridge meeting and SBSTTA
10:30-11:00	Presentation by David MacKinnon
11:00-11:30	Break
11:30-12:30	Discussion on challenging areas, areas meeting protected area definition and including secondary and ancillary conservation
12:30-14:00	Lunch
14:00-15:30	Presentation of case studies (3-4 at 10 minutes each)
15:30-16:00	Break
16:00-17:30	Plenary discussion on case study examples, issues arising
17:30-18:30	Timeout - island walk
18:30	Dinner

DAY 3 - 2 JULY

7.30-9:00	Breakfast
9:00-10:30	Presentation of 3-4 case studies (10 minutes each)
10:30-11:00	Break
11:30-12:30	Discussion on case studies, issues
12:30-14:00	Lunch
14:00-15:30	Group work
15:30-16:00	Break
16:00-17:30	Feedback from groups and discussion
17:30-18:30	Timeout - walk around island
18:30	Dinner
19:30	Marine-focused evening

DAY 4 - 3 JULY

7:30-9:00	Breakfast
9:00-9:30	Check in on progress and links to the follow-on Cultural and Spiritual workshop
9:30-11:00	Group work
11:00-11:30	Break
11:30-12:30	Further discussion and/or drafting in groups
12:30-14:00	Lunch
14:30-15:30	Group work

15:30-16:00	Break
16:00-17:00	Feedback from each group and discussion
17:30-18:00	Wrap up
18:30	Dinner
After Dinner	Socializing time

DAY 5: 4 JULY

7.30-9.00	Breakfast
9:20	Departure by boat and train after breakfast

ANNEX II: PARTICIPANTS LIST

1. Thora Amend (**Germany, Peru**), GIZ
2. Ny Aina Andrianarivelo (**Madagascar**), Blue Ventures
3. Heather Bingham (**U.K.**), UNEP-WCMC
4. Grazia Borrini-Feyerabend (**Switzerland**), ICCA Consortium
5. Jessica Brown (**USA**), WCPA Protected Landscapes Specialist Group
6. Marc Costello (**New Zealand**), University of Auckland
7. Alkaly Doumbouya (**Guinea**), National Fisheries Research Center of Boussoura
8. Nigel Dudley (**UK**), WCPA
9. Sabine Jessen (**Canada**), Canadian Parks and Wilderness Society
10. Harry Jonas (**UK, Malaysia**), Natural Justice
11. Dan Laffoley (**UK**), WCPA
12. David MacKinnon (**Canada**), Canadian Council on Ecological Areas
13. Kathy MacKinnon (**U.K.**), WCPA
14. Clara Lucia Matallana Tobón (**Colombia**), Humboldt Institute
15. Brent Mitchell (**USA**), WCPA Privately Protected Areas Specialist Group
16. Onkemetse Nteta (**South Africa**), WWF
17. Jacques Perron (**Canada**), Canadian Council on Ecological Areas
18. Andrew Rhodes (**Mexico**), National Commission of Natural Protected Areas
19. Trevor Sandwith (**South Africa, Switzerland**), IUCN
20. Agus Budi Utomo (**Indonesia**), Burung Indonesia
21. Hesti Widodo (**Indonesia**), Coral Triangle Centre

ANNEX III: CONSIDERATION OF OECMs AT SBSTTA-20

The Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA) held its twentieth meeting from 25-30 April 2016 in Montreal, Canada . In discussions on progress towards achieving Target 11, Parties at SBSTTA 20 provided additional recommendations on 'other effective area-based conservation measures' (OECMs) for consideration at COP13 – see below.

1. NEGOTIATIONS

Pre-session documents

OECMs appeared in the document 'Protected Areas and Ecosystem Restoration' ([UNEP/CBD/SBSTTA/20/12](#)) only once, in paragraph 23, which states:

In decision XI/24, the Conference of the Parties welcomed the organization of the Sixth World Parks Congress (WPC). The Congress was held in Sydney, Australia, in November 2014 by the International Union for Conservation of Nature (IUCN). An information document provided by IUCN on the outcomes of the Congress is available to SBSTTA (UNEP/CBD/SBSTTA/20/INF/40), including a progress report on the work of the IUCN World Commission on Protected Areas to develop guidance on criteria for other effective conservation measures.

OECMs also appeared in a number of places in the document 'Update Assessment of Progress on Selected Aichi Targets' ([UNEP/CBD/SBSTTA/20/2](#)).

Paragraph 21:

A total of 21 countries in mainland Asia, Latin America and the Caribbean identified priority actions addressing what they stipulated are OECMs. For example, Lebanon has identified natural parks, natural sites and monuments, Himas (community-based natural resources management systems), and sites recognized by international organizations and conventions as other effective area-based conservation measures. Lebanon has already established 11 terrestrial Himas and 3 Himas protecting inland water resources. Within the next five years, Lebanon aims to increase the number of community conserved areas by establishing new Himas as part of its priority actions.

Paragraph 22:

To improve the information on the status of protected areas, understanding on OECMs and improve progress towards achievement of the targets, countries can:

(a) Revise their actions to take into account the projected outcomes of GEF 5 and 6 protected area projects and other bilaterally funded projects;

(b) Regularly update their national information in the World Database on Protected Areas, managed by the International Union for Conservation of Nature (IUCN) and the United Nations Environment Programme's World Conservation Monitoring Centre (UNEP-WCMC), to avoid discrepancies and improve the quality of global information for reporting and planning;

(c) Undertake concerted efforts to implement their identified road maps and report on

their implementation prior to COP 14 and COP 15, as part of their commitments to report on the implementation of the Strategic Plan for Biodiversity 2011-2020;

*(d) Upon clear guidance on what constitutes **OECMs**, can map them with other elements of Target 11 (ecological representation, areas important for biodiversity and ecosystems services, connectivity and conservation corridors, and equity) and include such areas in their official reports.*

Paragraph 38(c):

*Countries and partners can explore the possibility of developing global and/or regional projects to demark connectivity corridors, including through ICCAs and **other effective area-based conservation** measures as stepping stones, and through ecosystem restoration, and create their management plans;*

Paragraph 48:

*In sum, countries from mainland Asia, Latin America and the Caribbean have identified a number of priority actions addressing: the expansion of terrestrial and inland water (21) as well as coastal and marine (24) protected areas; **other effective area-based conservation measures** (21); areas important for biodiversity (22) and ecosystem services (11); ecological representation (25); well connected systems of protected areas (21); integration into wider land- and seascapes (11); effectively managed (32); and equitably managed (22). Further, they have committed to increasing terrestrial and inland water protected areas by 0.8 per cent and coastal and marine protected areas by 6.2 per cent.*

Paragraph 52:

*It can be noted that the elements of the target are closely linked; working towards one will influence the implementation of others. For example, an action to improve the coverage of terrestrial and marine protected areas will invariably contribute to improving ecological representation and, potentially, coverage of areas important for biodiversity and ecosystem services. However, for the target to be achieved, all elements need to be considered. Therefore, countries should aim to implement the elements together in a cohesive manner, keeping in mind they are parts of a whole. For example, an action to map a particular type of **other effective area-based conservation measure** will also impact the coverage of protected areas, connectivity, representativeness, biodiversity and ecosystems services, its management, and integration into the wider land- or seascape. Thus, interlinkages between the elements, as well as to other Aichi Biodiversity Targets, should be explicit in order to facilitate implementation and reporting in a comprehensive manner.*

Consideration by Parties

Plenary considered the documents on Monday 25 April. A range of countries referenced OECMs, including a number of calls by Parties to be included in the development of the guidance on OECMs.

The Secretariat then issued 'Protected Areas: Progress Towards the Achievement of Aichi Biodiversity Targets 11 and 12' ([UNEP/CBD/SBSTTA/20/CRP.2](#)). That document had the following references to OECMs, which made three references to OECMs.

The IUCN team focusing on protected areas and OECMs discussed the issues with a number of delegations, and Canada agreed to make a number of proposed amendments to the text. The next reading of the document took place on Thursday 28 April.

During the reading a number of countries spoke to OECMs. Comments included:

- Ensuring that OECMs was written out in full throughout the document, not in part;
- Adding reference to OECMs after a number of references to Protected areas,
- Included reference to the IUCN's work on OECM; and
- A request to the Executive Secretary to organize a technical expert workshop on OECMs.

The comments were captured in document Progress Towards the Achievement of Aichi Biodiversity Targets 11 and 12 (UNEP/CBD/SBSTTA/20/L.3), and references to OECMs now include:

Paragraph 4:

*(b) ... in establishing new and/or expanding existing protected areas, or **other effective area-based conservation measures**, to give due consideration to areas that: (i) improve ecological representativeness; (ii) increase connectivity; (iii) promote the integration of protected areas into the wider landscape and seascape; (iv) protect the habitats of species, in particular threatened, endemic and migratory species, including through such mechanisms as important bird and marine mammal areas; (v) promote the integration of areas managed under collective action by indigenous peoples and local communities into the wider landscapes and seascapes, as appropriate; (vi) expand the coverage of areas important for biodiversity and ecosystem services; (vii) are identified as centres of origin or centres of genetic diversity; and (viii) have involved the full and effective participation and have received the prior informed consent of indigenous peoples and local communities whose territories, areas and resources overlap wholly or partially with the proposed areas, in accordance with national legislation.*

*(c): To endeavour to undertake more systematic assessments of management effectiveness and biodiversity outcomes of protected areas, including, where possible, **other effective area-based conservation measures**, to improve the management effectiveness by addressing the gaps, and to provide, on a voluntary basis, information on the results to the Global Database on Protected Areas Management Effectiveness, maintained by the United Nations Environment Programme's World Conservation Monitoring Centre, as appropriate.*

Paragraph 6:

Invites Parties, other Governments, relevant partners, regional agencies, bilateral and multilateral funding agencies, in conjunction with the Secretariat of the Convention on Biological Diversity, taking into account information provided by, and in consultation with Parties and other Governments, and subject to the availability of resources:

(a) To undertake a review of experiences on:

*(i) Protected areas and **other effective area-based conservation measures**, taking into account the work of the International Union for Conservation of Nature and other appropriate expert bodies;*

(ii) Additional measures to enhance integration of protected areas and *other effective area-based conservation measures* into the wider land- and seascapes,

(iii) Mainstreaming of protected areas and *other effective area-based conservation measures* across sectors;

Paragraph 7:

Requests the Executive Secretary:

(a) *To develop voluntary guidance on the elements listed in paragraph 6(a) above [i.e. including on *OECMs*];*

(b) *To organize, subject to the availability of resources, a technical expert workshop to provide scientific and technical advice on definition, management approaches and identification of *other effective area-based conservation measures* and their role in achieving Aichi Biodiversity Target 11;*

Paragraph 8:

*Invites the Global Environment Facility and its implementing agencies to facilitate the alignment of the development and implementation of protected area and *other effective area-based conservation projects* in its sixth and seventh replenishment cycles with the national actions identified in national biodiversity strategies and action plans and, as appropriate, through the regional workshops for the achievement of Targets 11 and 12, with a view to facilitating the systematic monitoring and reporting of the results of those projects as they contribute to the implementation of the National Action Plans for the achievement of Aichi Biodiversity Targets 11 and 12 and other related targets.*

ANNEX IV: CANADIAN COUNCIL ON ECOLOGICAL AREAS GUIDANCE ON OEBCMs

This Annex provides an overview of a presentation by Dave MacKinnon (Canadian Council on Ecological Areas) on the Development of Science-based Guidance for Reporting Protected Areas and "Other Effective Area-based Conservation Measures" in the Canadian Context.

Through a series of national workshops of conservation practitioners and other experts, the Canadian Council on Ecological Areas (CCEA) has developed [science-based guidance](#) for reporting protected areas and "other effective area-based conservation measures" (OEBCMs). This guidance is intended for use by Canadian federal, provincial, and territorial agencies when reporting protected areas and OEBCMs to the Canadian Conservation Areas Reporting and Tracking System (CARTS), which is the primary source of information for national reporting to the [World Database on Protected Areas](#) and on Canada's protected area-related commitments under the Convention on Biological Diversity (CBD). The CCEA guidance identifies key traits and thresholds of effectiveness that conservation areas and mechanisms should have, in the Canadian context, to achieve the in-situ conservation of biodiversity, defined as "the conservation of ecosystems and natural habitats and the maintenance and recovery of viable populations of species in their natural surroundings". The guidance primarily addresses potential effectiveness of tools, based on their traits, rather than realized effectiveness 'on the ground'.

The guidance gives recognition to tools and approaches that can effectively conserve biodiversity, regardless of governance type. It does not discount the value of other kinds of conservation measures, recognizing that all have their place, but does assist those making decisions on whether to report particular areas as part of Canada's contribution to the achievement of [Aichi Target 11](#) and [Canada's 2020 Biodiversity Target 1](#). The guidance includes a set of consensus-based statements on the traits of [Aichi Target 11](#) OEBCMs (see [MacKinnon et al., 2015](#), table 3 and Outcome 3), a screening tool and guidance on its interpretation (see [MacKinnon et al., 2015](#), Figure 2), and a supplementary screening tool specifically addressing the issue of subsurface resource rights ([link](#)). The consensus statements address purpose, duration, conservation-objective primacy, nature conservation outcomes, and strength of conservation measures reported as OEBCMs, and provide guidance on the interpretation of "sustainable use" and "minimum standards of effectiveness" in the context of [Aichi Target 11](#) and [Goal C of the Strategic Plan for Biodiversity 2011-2020](#).

CCEA has also tested the application of its Aichi Target 11 screening tool to real-world examples of Canadian area-based conservation measures through a practitioner-led, peer-reviewed process. Outcomes of this screening exercise for four areas are shown in Appendix Table 1-1. Of the four areas for which peer-reviewed screening has been completed, none were identified as OEBCMs, two were identified as protected areas that had been previously been reported as such, one was identified as a hitherto-unreported protected area, and one was identified as neither a protected area nor OEBCM. It is expected that further test application of the screening tool will identify Canadian examples of potential OEBCMs.

Reference: D. MacKinnon, C. J. Lemieux, K. Beazley, S. Woodley, R. Helie, J. Perron, J. Elliott, C. Haas, J. Langlois, H. Lazaruk, T. Beechey, and P. Gray (2015) Canada and Aichi Biodiversity Target 11: understanding 'other effective area-based conservation measures' in the context of the broader target. *Biodiversity and Conservation* 24(14): 3559-3581.

ANNEX V: CASE STUDIES

This annex contains the following case studies, as submitted by participants:

1. Hutan Harapan, Sumatera (Indonesia)
2. Areas Voluntarily Destined for Conservation (Mexico)
3. Fishing Refuge Areas: Akumal, Quintana Roo (Mexico)
4. Forest Management (Mexico)
5. Program of Payment for Environmental Services (Mexico)
6. Units for the Conservation, Management and Sustainable Use of Wildlife (Mexico)
7. Cable Zone, Hauraki Gulf, south west Pacific Ocean (New Zealand)
8. Network of Areas of Particular Environmental Interest in the Clarion Clipperton Zone in the Pacific, in the international seabed Area of the Eastern Central Pacific between Mexico and Hawaii (USA)
9. Northwest Atlantic Fisheries Organization Vulnerable Marine Ecosystem, Northwest Atlantic, NAFO Regulatory Area (outside 200 mile limit)
10. Scapa Flow, Scotland
11. Strait of Georgia Glass Sponge Reef Fishing Closures, British Columbia (Canada)
12. Checleset Bay Ecological Reserve, BC (Canada)
13. Rockfish Conservation Areas, British Columbia (Canada)
14. Bitá, Protected River, Colombian Orinoco Basin (Colombia)
15. Special Management Area of Afro Colombian Communities of the upstream of the Amurrupe River, Risaralda (Colombia)
16. Yélisoubé, Loos Islands, Conakry (Guinea)
17. Part of Hope Quarry, Peak District National Park, Derbyshire (UK)
18. Mount Candalaga Dumut ICCA (Philippines)
19. Community-based MPA: Ay and Rhun Island, Maluku (Indonesia)
20. Mabaso community stewardship project, KZN Province (South Africa)
21. Locally managed marine areas in Antongil Bay (Madagascar)

1. Hutan Harapan, Sumatra (Indonesia)

Overview

Brief description, including natural, cultural and social values, and reasons for considering the area as an OECM

Hutan Harapan or the Rainforest of Hope is formerly commercially logged lowland tropical forest in central-south Sumatra, Indonesia. Despite past intensive logging activity, Hutan Harapan is still rich in biodiversity and is an important habitat for over 1,350 different species; 133 of which are globally threatened. This includes several endangered species such as the Sumatran tiger and Sumatran elephant. Hutan Harapan represents more than 20% of this particular forest type - a forest "island" surrounded by plantations.

- 307 bird species, representing 49% of Sumatran bird species or 72% of lowland bird species in Sumatra.
- 64 species of mammals, including Sumatran tiger (*Panthera tigris sumatrae*), Sumatran elephant (*Elephas maximus*), Malay tapir (*Tapirus indicus*), and Sun bear (*Helarctus malayanus*).
- 55 species of amphibians, including 8 categorized as globally threatened species.
- 71 species of reptiles, including 5 categorized as globally threatened species
- 123 species of fresh water fishes representing 20% all fresh water fishes in Sumatra, including 4 categorized as globally threatened species.
- 728 plant species representing 89% of known plant species in Sumatra.

Hutan Harapan's global significance is recognized internationally: the area forms part of Sundaland biodiversity hotspot (one of only 34 global Biodiversity Hotspots) as well as being part of BirdLife International's global network of Endemic Bird Areas (EBAs) and Important Bird and Biodiversity Areas (IBAs)iii. Hutan Harapan consists of 2 IBAs.

Hutan Harapan is also home to 132 families of traditional Batin Sembilan people whose live depend on forest resources.

Boundaries & Geographical Space

What size is the area?

Hutan Harapan is 98,000 ha situated in the southern part of Sumatra. The northern area is in Jambi Province and the southern area is in South Sumatra Province.

How are the area and its boundaries defined?

Hutan Harapan is an Ecosystem Restoration Concession (ERC) which is a new category of forestry concession in Indonesia. License for ERC is granted by Minister of Environment and Forestry to manage production forest areas for restoration purposes instead of logging. Each of the ERC licenses is granted to a specific forest area to be managed by a specific business entity. Therefore the area is defined legally under a licensing procedure based on proposal submitted by the business entity to the ministry. Once the license is granted, the boundaries on the ground will be defined according to the area approved in the license.

Business entity may submit application to obtain EREC license for specific areas within production forests that are allocated or ERC development.

Governance Type

Description of the area's governance arrangements e.g. private, indigenous etc.

As a forestry concession (ERC) and as required by law, Hutan Harapan is managed by a private company. Therefore, the company is legally responsible in managing the ERC. The

forest area under which the license is issued, however, is categorized under state forest land. To manage the concession, a land-use plan has been developed consisting of 3 main zones: protection, production, and infrastructure. Within the production zone, collaboration and livelihood zones have also been designated to work with communities living inside the concession. Therefore in these zones, the management of the area is based on agreements established with the communities.

Do the groups with rights, responsibilities or authority for the area recognize and support its status as an area-based conservation measure?

By granting ERC license to specific forest areas, the government (Ministry of Environment and Forestry) recognizes the need to maintain the remaining natural forests, to restore the ecosystem functions, as well as improving the forest productivity. Although the ERC license is not granted for conservation, it is also not a license to extract timbers. Hence the purpose of the license is not to manage the designated areas for logging, but for restoration purposes. Local communities such as Batin Sembilan people are supportive given their dependency to forest resources. Local governments support the establishment of Hutan Harapan which is the first ERC in Indonesia. Recommendations from District as well as Provincial Government were part of the requirement to secure ERC license for Hutan Harapan.

Permanence

Is there a legal or other instrument/decision that sets out the area's governance and conservation management arrangements, as well as other factors (below)

The licensing policy under which ERC is defined is part of government regulation approved by the national parliament. Each of the ERC license granted is legally binding. For Hutan Harapan, 2 ministerial decrees were issued and associated with the management license.

How easily can the instrument/decision be overturned?

ERC license, as it is also the case for other type of forestry concession licenses in Indonesia, can only be revoked by government if the concession holder failed to comply with the obligation and or considered perform poorly based on periodical assessment. Other possibility that the management over the area come to an end is if the concession holder returned the license back to the government before the end of license period.

Over what time-frame is the measure in place: long-/medium-/short-term

The ERC license to manage the southern part of Hutan Harapan is for 100 years, starting in 2008. The second license to manage the northern part is for 60 years starting 2017. Other ERCs in Indonesia have the duration of their license for 60 years which can be extended for another 35 years.

Is the measure in place year round or only part of the year? If the latter, which management practices are applied when the measure is not in effect?

Conservation measures in protection zone can be as long as the duration of the license (100 or 60 years) and even so during the restoration period.

Management Objectives

What are the area's management objectives?

Hutan Harapan management has multiple-objectives recognizing the legal status as production forest as well as the importance of the ecosystem contained. The management is aimed at improving the forest resource productivity, protecting/conserving the remaining lowland rainforest, sustaining livelihood of the communities that depend on Hutan Harapan

forest resources, developing innovative methods for rehabilitating degraded lands and secondary forests as well as restoring the ecosystem functions.

Is biodiversity conservation an explicit or implicit management objective?

Implicit objective

If there is an explicit/implicit biodiversity conservation objective, does it take primacy over other objectives in case of conflict?

According to the zonation, biodiversity conservation is being addressed in each of the zone. In the protection zone, biodiversity conservation takes a higher priority whereas in production zone, the primary objective is on forest productivity and livelihood development. Nevertheless, as the management paradigm being put in place is an ecosystem based approach, the zonation is not meant to be strictly applied.

Does the measure cover all or most elements of biodiversity in the area or only certain species?

Establishing Hutan Harapan as an ERC is considered as a conservation measure. Without such a measure, a significant portion of the areas might have been converted into monoculture plantation. The measure has been benefiting the species, habitat, and the people that depend on the ecosystem services provided.

In terms of its management, Hutan Harapan has selected key species of multiple-taxa to monitor progress of forest restoration. At the same time, management interventions also targeting habitat restoration as part of forest restoration strategies. Further, by establishing a specific zone for the protection of the remaining natural forests allows Hutan Harapan to take measures benefiting most elements of biodiversity contained.

Is management effectiveness measured? If so, how and what are the results?

Framework to measure the management effectiveness of ERCs is not yet available. ERCs in Indonesia are a major shift of forest management paradigm moving away from timber (commodity) based toward ecosystem based. Practical implementation of the approach remains a challenge and need to be supported with knowledge and learning as well as strong regulatory support which should be away from commodity based focused.

Regulatory on management plans of ERCs are being improved to allow ERC holders to implement their management objectives as well as deal to with socio, economic and physical conditions on the ground.

Conservation Effectiveness

Is the area effectively conserving biodiversity and how is conservation effectiveness measured?

ERCs open possibility for biodiversity conservation in Indonesia's production forest areas in a long run. If the areas are of important biodiversity areas (for example Hutan Harapan), ERCs can support species as well as habitat conservation. The de facto logging moratorium applied in ERCs provides opportunity for long term biodiversity conservation. Establishment of ERCs in important biodiversity areas such as Hutan Harapan is a conservation measure as otherwise the degraded forests within it would have been gone due to conversion for other uses.

ERCs can also support connectivity conservation is well-placed in the landscape. It can provide connectivity to formal protected areas.

Hence, the conservation effectiveness of ERCs can be measured at species, site, habitat, and landscape levels. Available tools might be used or further developed to measure the effectiveness at the different levels.

How encompassing is measure is, and is the current effectiveness due to the measure, or just the fact that damaging activities haven't been targeted there yet

As noted above, by establishing Hutan Harapan as an ERC, the remaining lowland rainforests in Sumatra can be maintained or otherwise would have been used or converted into monoculture. This measure encompasses the duration of the license (60 or 100 years). The de facto logging moratorium in Hutan Harapan ERC is taking place which means degradation and/or deforestation can be reduced.

There is still un-known, however, what would happen once the licenses (for ERC management) are expired. It will depend on the future policy on ERCs in Indonesia.

2. Areas Voluntarily Destined for Conservation (Mexico)

Overview

Brief description, including natural, cultural and social values, and reasons for considering the area as an OECM

Certification is a tool that helps owners to the establishment, administration and management of their private protected natural areas. It is a unilateral process by the applicant, CONANP participates as a notary of the will to preserve their land and policies, criteria and actions that the applicant intends to make to achieve their ends. This process is ideal for society in the conservation of forests, jungles, swamps, deserts and the wildlife that inhabits them.

Boundaries & Geographical Space

What size is the area?

By 2016 there is total of 404,238.46 ha in AVDCs

How are the area and its boundaries defined?

Depends on the scope of environmental services, and the preservation of representative natural environments of different geographical regions and ecological and most fragile ecosystems. Nowadays, there are 370 AVDC in 20 states.

Governance Type

Description of the area's governance arrangements e.g. private, indigenous etc.

These properties are considered as productive areas dedicated to a public interest function, but there are several categories: Public, Private, Public-Centralized, Public-Parastatal, and Social-Communal land.

Do the groups with rights, responsibilities or authority for the area recognize and support its status as an area-based conservation measure?

Yes. Ca. 78,675 people participate in the ecosystems restoration, including indigenous and local communities.

Permanence

Is there a legal or other instrument/decision that sets out the area's governance and conservation management arrangements, as well as other factors (below)

General Law of Ecological Balance and Environmental Protection

(http://www.diputados.gob.mx/LeyesBiblio/pdf/148_130516.pdf)

How easily can the instrument/decision be overturned?

Non easy due to the several regulations that are related to the agreement.

Over what time-frame is the measure in place: long-/medium-/short-term

Long-term.

Is the measure in place year round or only part of the year? If the latter, which management practices are applied when the measure is not in effect?

Year round.

Management Objectives

What are the area's management objectives?

- Preserve representative natural environments.
- Safeguard the genetic diversity of wild species.
- Ensure the preservation and sustainable use of ecosystems.
- Provide an enabling environment for scientific research field.
- Generate, rescue and disseminate knowledge, practices and technologies, traditional or new.
- Protect villages, roads, industrial facilities and agricultural exploitations.
- Protect natural environment areas, monuments and archaeological, historical remains and artistic and tourist areas

Is biodiversity conservation an explicit or implicit management objective?

Explicit

If there is an explicit/implicit biodiversity conservation objective, does it take primacy over other objectives in case of conflict?

Yes

Does the measure cover all or most elements of biodiversity in the area or only certain species?

Yes

Is management effectiveness measured? If so, how and what are the results?

Yes, the National Council of Protected Areas is an organization of consultation and support of the Ministry of Environment and Natural Resources and the National Commission for Protected Areas in the **formulation, implementation, monitoring and evaluation of public policy for the establishment, management and monitoring federal Protected Natural Areas (PNA)**.

Conservation Effectiveness

Is the area effectively conserving biodiversity and how is conservation effectiveness measured?

Yes. Each AVDC works within a framework or management plan which guides the actions and assessments focused on biodiversity conservation.

How encompassing is measure is, and is the current effectiveness due to the measure, or just the fact that damaging activities haven't been targeted there yet

Not available.

3. Fishing Refuge Areas: Akumal, Quintana Roo (Mexico)

Overview

Brief description, including natural, cultural and social values, and reasons for considering the area as an OECM

In 2015 an agreement establishing a fishing refuge area in marine waters under federal jurisdiction was issued for the conservation of several species.

Fishing Refuge: Defined areas in waters under federal jurisdiction, with the primary purpose of conserving and contribute, naturally or artificially, to the development of fisheries resources on the occasion of reproduction, growth or recruitment, and to preserve and protect the surrounding environment.

Boundaries & Geographical Space

What size is the area?

Could extend to more than 9.88 km²

How are the area and its boundaries defined?

Along the coast of the Riviera Maya, in the municipality of Tulum in the state of Quintana Roo, it is located Akumal, which comprises the Akumal Bay South, Akumal Bay North, Jade Bay and Caracoles Bay, with depths less than 5 meters that constitute reef lagoons, since they are lined with barrier reefs and seagrass beds.

Governance Type

Description of the area's governance arrangements e.g. private, indigenous etc.

National Fisheries Commission (CONAPESCA, by its acronym in Spanish) and the National Fisheries Institute (INAPESCA, by its acronym in Spanish).

Do the groups with rights, responsibilities or authority for the area recognize and support its status as an area-based conservation measure?

Yes

Permanence

Is there a legal or other instrument/decision that sets out the area's governance and conservation management arrangements, as well as other factors (below)

Agreement establishing a fishing refuge area in marine waters under federal jurisdiction, located in the area of Akumal in Quintana (2015)

(http://www.dof.gob.mx/nota_detalle.php?codigo=5388585&fecha=13/04/2015)

How easily can the instrument/decision be overturned?

Non easy due to the several regulations that are related to the agreement.

Over what time-frame is the measure in place: long-/medium-/short-term

Long-term: It has been considered a period of **six years** as the minimum time to be able to assess the growth of fish stocks and other resources that inhabit the areas established.

Is the measure in place year round or only part of the year? If the latter, which management practices are applied when the measure is not in effect?

Temporary partial fishing refuge: It can only be carried out sports and recreational activities, as well as commercial fishing or domestic consumption of one or more species of aquatic

flora and fauna, for a defined period of time and only by using highly selective specific fishing methods.

Management Objectives

What are the area's management objectives?

The recovery of biomass levels of commercial exploitation species regulated by the General Law on Sustainable Fisheries and Aquaculture

Is biodiversity conservation an explicit or implicit management objective?

Explicit

If there is an explicit/implicit biodiversity conservation objective, does it take primacy over other objectives in case of conflict?

Yes

Does the measure cover all or most elements of biodiversity in the area or only certain species?

Yes, natural resources that constitute the flora and fauna whose total, partial or temporary life is water.

Exceptions: Commercial fishing and domestic consumption of *Pterois volitans* is allowed.

Is management effectiveness measured? If so, how and what are the results?

Yes. To date, there is no information available of results.

Conservation Effectiveness

Is the area effectively conserving biodiversity and how is conservation effectiveness measured?

Not available

How encompassing is measure is, and is the current effectiveness due to the measure, or just the fact that damaging activities haven't been targeted there yet

Not available

4. Forest Management (Mexico)

Overview

Brief description, including natural, cultural and social values, and reasons for considering the area as an OECM

Consists on the sustainable use of resources of forests, jungles and arid vegetation, providing financial support to forest owners to hire the necessary technical assistance to develop studies that allow them to obtain authorizations for use of timber and non-timber resources

Boundaries & Geographical Space

What size is the area?

1,708,000 ha

How are the area and its boundaries defined?

It is important to incorporate new forest producers to low planned, legal and sustainable management.

Governance Type

Description of the area's governance arrangements e.g. private, indigenous etc.
The Ministry of Environment and Natural Resources.

Do the groups with rights, responsibilities or authority for the area recognize and support its status as an area-based conservation measure?

Yes.

Permanence

Is there a legal or other instrument/decision that sets out the area's governance and conservation management arrangements, as well as other factors (below)

National Strategy for Sustainable Forest Management for Increasing Production and Productivity 2013-2018: Aims to meet the goals of increased timber production established in the National Development Program, and the number of jobs in the sector, access to credit, the number of hectares under management planned and the number of hectares with some sort of certification.

How easily can the instrument/decision be overturned?

Non easy due to the several regulations that are related.

Over what time-frame is the measure in place: long-/medium-/short-term

Long-term.

Is the measure in place year round or only part of the year? If the latter, which management practices are applied when the measure is not in effect?

Year round.

Management Objectives

What are the area's management objectives?

Economic resources are granted to people performing harvesting (timber, non-timber and wildlife) to carry out practices that allow the establishment of natural regeneration and

recovery of the populations in those areas subject to use and also to improve road infrastructure and modernize equipment used in the process of obtaining raw materials.

Is biodiversity conservation an explicit or implicit management objective?

Explicit

If there is an explicit/implicit biodiversity conservation objective, does it take primacy over other objectives in case of conflict?

Yes

Does the measure cover all or most elements of biodiversity in the area or only certain species?

Covers forest elements of the area.

Is management effectiveness measured? If so, how and what are the results?

Yes.

Conservation Effectiveness

Is the area effectively conserving biodiversity and how is conservation effectiveness measured?

Yes, based on the assessment of the implementation of the National Strategy for Sustainable Forest Management.

How encompassing is measure is, and is the current effectiveness due to the measure, or just the fact that damaging activities haven't been targeted there yet

Information not available.

5. Program of Payment for Environmental Services (Mexico)

Overview

Brief description, including natural, cultural and social values, and reasons for considering the area as an OECM

The Payment for Environmental Services was designed to provide economic incentives to forest land owners (communities and small owners) to support conservation practices and avoid use change (deforestation) of forests. It aims to build capacity to develop markets for environmental services in Mexico.

Boundaries & Geographical Space

What size is the area?

More than 2 million ha

How are the area and its boundaries defined?

Defined by properties that maintain forest cover in good condition, including those with a legally authorized forest management and use.

Governance Type

Description of the area's governance arrangements e.g. private, indigenous etc.

In the country, the National Forestry Commission (CONAFOR, by its acronym in Spanish) is the responsible for the operation and forest policy, as well for the productive activities, conservation and restoration of forests, jungles and vegetation in arid and semi-arid regions.

Do the groups with rights, responsibilities or authority for the area recognize and support its status as an area-based conservation measure?

Yes. It has benefited 4,893 communities.

Permanence

Is there a legal or other instrument/decision that sets out the area's governance and conservation management arrangements, as well as other factors (below)

- **National Forestry Program:** aims to improve the quality of life of owners and owners of forest land, and contribute to the conservation of ecosystems. ([file:///D:/Downloads/Reglas%20de%20Operaci%C3%B3n%20PRONAFOR%202015%20\(1\).pdf](file:///D:/Downloads/Reglas%20de%20Operaci%C3%B3n%20PRONAFOR%202015%20(1).pdf))
- **Biodiversity Endowment Fund:** Instrument for financing **long-term** conservation of forest ecosystems whose biodiversity is considered of global importance, through payment schemes for environmental services.
- **Concurrent Fund Scheme:** Promote the concurrence of funds for the expansion of the program "Payment for Environmental Services".

How easily can the instrument/decision be overturned?

Non easy due to the several regulations that are related to the Program.

Over what time-frame is the measure in place: long-/medium-/short-term

Long-term.

Is the measure in place year round or only part of the year? If the latter, which management practices are applied when the measure is not in effect?

Year round.

Management Objectives

What are the area's management objectives?

Increase and preserve biodiversity, and protect forest ecosystems and globally significant mountains, through improved targeting current programs, and the establishment of an Endowment Fund to provide long-term financing for the payment of environmental services.

Is biodiversity conservation an explicit or implicit management objective?

Explicit

If there is an explicit/implicit biodiversity conservation objective, does it take primacy over other objectives in case of conflict?

Yes

Does the measure cover all or most elements of biodiversity in the area or only certain species?

Yes

Is management effectiveness measured? If so, how and what are the results?

Yes. Some of Opportunities are: There are areas of land with agro-ecological conditions suitable for the development of highly productive Commercial Forest Plantations; The program is part of a comprehensive forestry development policy with clear and achievable objectives, and with a continuous assessment which translates into greater efficiency in their business processes.

Conservation Effectiveness

Is the area effectively conserving biodiversity and how is conservation effectiveness measured?

Yes, the actions have allowed the permanence of 98.8% of the forest area of the country within five years (2005-2010). Several assessments have been made in joint work between the Ministry of Environment and Natural Resources, the National Forestry Commission and the National Council of Policy Development Assessment.

How encompassing is measure is, and is the current effectiveness due to the measure, or just the fact that damaging activities haven't been targeted there yet

CONAFOR is currently carrying out the work needed to measure the forest area of Mexico by 2015, so that 99% of permanence of the country's forest area is estimated. Also, the 1.37% of the susceptible forest area restoration supported by actions of conservation and restoration of soil and/or reforestation representing a compliance rate of 86.7% compared to the annual target set and a stay of 98.3% of registered surface supported by PES for the period 2009-2012 with a fulfilment of 99.3% compared to the target.

6. Units for the Conservation, Management and Sustainable Use of Wildlife

Overview

Brief description, including natural, cultural and social values, and reasons for considering the area as an OECM

The **Units for the Conservation, Management and Sustainable Use of Wildlife** aim to promote spaces compatible with the conservation of wildlife alternative production schemes, and are integrated into a National System.

Boundaries & Geographical Space

What size is the area?

Information not available

How are the area and its boundaries defined?

Conduct activities of conservation and sustainable use of specimens of wildlife developed under natural conditions without imposing restrictions on their movements, or conditions of captivity or confinement.

Governance Type

Description of the area's governance arrangements e.g. private, indigenous etc.
The Ministry of Environment and Natural Resources.

Do the groups with rights, responsibilities or authority for the area recognize and support its status as an area-based conservation measure?

Yes.

Permanence

Is there a legal or other instrument/decision that sets out the area's governance and conservation management arrangements, as well as other factors (below)

- **Regulation to the General Law of Ecological Balance and Environmental Protection**
- **Management Plan:** They describe and program management activities.

How easily can the instrument/decision be overturned?

Non easy due to the several regulations that are related.

Over what time-frame is the measure in place: long-/medium-/short-term

Long-term.

Is the measure in place year round or only part of the year? If the latter, which management practices are applied when the measure is not in effect?

Year round.

Management Objectives

What are the area's management objectives?

Promote alternative production schemes compatible with care for the environment through rational use, orderly and planned use of natural resources, renewable content in them, and slow or reverse environmental degradation processes.

Is biodiversity conservation an explicit or implicit management objective?

Explicit

If there is an explicit/implicit biodiversity conservation objective, does it take primacy over other objectives in case of conflict?

Yes

Does the measure cover all or most elements of biodiversity in the area or only certain species?

Yes

Is management effectiveness measured? If so, how and what are the results?

Yes, through Assessments Projects. Some of the assessments concluded that there is a need for consistent Management Plans; the need for more biological monitoring; management focused on a few species and essentially based on economic incentives.

Conservation Effectiveness

Is the area effectively conserving biodiversity and how is conservation effectiveness measured?

Yes. Through the Assessments of Management Plans.

How encompassing is measure is, and is the current effectiveness due to the measure, or just the fact that damaging activities haven't been targeted there yet

Information not available.

7. Cable Zone, Hauraki Gulf, south west Pacific Ocean (New Zealand)

Overview

Brief description, including natural, cultural and social values, and reasons for considering the area as an OECM

Fishing and anchoring is prohibited in the area because a major telecommunications cable runs through it.

Boundaries & Geographical Space

What size is the area?

Over 100 km long and 10 km wide

How are the area and its boundaries defined?

About 5 Km each side of the cable.

Governance Type

Description of the area's governance arrangements e.g. private, indigenous etc.

National protection.

Do the groups with rights, responsibilities or authority for the area recognize and support its status as an area-based conservation measure?

No. Its aim is to prevent cable damage. Conservation benefits are coincidental.

Permanence

Is there a legal or other instrument/decision that sets out the area's governance and conservation management arrangements, as well as other factors (below)

Yes.

How easily can the instrument/decision be overturned?

Very difficult.

Over what time-frame is the measure in place: long-/medium-/short-term

Permanent.

Is the measure in place year round or only part of the year? If the latter, which management practices are applied when the measure is not in effect?

No. In effect all year around.

Management Objectives

What are the area's management objectives?

Prevent cable damage from trawling and anchoring.

Is biodiversity conservation an explicit or implicit management objective?

No.

If there is an explicit/implicit biodiversity conservation objective, does it take primacy over other objectives in case of conflict?

n/a

Does the measure cover all or most elements of biodiversity in the area or only certain species?

No. Mostly sub tidal sediment habitat. But likely to cover representatives of species preferring this habitat.

Is management effectiveness measured? If so, how and what are the results?

No.

Conservation Effectiveness

Is the area effectively conserving biodiversity and how is conservation effectiveness measured?

Preliminary surveys indicate some protection to fish populations due to reduced fishing. However, considerable fishing at edges.

How encompassing is measure is, and is the current effectiveness due to the measure, or just the fact that damaging activities haven't been targeted there yet

It is effective and could be more so if officially designated a Marine Reserve with appropriate boundary markers.

8. Network of Areas of Particular Environmental Interest in the Clarion Clipperton Zone in the Pacific, in the international seabed Area of the Eastern Central Pacific between Mexico and Hawaii (USA)

Overview

Brief description, including natural, cultural and social values, and reasons for considering the area as an OECM

Nine so-called “Areas of Particular Environmental Interest” were adopted on a provisional basis in June 2012 by the International Seabed Authority (ISA) as part of an environmental management plan (EMP) for the Clarion Clipperton Zone (ISBA/18/C/22). The primary conservation objective is to maintain regional biodiversity, ecosystem structure and ecosystem

function across a poorly studied but richly biodiverse, fragile and slow-to recover deep seabed in the face of future mineral mining;

The plan is to be implemented over an initial three-year period. The details of the size, location and number of required areas of particular environmental interest are subject to being redefined based on improved scientific, technical, environmental baseline and resources assessment data. The primary conservation measure is that no application for contract of work for exploration or exploitation is to be granted for a period of five years or until further review by the International Seabed Authority.

Boundaries & Geographical Space

What size is the area?

Each of the 9 sites is 400 km x 400 km, including a buffer zone of 100km² extending in each direction. Thus each site is approximately 160,000 km² in size.

The total area of the CCZ nodule province is approximately 6000,000 km².

The nine APEIs cover 1440,000 km², or approximately 25% of the management area.

The CCZ is broadly comparable to the size of Europe, with each APEI being about the size of England.

How are the area and its boundaries defined?

The areas are located so as to include a wide range of the different habitat types present in the CCZ that are far enough and large enough to be relatively immune to the impacts of mining in the larger region.

The areas are defined by geographic Coordinates listed in an Annex to the Council Decision.

Governance Type

Description of the area’s governance arrangements e.g. private, indigenous etc.

By an international organization consisting of UNCLOS member States --the International Seabed Authority.

Do the groups with rights, responsibilities or authority for the area recognize and support its status as an area-based conservation measure?

Yes, the 9 APEIs are contained in an Environmental Management Plan for the Clarion Clipperton Zone adopted by the ISA Council in 2012 that applies to existing as well as potential future contractors.

Permanence

Is there a legal or other instrument/decision that sets out the area's governance and conservation management arrangements, as well as other factors (below)

There is a legal instrument that approves the Environmental Management Plan and its arrangements: Decision of the Council relating to an environmental management plan for the Clarion-Clipperton Zone, ISBA/18/C/22. The actual plan is set out in ISBA/17/LTC/7.

How easily can the instrument/decision be overturned?

Unclear. The EMP was adopted for an initial three year period, which included the designation, "on a provisional basis, of a network of APEIs. The APEIs are subject to further adjustment based on the results of workshops that have yet to be convened, but are planned for either this year or next.

The plan itself is subject to periodic review, every two to five years, and is intended to be updated.

Over what time-frame is the measure in place: long-/medium-/short-term

Unclear, the Decision says they are in place for five years or until further review.

The LTC is to keep the APEIs under review and determine their suitability or need for amendment. The Decision does envisage that any decision to amend the areas should be based on the outcomes of expert workshops and new data and information from the contractors, and taking into account the views of recognized experts.

Is the measure in place year round or only part of the year? If the latter, which management practices are applied when the measure is not in effect?

Year round

Management Objectives

What are the area's management objectives?

In order to protect the full range of habitats and biodiversity across the Zone, destructive seafloor activities must be excluded in particular areas distributed across those gradients.

The goals of the present Environmental Management Plan include:

- (a) Facilitate exploitation of seabed mineral resources in an environmentally responsible manner, consistent with the legal framework and environmental guidelines of the International Seabed Authority for managing deep-sea nodule mining and protecting the deep-sea environment;
- (b) Contribute to the achievement of the management goals and targets set forth in the Plan of Implementation of the World Summit on Sustainable Development, including: halting the loss of biodiversity; establishing ecosystem approaches to management; and developing marine protected areas, in accordance with international law and based on the best scientific information available, including representative networks by 2012;
- (c) Maintain regional biodiversity, ecosystem structure and ecosystem function across the Clarion-Clipperton Zone;
- (d) Manage the Clarion-Clipperton Zone consistent with the principles of integrated ecosystem-based management;
- (e) Enable the preservation of representative and unique marine ecosystems;
- ...(j) Avoid overlap between the contractor areas, reserved areas and any areas of particular environmental interest

Is biodiversity conservation an explicit or implicit management objective?

An explicit management objective: Maintain regional biodiversity, ecosystem structure and ecosystem function across the Clarion-Clipperton Zone;

If there is an explicit/implicit biodiversity conservation objective, does it take primacy over other objectives in case of conflict?

Yes, but only on a provisional basis. The Council decision also specifically retains “flexibility” i.e. that “Any design of areas of particular environmental interest allows for the ability to modify the location and size of such areas, based on improved information about the location of mining activity, measurement of actual impacts from mining operations, and more biological data”, with an explicit reference to the need to apply the precautionary principle.

In case of a potential conflict, individual APEIs may be moved under specific conditions: “Any proposal to alter the location or nature of an area of particular environmental interest will require information on any suggested alternative to ensure that the strategic and operational objectives are maintained.”

Does the measure cover all or most elements of biodiversity in the area or only certain species?

No. It does not cover areas of ecological or biological significance (EBSAs) “Areas of special significance for their uniqueness, biological diversity or productivity, as well as areas of special importance to the life histories of non-fish species referred to in the criteria of the Convention on Biological Diversity have not been incorporated in the scientific design. The network design principles are based on areas representative of the full range of ecosystems, habitats, communities and species of different biogeographic regions; and having areas of sufficient size to protect and ensure the ecological viability and integrity of the features for which they were selected. **This was due to lack of knowledge at the time.**

The network does not cover biodiversity in the water column. It is explicitly aimed at conservation of the seafloor. The buffer zone around each site is however intended to put the APEIs away from any potential impacts from sediment plumes raised during mining operations and hence will provide incidental protection to the water column.

It only addresses a single activity: seabed mining, and does not address other potentially harmful activities or impacts from e.g. fishing, shipping, ocean dumping.

No. The areas were designed to explicitly avoid overlap with the current distribution of claimant and reserve areas and hence scientific design principles for representative networks could not be fully applied, but needed to adjust to avoid existing claims.

Is management effectiveness measured? If so, how and what are the results?

Yes, the LTC has conducted a preliminary review of the status of the implementation of the Plan, based on an independent assessment. The recommendations were primarily focused on improving research and data availability and data management. Among the recommendations were a further scientific workshop in 2016, and it is unclear if it will take place.

Conservation Effectiveness

Is the area effectively conserving biodiversity and how is conservation effectiveness measured?

Conservation effectiveness will be difficult to measure until mining begins. In the interim, the Authority, States Parties and contractors are encouraged to support and conduct marine scientific research in these areas to enhance knowledge and understanding of the ecosystem structures and functions.

The LTC is encouraged to develop suitable mechanisms for monitoring the achievement of the conservation objectives for the area but it appears this has not been done.

How encompassing is the measure, and is the current effectiveness due to the measure, or just the fact that damaging activities haven't been targeted there yet

The measure does not envisage active site management, but does encourage scientific research, the supply of available data, and regular reports on the implementation of the plan.

9. Northwest Atlantic Fisheries Organization Vulnerable Marine Ecosystem, Northwest Atlantic, NAFO Regulatory Area (outside 200 mile limit)

Overview

Brief description, including natural, cultural and social values, and reasons for considering the area as an OECM

NAFO has closed 20 areas to bottom fishing over the past 12 years, with a particular focus on corals, sponges and sea pen concentrations identified following the UNGA Resolution 61/105. While initially “closed” to fishing in 2004, seamount areas were fully closed to all bottom fishing in 2015. Closures are all for vulnerable marine ecosystem elements or indicator species and are only closed to bottom fishing and not to any other activity.

Boundaries & Geographical Space

What size is the area?

(NAFO to confirm total area) VME areas ~ 25,000 km² , need km² for seamounts)

How are the area and its boundaries defined?

See map included below. Areas are defined in two ways – VME closures and seamount closures and included in the NAFO Conservation and Enforcement Measures with specific coordinates as well as a defined map.

Governance Type

Description of the area’s governance arrangements e.g. private, indigenous etc.

NAFO is the governance body for straddling stock fisheries and all bottom fishing activities are restricted within the closed areas, however the most significant impact on closed areas remains ongoing scientific trawl surveys that continue within the closed areas, despite calls for a review of the impact of these surveys and evidence that significant catches of VMEs occur on an annual basis within the closed areas. The area also overlaps with the International Convention for the Conservation of Atlantic Tunas (ICCAT), as well as Canada’s extended continental shelf where governance of oil and gas resources is by the Canada-Newfoundland Offshore Petroleum Board (CNOBP), International Maritime Organization governs shipping activity and shipping lanes in the area and there are no restrictions within the closed areas.

Do the groups with rights, responsibilities or authority for the area recognize and support its status as an area-based conservation measure?

Currently, there is no mechanism to ensure that the closures are protected from other human impacts, except for bottom fishing under NAFO’s jurisdiction. This is problematic, as there is exploration, seismic testing and drilling for oil and gas within at least one closed area as of 2016. ICCAT does not restrict fisheries for highly migratory species within the closed areas.

Permanence

Is there a legal or other instrument/decision that sets out the area's governance and conservation management arrangements, as well as other factors (below)

UNGA 61/105 Sustainable Fisheries Resolution, non-binding soft law triggered the closure decisions, NAFO's Conservation and Enforcement Measures include the closures as part of NAFO's fisheries regulation.

How easily can the instrument/decision be overturned?

Closures could be opened with the agreement of 2/3rds of NAFO's Contracting Parties.

Over what time-frame is the measure in place: long-/medium-/short-term

Generally, the closures are viewed as long term however there are some Contracting Parties who refused to agree to new closures and do not consider the closures necessarily permanent.

Is the measure in place year round or only part of the year? If the latter, which management practices are applied when the measure is not in effect?

Year round.

Management Objectives

What are the area's management objectives?

NAFO manages straddling stocks, however under UNGA 61/105 para 83 they are required to avoid impacts of bottom trawling on VMEs.

Is biodiversity conservation an explicit or implicit management objective?

Implicit in VME indicators and elements as identified.

If there is an explicit/implicit biodiversity conservation objective, does it take primacy over other objectives in case of conflict?

VME protection

Does the measure cover all or most elements of biodiversity in the area or only certain species?

Only benthic VME species. Closures are specific to corals, sponges and seapens and seamount species, however these areas likely benefit demersal fish species as well.

Is management effectiveness measured? If so, how and what are the results?

Incursions and fishing vessel traffic within the closed areas is monitored via VMS and reported upon via annual compliance reports. To date, there has been little evidence of fishing within the VMEs closed areas, with the exception of one seamount area where midwater trawling continues for alphonso.

Conservation Effectiveness

Is the area effectively conserving biodiversity and how is conservation effectiveness measured?

The VME closures provide considerable protection for some VME species (corals, sponges, seapens) and associated benthic fauna as well as associated demersal marine fish species. Effectiveness is measured through the Annual NAFO Compliance Review where fishing vessel activity is monitored via VMS. Tracks through the closed areas are assessed for vessel speed to determine if fishing activity might be taking place.

How encompassing is measure is, and is the current effectiveness due to the measure, or just the fact that damaging activities haven't been targeted there yet

The measure only restricts bottom activities, current effectiveness is due to agreement by Contracting Parties that their flagged vessels abide by NAFOs' CEM. The areas used to be open to fishing activity and are now closed. There are no restrictions on other activities and oil and gas activity is occurring nearby and within some VME areas. Non-bottom fishing is allowed. There is no mechanism to close these areas to oil and gas drilling or exploration within NAFO and no governance mechanism to engage with the Canada-Newfoundland Offshore Petroleum Board on shared protections.

10. Scapa Flow, Scotland

Overview

Brief description, including natural, cultural and social values, and reasons for considering the area as an OECM

Scapa Flow has a long history as a safe harbour in the North of Scotland with easy access to both the North Sea and the Atlantic Ocean. It has been the base for the allied North Atlantic Fleet in two World Wars. It is also an important commercial harbour to this day with an oil terminal on Flotta one of the islands in Scapa Flow. It is also an important fishing area especially for crabs and lobsters used by local inshore fishermen. Perhaps its most recent claim to fame is as an important scuba dive location for those who wish to explore the wrecks of the First World War German fleet that was captured and held in Scapa Flow before they were all scuttled by their crews. This has provided local fishermen with additional income and helped them diversify into providing diving trips. At the same time these wrecks and other historical wrecks such as the Royal Oak the flag ship of the North Atlantic Fleet which was sunk by a German submarine and is now a war grave provides protection from mobile gear and as such enhance the natural benthic biodiversity.

Boundaries & Geographical Space

What size is the area?

Scapa Flow covers an area of 324.5 sq. km and contains in the order of 1 billion cubic metres of water

How are the area and its boundaries defined?

Scapa flow is a natural harbour with an entrance on the west between the islands on Mainland Orkney and Hoy and in the south-east Hoxa Sound, that lies between the islands of South Ronaldsay and Hoy. There were up until 1943 four other narrow entrances into Scapa Flow on its eastern boundary but these were blocked with the building of the Churchill Barriers that were designed to prevent further U-boat attacks. These barriers remain.

Governance Type

Description of the area's governance arrangements e.g. private, indigenous etc.

The area is under the jurisdiction of the Orkney Islands Harbour Authority.

Do the groups with rights, responsibilities or authority for the area recognize and support its status as an area-based conservation measure?

The importance of the protection of the natural and historical heritage of Scapa Flow is recognized by OIHA and there are various measures in place to enhance its protection and good management such as a local monitoring programme, an annual monitoring programme of selected sites, good practice guidelines to manage the diving tourism industry, etc.

Permanence

Is there a legal or other instrument/decision that sets out the area's governance and conservation management arrangements, as well as other factors (below)

Orkney Islands Council Harbour Authority is the statutory body who oversee the operations in Scapa Flow and there are various directions and byelaws in place to manage the various activities. E.g.

- The Orkney Pilotage Direction (2.6Mb)

- General Byelaws (160k)
 - Orkney Harbour Areas (Vehicles) Byelaws (134k)
 - The Orkney Harbours [Petroleum] Byelaws (157k)
- The Orkney Harbours [Liquefied Gases] Byelaws (251k)

How easily can the instrument/decision be overturned?

These are statutory measures that cannot be easily overturned.

Over what time-frame is the measure in place: long-/medium-/short-term

Long-term

Is the measure in place year round or only part of the year? If the latter, which management practices are applied when the measure is not in effect?

Year-round

Management Objectives

What are the area's management objectives?

The main objectives are the safe management of the harbour area whilst at the same time conserving the natural and cultural heritage

Is biodiversity conservation an explicit or implicit management objective?

It is implicit.

If there is an explicit/implicit biodiversity conservation objective, does it take primacy over other objectives in case of conflict?

Areas of Scapa Flow and the surrounding land are designated for the natural and cultural heritage, e.g. historic wreck sites, Special areas of Conservation and Special protection Areas as well as adjacent local and national nature reserves on land

Does the measure cover all or most elements of biodiversity in the area or only certain species?

The different designations cover a range of different species.

Is management effectiveness measured? If so, how and what are the results?

The quality of the natural environment and issues such as introduction of non-native species from ballast and ship hull fouling are monitored on a regular basis through various monitoring schemes that are undertaken at regular intervals. There is also monitoring for toxic algal blooms to inform the shellfish fishery with the powers in place to close such fisheries if toxic blooms occur.

Conservation Effectiveness

Is the area effectively conserving biodiversity and how is conservation effectiveness measured?

With the areas around the various historic wrecks effectively closed to all types of mobile gear there has by default been a high degree of protection afforded to parts of the benthic ecosystem within Scapa Flow and there is evidence in these areas of thriving maerl beds, flame shell beds, horse mussel reefs and even fan shells which are very rare elsewhere in Scotland

How encompassing is measure is, and is the current effectiveness due to the measure, or just the fact that damaging activities haven't been targeted there yet

The situation and the condition of the sea bed habitat are entirely due to the fact that the designations that are in place have provided the necessary protection for around the last 100 years.

11. Strait of Georgia Glass Sponge Reef Fishing Closures, British Columbia (Canada)

Overview

Brief description, including natural, cultural and social values, and reasons for considering the area as an OECM

Full, legal, bottom-contact fishing closures were put in place to protect nine glass sponge reefs in the Strait of Georgia, off the southern coast of British Columbia. The fishing closures prohibit all bottom contact fishing activities, including bottom trawling, bottom long line, and trap fisheries (prawn and crab), within 150m off the reefs. The closures cover all fishing activities: commercial, recreational and aboriginal (food, social, ceremonial). The buffer zone was determined following consultation with the commercial and recreational fishing sectors, conservation groups and First Nations. Initially a 200m buffer was proposed in keeping with the proposed “adaptive management zone” around the Hecate Strait and Queen Charlotte Sound MPA. It is worth noting that the original recommendation by government scientists was for a 5-8km buffer zone for the MPA.

Thought to have gone extinct around 40 million years ago living glass sponge reefs (bioherms) were first discovered in British Columbia in 1987. Just a handful of living glass sponge reefs have been found in British Columbia and only a single small reef in Alaska. The reefs are a very important biogenic habitat, creating refugia and nursery habitat for commercially important and threatened species, including rockfish, spot prawns, halibut and herring. In addition to this ongoing scientific studies of the reefs are revealing the significant role the reefs play in nutrient cycling and filtering bacteria from water when they feed. Glass sponges are very fragile and easily crushed by fishing gear. As filter feeders the reefs are also vulnerable to sedimentation, which can smother and choke the sponges, reducing their ability to filter feed and effectively starving the sponges.

Boundaries & Geographical Space

What size is the area?

There are closures around fourteen glass sponge reef bioherms totalling 51km² (breakdown for individual reefs below)

Bioherm Name/ Location

Foreslope Hills

Size (km²)

0.89

Outer Gulf Islands

2.85

Outer Gulf Islands

1.62

Halibut Bank

7.35

Sechelt

7.82

East of Hornby Island

3.08

Howe Sound-Queen Charlotte Ch.

5.85

Howe Sound-Queen Charlotte Ch.

0.70

Gabriola Island

0.72
Outer Gulf Islands
1.33
Howe Sound - Defence Islands
0.96
Parksville
2.71
Howe Sound-Queen Charlotte Ch (alt.)
7.71
Sechelt - alternative
8.23

How are the area and its boundaries defined?

The fishing closures are defined by polygons, which encompass the entirety of each reef with a 150 m buffer. The polygons were designed with minimal corners and simplistic shapes for optimal coverage and enforcement. The coordinates for the closures were made publicly available and included in the ground fish integrated fisheries management plans (IFMPs) for each area.

Governance Type

Description of the area's governance arrangements e.g. private, indigenous etc.

The closures were designated federally by the Fisheries, Oceans and Canadian Coastguard who have jurisdiction over marine fishing activities and the water column. The closures were designated through a "Fishery Notice" and included in the Integrated Fisheries Management Plans (IFMPs) which are produced for each fishery. First Nations have constitutionally protected rights to access resources. DFO policy states that "after conservation needs are met First Nations' FSC rights and treaty obligations to First Nations have first priority in allocation decisions". As all bottom contact fishing activities will have detrimental impacts on the reefs, no bottom-contact fishing activity is deemed to be consistent with the conservation objectives of the fishing closure and so all First Nations bottom-contact fisheries, including Food, Social and Ceremonial (FSC) are prohibited. Restrictions on First Nations fishing activities came into effect on 1 April 2016. At least one First Nation voiced strong support for the closures.

Do the groups with rights, responsibilities or authority for the area recognize and support its status as an area-based conservation measure?

To the best of our knowledge. First Nations consultations were bilateral so we do not know the discussions and outcome for each Nation.

Permanence

Is there a legal or other instrument/decision that sets out the area's governance and conservation management arrangements, as well as other factors (below)

The Fishery Notice and IFMP sets out the area's governance and conservation management arrangements.

How easily can the instrument/decision be overturned?

The Fishery Notice states that the closure will be in place "Until further notice". DFO staff has indicated the intention for the closures to be permanent however as it is implemented as a fisheries closure it lacks the firmness of legislated protections and could be overturned at any time. IFMPs for crab and groundfish are renewed annually and prawn and shrimp trap and trawl fisheries are renewed every two years. The

Over what time-frame is the measure in place: long-/medium-/short-term

Long term

Is the measure in place year round or only part of the year? If the latter, which management practices are applied when the measure is not in effect?

Year-round

Management Objectives

What are the area's management objectives?

The management objective is the protection and conservation of the glass sponge reefs.

Is biodiversity conservation an explicit or implicit management objective?

Implicit. The closures are intended to protect the reefs, which comprise a few species, however the reefs support a great many more species and so protection of the reefs would benefit the biodiversity conservation of a number of species.

If there is an explicit/implicit biodiversity conservation objective, does it take primacy over other objectives in case of conflict?

Protection of the glass sponge reefs is the primary objective and it supersedes all other considerations. As per DFO policy, First Nations FSC fisheries, although constitutionally protected rights are not consistent with the conservation objective and therefore not permitted.

Does the measure cover all or most elements of biodiversity in the area or only certain species?

The closures are intended to protect the reefs, which comprise a few species, however the reefs support a great many more species and so protection of the reefs would benefit the biodiversity conservation of a number of species.

Is management effectiveness measured? If so, how and what are the results?

Management effectiveness in terms of adherence to the regulations, is measured through regular patrols of the areas by DFO enforcement. Reef surveys will also be conducted to monitor reef health and biodiversity (see below).

Conservation Effectiveness

Is the area effectively conserving biodiversity and how is conservation effectiveness measured?

The reefs are to be surveyed over the summer, this will be used to provide a baseline for future monitoring of reef health. There are obvious issues in using current survey data as a baseline for reef health and we hope that DFO will take into account "shifting baselines".

How encompassing is measure is, and is the current effectiveness due to the measure, or just the fact that damaging activities haven't been targeted there yet

The fishing closures only address bottom contact fishing activities and do not dictate any other marine or coastal activities that occur near the reefs. Bottom contact fishing activities were deemed to be the most significant threat to the reefs. The closures were intended to protect the reefs from damage from direct impact and also from indirect impacts like sediment plumes.

The reefs are still at risk from other activities, in particular anchoring (of recreational, commercial and/or industrial vessels) and the laying of underwater cables, which are pressing threats. These activities can cause direct harm if they contact the reefs and can

impact the reefs indirectly by scouring sediments. Some reefs are at greater risk than others in terms of these activities due to their proximity to recreational areas and population centres.

Since 1972 there has been a federal moratorium in place regarding offshore oil and gas exploration and production in British Columbia, however the moratorium is not legislated and therefore could be easily overturned. It is not known how seismic testing and drilling would affect the sponges but in the least, sedimentation issues are likely.

Other fishing activities still occur in the water column above and around the reefs. Midwater trawling data shows that groundfish are occasionally caught, which shows that the gear must periodically (unintentionally) touch the seafloor (Boutillier reference). Therefore there remains a significant risk of damage. Even where pelagic and surface fishing activities do not directly affect the sponge reefs there may be ecological effects through removal of biological matter and the resultant consequences on nutrient flow and cycling to deepwater ecosystems. These connections are poorly understood but present a great enough concern that the IUCN guidelines for applying protected area management categories to MPAs strongly advises against vertical zoning (Day et al). Their position also reflects the challenges with managing and enforcing vertical zoning.

The fishing closures also do not prohibit other activities such as dumping, dredging or coastal developments or nearshore activities (such as outflows and point source pollution, dock construction, etc.) that would also potentially affect the reefs.

12. Checleset Bay Ecological Reserve, BC (Canada)

Overview

Brief description, including natural, cultural and social values, and reasons for considering the area as an OECM

Provincial Marine Parks and Ecological Reserves are already included in Canada's official protected area statistics as MPAs. However, the provincial government does not have jurisdiction over maritime activities like fishing, shipping, and oil and gas development. Therefore the ability of a provincial protected area to effectively protect biodiversity is questionable, without federal engagement. For this reason, CPAWS does not consider them to be fully implemented MPAs.

Ecological reserves are established to "preserve representative and special natural ecosystems, plant and animal species, features and phenomena"^{iv} and the principal uses are for research and education. Ecological reserves can be terrestrial, marine or a combination thereof. There are over 20 ecological reserves in BC with a marine component. Ecological reserves are not created for recreation but many are open to low impact, non-extractive activities.

Checleset Bay Ecological Reserve (CBER) is almost entirely marine and has the largest marine component of all ecological reserves in BC at 331km². The original purpose of CBER was to provide high quality habitat for the reintroduction of sea otters.

The primary role of the CBER is to protect a representative marine ecosystem on the west coast of Vancouver Island.

The secondary role is to protect a high diversity of marine habitats that in turn support a high diversity of species from algae to sea otters and northern sea lions, whales, porpoises, pinnipeds, seabirds, finfish and shellfish. There are also a number of terrestrial mammals that use the islands.

The tertiary role of CBER is to protect and preserve cultural heritage features including archaeological sites, tied to a rich heritage for First Nations and settlers.

The quaternary role is to support opportunities for scientific research on sea otters.

The north-east portion of CBER is included in a Rockfish Conservation Area (RCA)(see other case study).

Boundaries & Geographical Space

What size is the area?

The marine component of CBER is 331.50km² in total, (an additional 15km² is terrestrial, comprising 40 small islands)

How are the area and its boundaries defined?

The map showing the park boundary and coordinates are available on the BC Ministry of Environment website

http://www.env.gov.bc.ca/bcparks/eco_reserve/checleset_er/checleset_bay_map.pdf?v=1466697569277

Governance Type

Description of the area's governance arrangements e.g. private, indigenous etc.

Ecological reserves are implemented by the BC provincial government under the Ecological Reserves Act. The provincial government does not have jurisdiction over activities that occur

in the water column, which includes fishing, marine transportation or oil and gas activities. DFO has established a Rockfish Conservation Area that overlaps the northern portion of the ecological reserve and prohibits the following activities according to Haggerty (2014).^v

The **recreational fishing activities** prohibited are:

- groundfish by hook and line
- salmon trolling, jigging or mooching
- spearfishing

Commercial fishing activities prohibited are:

- groundfish bottom trawl
- groundfish hook and line for halibut, inside rockfish, outside rockfish, lingcod, dogfish
- sablefish by trap
- salmon trolling

Outside the RCA, there are no restrictions on fishing activities in the rest of the ecological reserve.

First Nations have constitutionally protected right of access.

The purpose statement for CBER states the Provincial government intends to work with Fisheries and Oceans Canada to seek cooperation regarding the management of fisheries and with First Nations to “reach a mutual understanding of ecological reserve management interests.”

Do the groups with rights, responsibilities or authority for the area recognize and support its status as an area-based conservation measure?

The purpose statement for CBER states the Provincial government’s intention to work with DFO to seek cooperation regarding the management of fisheries and with First Nations to “reach a mutual understanding of ecological reserve management interests.”

Permanence

Is there a legal or other instrument/decision that sets out the area’s governance and conservation management arrangements, as well as other factors (below)

The Purpose Statement for the CBER outlines management issues and conservation objectives. The Ecological Reserves Act outlines the legal framework and jurisdiction for ecological reserves including restrictions on disposition, permit requirements, conservation objectives and power to make regulations.

How easily can the instrument/decision be overturned?

An ecological reserve established under the Ecological Reserves Act is legislated and not easily overturned.

Fishing restrictions in place through the Rockfish Conservation Area are established through fishing closures and may be overturned at any time.

Over what time-frame is the measure in place: long-/medium-/short-term

Long term

Is the measure in place year round or only part of the year? If the latter, which management practices are applied when the measure is not in effect?

Year-round

Management Objectives

What are the area's management objectives?

The primary role of the CBER is to protect a representative marine ecosystem on the west coast of Vancouver Island.

The secondary role is to protect a high diversity of marine habitats that in turn support a high diversity of species from algae to sea otters and northern sea lions, whales, porpoises, pinnipeds, seabirds, finfish and shellfish. There are also a number of terrestrial mammals that use the islands.

The tertiary role of CBER is to protect and preserve cultural heritage features including archaeological sites, tied to a rich heritage for First Nations and settlers.

The quaternary role is to support opportunities for scientific research on sea otters.

Is biodiversity conservation an explicit or implicit management objective?

Biodiversity conservation is an explicit objective.

If there is an explicit/implicit biodiversity conservation objective, does it take primacy over other objectives in case of conflict?

The CBER does not have jurisdiction to address conflicts regarding fishing activities, including shellfish harvesting. According to the purpose statements the CBER does have “cooperative management arrangements for commercial fishery closures specific to the reserve: Harvesting is prohibited for anchovy, surf perch, pile perch, sea cucumber, geoduck, horseclam, octopus, scallop, red and green urchins.” However no supplementary information is available pertaining to the nature and permanence of these fisheries closures. According to a 2011 analysis of fishing activities permitted within MPAs the following fisheries are permitted within at least part of CBER: Bottom Trawl, Clam, Crab, Halibut, Herring SU, Midwater Trawl, Opal Squid, Prawn Trap, Rockfish H&L, Sablefish, Sardine, Schedule 2, Shrimp Trawl, Surfperch, and Tuna. ^{vi} For the portion of the CBER that falls within a Rockfish Conservation Area (RCA), only certain fisheries are restricted and restrictions do not apply to First Nations. There are concerns about enforcement of rockfish conservation areas, especially in more remote locations like Checleset Bay. The CBER can address impacts from tourism and recreation: vessel landing along the shoreline of CBER is restricted and permits are required. The Purpose Statement also includes an objective to work with the Ministry of Forests to ensure upland activities do not impact the ecological reserve and mitigate risks.

Does the measure cover all or most elements of biodiversity in the area or only certain species?

As CBER does not have jurisdiction over fishing activities and vessel traffic it is not able to adequately protect species from disturbance and trophic impacts. It offers some species, some protections.

Is management effectiveness measured? If so, how and what are the results?

BC Parks wardens enforce regulations, however as is the case for DFO enforcement of Rockfish Conservation Areas and fisheries closures, limited funding and logistical capacity restrict management effectiveness. The Purpose Statement includes an objective “In the long term, review the designation to ensure that objectives can be met”. There is no monitoring plan outlined. BC Parks has very, very limited staffing to ensure adherence to regulations.

Conservation Effectiveness

Is the area effectively conserving biodiversity and how is conservation effectiveness measured?

All though the CBER has strong conservation objectives and is built on good intentions, it does not have the jurisdiction to prohibit extractive or disruptive activities like fishing and vessel traffic, and therefore it does not effectively conserve biodiversity. It is not clear from the available information whether or how conservation effectiveness is measured.

How encompassing is measure is, and is the current effectiveness due to the measure, or just the fact that damaging activities haven't been targeted there yet

CBER – like other ecological reserves in BC – fails to address key activities like fishing and transportation that are known to have multiple and significant impacts on marine ecosystems. Since the ecosystem in question has been affected by activities and continues to be, the ecological reserve designation is not effective or encompassing. Fisheries closures are in place to address some issues but there is a lack of clarity around the nature and permanence of the closures which prevents effective integrated management and impedes proper assessment of the effectiveness of the conservation measure.

13. Rockfish Conservation Areas, British Columbia (Canada)

Overview

Brief description, including natural, cultural and social values, and reasons for considering the area as an OECM

Between 2004 and 2007 164 Rockfish Conservation Areas (RCAs) were established throughout the BC coast. According to the Fisheries and Oceans Canada's (DFO) rockfish conservation strategy, 37 species of rockfish caught in fisheries off the BC coast and inshore rockfish (yelloweye, quillback, copper, china, tiger, black, brown, and blue rockfish) are at "low levels of abundance". RCAs were established specifically to protect inshore rockfish.^{vii}

RCAs are intended to protect rockfish within their boundaries from accidental or targeted catch by recreational and commercial fisheries. RCAs are largely located in inshore rocky reef areas, and have been established both in remote areas and close to human communities/populations.

DFO lists the following recreational and commercial fishing activities as permitted within RCAs, they do not provide a list of prohibited activities.

The **recreational fishing activities** allowed are:

- invertebrates by hand picking or dive
- crab by trap
- shrimp/prawn by trap
- smelt by gillnet

Commercial fishing activities allowed are:

- invertebrates by hand picking or dive
- crab by trap
- prawn by trap
- scallops by trawl
- salmon by seine or gillnet
- herring by gillnet, seine and spawn-on-kelp
- sardine by gillnet, seine, and trap
- smelt by gillnet
- euphausiid (krill) by mid-water trawl
- opal squid by seine
- groundfish by mid-water trawl

The following activities are prohibited in RCAs according to Haggerty (2014).^{viii}

The **recreational fishing activities** prohibited are:

- groundfish by hook and line
- salmon trolling, jigging or mooching
- spearfishing

Commercial fishing activities prohibited are:

- groundfish bottom trawl
- groundfish hook and line for halibut, inside rockfish, outside rockfish, lingcod, dogfish
- sablefish by trap
- salmon trolling

Boundaries & Geographical Space

What size is the area?

164 RCAs cover a total area of 4847.2km². They range in size from 0.1km² to 493 km².

How are the area and its boundaries defined?

Each RCA has legally defined boundaries and GPS coordinates are available online and in printed materials aimed at commercial and recreational fishers. RCA boundaries are designed with minimal corners/sides to aid navigation and enforcement and are bound by shorelines to some extent. The location and coordinates for RCAs are published on the DFO website, in a booklet, and are also listed in Integrated Fisheries Management Plans (IFMPs) for commercial fisheries. Commercial groundfish fishers have onboard observers and VMS, and comply with the boundaries, but compliance by recreational fishers is poor (see below).^{ix}

Governance Type

Description of the area's governance arrangements e.g. private, indigenous etc.

RCAs are federally designated fisheries closures established by the federal fisheries agency, DFO.

Do the groups with rights, responsibilities or authority for the area recognize and support its status as an area-based conservation measure?

RCAs theoretically have the power to exclude activities harmful to rockfish. However, DFO has not had the capacity to enforce those exclusions, especially for recreational fishers. While there was an extensive outreach and consultation process surrounding the establishment of the RCAs, they remain a contentious issue for some user groups. The fisheries closures do not apply to First Nations constitutionally protected rights to fish for Food, Social or Ceremonial fisheries (FSC). DFO does not have the jurisdiction to grant or exercise subsurface rights.

Permanence

Is there a legal or other instrument/decision that sets out the area's governance and conservation management arrangements, as well as other factors (below)

RCAs are established under the federal Fisheries Act. The areas and regulations are listed on the DFO website, in a booklet, and in the IFMPs for commercial fisheries and the Sport fishing Guide for recreational fishers, which are all publicly available from DFO.

How easily can the instrument/decision be overturned?

According to DFO, RCAs are intended to be long-term closures (and many have been in place for ten years). However, fishing closures are implemented through regulation, and can be overturned or changed by the Minister at any time.

Over what time-frame is the measure in place: long-/medium-/short-term

Long term

Is the measure in place year round or only part of the year? If the latter, which management practices are applied when the measure is not in effect?

Year-round

Management Objectives

What are the area's management objectives?

The management objective is the protection and conservation of specific inshore rockfish species.

Is biodiversity conservation an explicit or implicit management objective?

Biodiversity is not specifically mentioned. Rather, RCAs are intended to protect rockfish, but may have the added benefit of protecting other species found in the same kind of habitat and subject to the same fishing methods.

If there is an explicit/implicit biodiversity conservation objective, does it take primacy over other objectives in case of conflict?

First Nations food, social and ceremonial fisheries (FSC) are permitted within RCAs. RCAs allow some kinds of fishing that may catch rockfish as bycatch (e.g., commercial prawn by trap, scallop trawl, groundfish mid-water trawl are allowed within RCAs).

Does the measure cover all or most elements of biodiversity in the area or only certain species?

The closures only provide protection from fisheries mortality to rockfish and similar species.

Is management effectiveness measured? If so, how and what are the results?

Monitoring and enforcement of RCAs is generally poor, particularly for recreational fishers. A study in the southern Strait of Georgia found that the majority of recreational fishers either are not aware of the existence of RCAs (26%), or do not know where the boundaries are (60%), resulting in low compliance with RCAs by this sector. Other studies have found that, on average, recreational fishing occurrence did not change after RCA implementation,^x and that 79% of RCAs in the southern Strait of Georgia had confirmed or suspected non-compliance.^v

Conservation Effectiveness

Is the area effectively conserving biodiversity and how is conservation effectiveness measured?

There is little information available to assess the effectiveness of RCAs. Baseline studies were not conducted prior to the implementation of the RCAs. While some surveys have since been conducted, it is difficult to determine whether there has been an effect on rockfish populations due to the RCAs. Some studies have shown some RCAs to be effective, while most have shown no difference.ⁱⁱ Furthermore these studies have only looked at the effects of RCAs on rockfish numbers, not wider biodiversity within the RCA. Further studies are planned to determine effectiveness however the lack of baseline data and new data will limit the validity and reliability of these assessments.

How encompassing is measure is, and is the current effectiveness due to the measure, or just the fact that damaging activities haven't been targeted there yet

RCAs theoretically have the power to exclude some activities harmful to rockfish. However, they only restrict/prevent fisheries mortality to rockfish and similar species. The mechanism used for RCAs, fishing closures, does not compel DFO to prohibit activities incompatible with conservation. The fishing closures only apply to a subset of fisheries that can occur within RCAs so there is still potential bycatch of rockfish in other fisheries, and the regulations do not protect habitat or consider trophic relationships. For example, a number of RCAs overlap glass sponge reefs which act as important refugia for rockfish, however some bottom

contact fishing (although not groundfish bottom trawling) is still permitted within the RCA which is a major threat to the reefs.

Furthermore it is not clear how effective RCAs currently are as a conservation measure. A lack of baseline data and lack of monitoring continues to hamper attempts to evaluate their effectiveness. DFO has not had the capacity to enforce exclusions, especially for recreational fishers. Studies have found that, on average, recreational fishing occurrence did not change after RCA implementation, and that 79% of RCAs in the southern Strait of Georgia had confirmed or suspected non-compliance.^{xi}

14. Bitá, Protected River, Colombian Orinoco Basin (Colombia)

Overview

Brief description, including natural, cultural and social values, and reasons for considering the area as an OECM

The Bitá river belongs to the Colombian portion of the Orinoco Basin and has a total length of 500km. Without hydrological connection with the Andean region, it is a black water river, rich in hydro biological resources but highly sensitive to changes to water conditions. Sparsely inhabited and isolated from the rest of the country, the region remains in a good general conservation condition. Main features of the basin are tropical savannas, grasslands, temporary wetlands and riparian forests, result of the extreme seasonal climatic regime and river pulse. Species present in the region include Botos or Orinoco River Dolphins (*Inia geoffrensis humboldtiana*), Giant Otters (*Pteronoura brasiliensis*) West Indian Manatee (*Trichechus manatus*), Capybara (*Hydrochaeris hydrochaeris*), Tapir (*Tapirus terrestris*) and Jaguar (*Panthera onca*). Fish: Brycon (*Brycon melanopterus*), bocachico (*Prochilodus mariae*), piranha (*Serrasalmus manueli*), Black arowana (*Osteoglossum bicirrhosum*) and Black Spot piranha (*Pigocentrus cariba*). Reptiles: Orinoco Crocodile (*Crocodylus intermedius*), Spectacled Caiman (*Caiman crocodilus*), Cuvier's Dwarf Caiman and Smooth-fronted Caiman (*Paleosuchus palpebrosus* and *Paleosuchus trigonatus*), Arrau River Turtle (*Podocnemis expansa*) and Yellow-spotted Amazon River Turtle (*Podocnemis unifilis*) while it boasts almost 200 species of plants belonging to 114 genera and 41 families. The region, originally inhabited by indigenous peoples (mainly sikuni, amorúa, Piaroa and piapoco) was destination for immigration waves from the countries' inland during the XIX and XX centuries, main economic activities included cattle ranching, farming and fisheries (including ornamental). Nevertheless, during the last 10 to 15 years, the region has been scenario of a fast transformation process, driven mainly by the development of large scale forestry and agribusiness projects, accompanied land acquisition processes. This transformation, even if an opportunity in terms of economic development, poses a risk to biodiversity, hydrological cycles and the socio cultural tissue. In this setting, the proposed management strategy, Protected River; based in the Ecological Integrity approach, aims to preserve the continuity of the riverine system as a whole and focuses in the maintenance of the ecological flow, from an initial observed state or benchmark.

Boundaries & Geographical Space

What size is the area?

Around 8500 sq km.

How are the area and its boundaries defined?

The boundaries have been defined exclusively after hydrological aspects, including only the watershed area, after the National Geographic Service. Nevertheless, it can be reviewed as a result of the assessment of biotic and socio economic connections and dynamics.

Governance Type

Description of the area's governance arrangements e.g. private, indigenous etc.

There are not yet any specific official or unofficial governance arrangements on place, one of the main weaknesses and threats of an area facing a rapid transformation process

Do the groups with rights, responsibilities or authority for the area recognize and support its status as an area-based conservation measure?

There is not an agreement about this issue yet, perceptions are fragmented.

Permanence

Is there a legal or other instrument/decision that sets out the area's governance and conservation management arrangements, as well as other factors (below)

Need to be developed. One of the main outcomes of the current stage is to promote the development of the necessary institutional framework.

How easily can the instrument/decision be overturned?

As there is not yet a formal instrument, but it is process in construction, there is not yet any decision to overturn. As a management strategy largely based on voluntary agreements, those are as strong as the will of each member. We are still in a vulnerable stage as the social tissue has not been fully developed, but this strengthening is also one of the main goals of the proposal.

Over what time-frame is the measure in place: long-/medium-/short-term

Long term

Is the measure in place year round or only part of the year? If the latter, which management practices are applied when the measure is not in effect?

Year round

Management Objectives

What are the area's management objectives?

The Protected River initiative seeks to establish bases for a process of integrated management of the basin based on socioeconomic knowledge of the landscape, information management, and the creation of scenarios for participation, learning, communication and governance.

Is biodiversity conservation an explicit or implicit management objective?

Biodiversity conservation is an explicit management objective

If there is an explicit/implicit biodiversity conservation objective, does it take primacy over other objectives in case of conflict?

No. It aims to allow a prudent and agreed-on transformation process within boundaries identified as "safe".

Does the measure cover all or most elements of biodiversity in the area or only certain species?

A set of Ecological Integrity indicators has been identified, including biodiversity and landscape metrics, as a proxy to measure and monitor Ecological Integrity

Is management effectiveness measured? If so, how and what are the results?

The process is still in an initial phase (baseline, indicator setting, development of the first conservation agreements, and communication strategy) and there is not yet enough data available to measure effectiveness.

Conservation Effectiveness

Is the area effectively conserving biodiversity and how is conservation effectiveness measured?

Biodiversity is less still in good condition in the area, mainly as a result of a stating transformation process; less than 10 % of the basin, but the goal is to avoid degradation before it reaches an irreversible threshold. Currently it is measured through the number of stakeholders (organizations or individuals) willing to join the initiative

How encompassing this measure is, and is the current effectiveness due to the measure, or just the fact that damaging activities haven't been targeted there yet

It is a straightforward measure easily collected, but it does not yet include all the actors, and damaging activities have not been completely targeted.

15. Special Management Area of Afro Colombian Communities of the upstream of the Amurrupe River, Risaralda (Colombia)

Overview

Brief description, including natural, cultural and social values, and reasons for considering the area as an OECM

This is a special management area located on a collective territory of afro Colombian communities, at the north west of the Risaralda department, which is part of the Choco Biogeographic Region. Approximately 80% of the area is cover by native tropical rainforest, 10% is cover with secondary forest and the remaining area is used for crops. The territory is inhabited mainly by indigenous people from the Embera Chami ethnic group and afro Colombians.

The Choco Biogeographic region is recognized as one of the most biologically and culturally diverse, in part because is in between the Andean and the Amazon regions. It has more than 11.000 vascular plants and 900 species of birds. In the area of the Amurrupe River, there are 80 species of bryophytes, 1.900 species of vascular plants, from which 330 species are orchids. The communities recognize at least 43 plants with medical uses. Regarding the fauna some studies suggest that in the area could inhabit about 500 species of birds and 83 mammals. For other groups information is still missing.

The area is manly use to establish agroforestral systems and timber extraction that is the main economic activity of the communities. At least 19 tree species are used for timber.

The area could be consider as an OECM, because it has a legal background, a community that supports it maintenance, it has clear conservation objectives, has a clearly defined limits and a management plan. The area is not consider a protected area, but is recognized as a special managed area.

Boundaries & Geographical Space

What size is the area?

10.823 hectares

How are the area and its boundaries defined?

The area include the upstream of the Amurrupe River, its limit are established in a map contained in an agreement of the regional environmental authority.

Governance Type

Description of the area's governance arrangements e.g. private, indigenous etc.

The area is managed by a community council supported by the regional environmental authority.

Do the groups with rights, responsibilities or authority for the area recognize and support its status as an area-based conservation measure?

The community proposed the creation of the area to the environmental authority, so they recognized the protected status, and agree with the conservation objectives.

Permanence

Is there a legal or other instrument/decision that sets out the area's governance and conservation management arrangements, as well as other factors (below)

There is an agreement of the regional environmental authority that creates the area.

How easily can the instrument/decision be overturned?

The decision cannot easily be overturned. There will be necessary to sign a new agreement with the communities and other stakeholders of the region.

Over what time-frame is the measure in place: long-/medium-/short-term

The agreement that creates this area was signed in 1999, so the expected time frame is for a long term.

Is the measure in place year round or only part of the year? If the latter, which management practices are applied when the measure is not in effect?

The measure is in place year round.

Management Objectives

What are the area's management objectives?

- Conserve and recover the biological diversity, habitats and ecosystems present in the area.
- Promote the participation of the afro Colombian community on the management of the area.
- Preserve the traditional knowledge of the community that inhabit the area.
- Support a sustainable economic growth of the community.

Is biodiversity conservation an explicit or implicit management objective?

Biodiversity is an explicit objective.

If there is an explicit/implicit biodiversity conservation objective, does it take primacy over other objectives in case of conflict?

The agreement does not give more importance to any of the objectives.

Does the measure cover all or most elements of biodiversity in the area or only certain species?

It cover all the biodiversity, but with an emphasis on species used for timber.

Is management effectiveness measured? If so, how and what are the results?

The area has a management plan, which progress is measure sporadically, in particular the regional authority has identified the principal difficulties to it implementation. The main problems are how to really work in cooperation with the community and taking into account all their necessities.

Conservation Effectiveness

Is the area effectively conserving biodiversity and how is conservation effectiveness measured?

The tropical rain forest of the area is well conserved, but there are not periodical measures of the state of the forest and the management plan does not set effectiveness indicators.

How encompassing is measure is, and is the current effectiveness due to the measure, or just the fact that damaging activities haven't been targeted there yet

To answer this question more research has to be done, the regional authority and the community council believes that the area is effective, but there are other aspects that may influence the state of, such as the difficulty for access and presence of armed groups. Nowadays the whole Choco biogeographic region phases threats caused by illegal deforestation and mining.

16. Yélisoubé, Loos Islands, Conakry (Guinea)

Overview

Brief description, including natural, cultural and social values, and reasons for considering the area as an OECM

Located Nearly 2km from Tamara Island Yélisoubvé (Île Corail) belongs to a group of 3 inhabited Islands (with Île Blanche (8.75ha), Îlot Cabri (0.65ha)) and many others Islets (Îlot de la Bouteille, Île Poulet, Île Fousset), in a Fauna Sanctuaries of Loos Islands (Marine Turtles conservation and bird nesting), at least 1 hour from Conakry.

The site is chosen for its cultural value. Ritual ceremonies are organized by indigenous peoples of Yélisoubé (coral island) .is made of granite rocks in its peripheral area. There is a cave in the middle part, while its central area is occupied by a dense shrubland whose undergrowth consists mainly of intertwined vines and thorny

The island Yélisoubé has a rich and varied flora

- An upper stratum is a settlement dominated by *Ficus ovata* with fewer structures as *Terminalia superba*, *Albizia zygia*, *Anisophillia laurina*, *Bombax costatum*, *Cola nitida*, *Dialium guineensis*, *Ficus exasperatas*, *Parkia biglobosa*, *Avicennia africana*, *Elaeis guineensis* There is also a underground consisting of *Vitex*, *Tricalcia*, *Pavetta*, *Ficus capensis* and grasses mainly composed of *Ficus vogeli* and some halophytes grasslands (salt flats).

On the island, we find three types of wildlife for the three environments offered by the area .It there's first aquatic fauna composed of demersal fish, pelagic fish, sharks, cephalopods, crustaceans, reptiles (turtles). *Sousa dolphin* and whales are also seen in the area.

The Wildlife consists of reptiles and avifauna. The most present reptile is *Varanus niloticus* and some unidentified snakes

The traditional practices of local management of natural resources include local rules for better heritage conservation (prohibit use and consumption of certain species of plants and animals, limiting access to certain areas of sacred forests, ponds and caves, use of certain plants and animal species for traditional medicine needs

Boundaries & Geographical Space

What size is the area?

Yélisoubé or Corail Islands = 3.75 ha

How are the area and its boundaries defined?

Only Yélisoubé or Corail Islands is considered as sacred site by the indigenous Baga and Mandényi and they have established boundaries by themselves

Governance Type

Description of the area's governance arrangements e.g. private, indigenous etc.

Despite of the weak presence of a representatives of the Ministry of Environment (3 persons staff), Yélisoubé is managed by an Elder Council, a college of insider headed by the Elder Ousmane Kobélé YATTARA

Do the groups with rights, responsibilities or authority for the area recognize and support its status as an area-based conservation measure?

Access to this site is regulated. Visitors must first have the authorization of the island of managers and a guide is always available for visits and offerings.

For the offerings, the site manager before departure made incantations imploring for the success of the trip, once the gift items (chicken, white bread, colas, goat, ram and oxen sometimes) are handed to the priest before the central cavern imploring the grace of the Gods of the island to grant the wishes of the donor. Slaughtered animals are consumed locally on the site and those released are living on the island under the protection of Gods of the site.

Permanence

Is there a legal or other instrument/decision that sets out the area's governance and conservation management arrangements, as well as other factors (below)

Until now, there is no formal instrument for governance and conservation management. But the site is since long undefined time under the

How easily can the instrument/decision be overturned?

On the Fauna Sanctuary of Loos Islands, the process has started to implement an MPA with management plan. But the sacred Yélisoubé Site is maintaining its indigenous based management methods and regulated access.

Over what time-frame is the measure in place: long-/medium-/short-term

Long time

Is the measure in place year round or only part of the year? If the latter, which management practices are applied when the measure is not in effect?

The measures are in place year round in Yélisoubé

Management Objectives

What are the area's management objectives?

- Share understanding of natural phenomena and limit access to resources (sacred, forbidden, reserved spaces)
- Propose and enforce usage rules (limits, relationships, forms, total prohibitions in respect of certain species, etc.) by earlier local sanctions.
- Preserving the site of any degradation or any cultivation
- Mutual all forces and volunteers within and among communities
- rely on the community for collective solutions to decisions
- build on solidarity and reciprocity within the group
- encouraged to specialize in different domains
- perpetuate local religious and spiritual beliefs and values

Is biodiversity conservation an explicit or implicit management objective?

Biodiversity conservation is an implicit management objective

If there is an explicit/implicit biodiversity conservation objective, does it take primacy over other objectives in case of conflict?

The biodiversity conservation objective does not take primacy over other objectives. It is the cultural values of these animists communities which are most important.

Does the measure cover all or most elements of biodiversity in the area or only certain species?

Yélisoubé considered as a sacred site, all biodiversity elements were also covered. It is forbidden to take any species there, if not only the offerings accepted by the indigenous site manager.

Is management effectiveness measured? If so, how and what are the results?

There is no evaluation of the management effectiveness, which is known only by formal created Protected Areas.

Conservation Effectiveness

Is the area effectively conserving biodiversity and how is conservation effectiveness measured?

Through the sacred ceremonies on Yélisoubé site, biodiversity is well conserve there. The site is really preserved as pictures can show.

How encompassing is measure is, and is the current effectiveness due to the measure, or just the fact that damaging activities haven't been targeted there yet

17. Part of Hope Quarry, Peak District National Park, Derbyshire (UK)

Overview

Brief description, including natural, cultural and social values, and reasons for considering the area as an OECM

The limestone quarry and cement works exist within the Peak District National park and was established before the PA was set up. Around half the area is a quarry and works, and clearly not of conservation value (although peregrines nest happily very close to where stone is still being blasted). Around half the quarry is no longer worked and is managed as a nature reserve, with high cliffs, important calcicole plant species and returning woodland. Extensive restoration has taken place.

Boundaries & Geographical Space

What size is the area?

The reserve covers a few hectares

How are the area and its boundaries defined?

The whole site is owned by Lafarge Company, now merged with Holcim, purchased from the original UK owner.

Governance Type

Description of the area's governance arrangements e.g. private, indigenous etc.

Privately managed within the national park

Do the groups with rights, responsibilities or authority for the area recognize and support its status as an area-based conservation measure?

The cement works occupies an ambiguous position – an important employer but also a source of noise, dust and heavy lorries. The national park authorities almost certainly wish it was not within the PA borders. The nature conservation aspect is known and respected.

Permanence

Is there a legal or other instrument/decision that sets out the area's governance and conservation management arrangements, as well as other factors (below)

The area is managed by the company. Lafarge has expressed formal commitment to restoration and conservation within its sites, has a monitoring system and has invested time and money into conservation. The manager is, in private life, an active raptor conservation volunteer.

How easily can the instrument/decision be overturned?

The company can change its policies whenever it likes, although would suffer negative publicity. The area set aside as a reserve is not in any particular danger; it is worked out and effectively waste land, unlikely to be used for other purposes but with significant conservation value.

Over what time-frame is the measure in place: long-/medium-/short-term

Medium term; the reserve has been managed for conservation already for many years.

Is the measure in place year round or only part of the year? If the latter, which management practices are applied when the measure is not in effect?

Year round

Management Objectives

What are the area's management objectives?

To maintain cliff habitat and calcicole plant communities

Is biodiversity conservation an explicit or implicit management objective?

Explicit

If there is an explicit/implicit biodiversity conservation objective, does it take primacy over other objectives in case of conflict?

Yes

Does the measure cover all or most elements of biodiversity in the area or only certain species?

It is a small area, important for birds, plants and some insect species.

Is management effectiveness measured? If so, how and what are the results?

Not formally; it is probably subject to bird monitoring by volunteer groups

Conservation Effectiveness

Is the area effectively conserving biodiversity and how is conservation effectiveness measured?

It is effectively conserving biodiversity within the limits outlined above

How encompassing is measure is, and is the current effectiveness due to the measure, or just the fact that damaging activities haven't been targeted there yet

The current effectiveness is due to the company's decision to restore the area and manage as a nature reserve. Several other former quarry sites within the national park are owned and managed by The Derbyshire Wildlife Trust

18. Mount Candalaga Dumut ICCA (Philippines)

Overview

Brief description, including natural, cultural and social values, and reasons for considering the area as an OECS

The ICCA was designated by the Mansaka people within their Ancestral Domain. No natural resource use is permitted. It is within a Key Biodiversity Area, which is home to threatened and restricted-range species, including the Philippine Eagle. The community has multiple objectives, including biodiversity conservation, but cultural/traditional preservation; supporting traditional livelihoods; and maintaining and enhancing natural resources are primary.

Boundaries & Geographical Space

What size is the area?

168km²

How is the area and its boundaries defined?

Area is defined by the community as a “Strict Protection Forest” within their Ancestral Domain. It is described in their Ancestral Domain Sustainable Development and Protection Plan (ADSDPP).

Governance Type

Description of the area’s governance arrangements e.g. private, indigenous etc.

Indigenous peoples

Do the groups with rights, responsibilities or authority for the area recognize and support its status as an area-based conservation measure?

Yes

Permanence

Is there a legal or other instrument/decision that sets out the area’s governance and conservation management arrangements, as well as other factors (below)

The Ancestral Domain Sustainable Development and Protection Plan have the support of the government, but the area is not recognized in law as a protected area. The area is governed through written and oral communication. Leaders of the governance council are chosen by the community through consensus.

How easily can the instrument/decision be overturned?

Unknown. An ADSDPP is a “long term comprehensive spatial and development plan”.

Over what time-frame is the measure in place: long-/medium-/short-term

Long-term

Is the measure in place year round or only part of the year? If the latter, which management practices are applied when the measure is not in effect?

Year round

Management Objectives

What are the area's management objectives?

Cultural/traditional preservation; Spiritual/sacred sites protection; Supporting traditional livelihoods; Maintaining and enhancing natural resources; Biodiversity/species conservation; Territorial security (control of access to land and resources); Increasing rights for self-rule and empowerment; Land ownership security

Is biodiversity conservation an explicit or implicit management objective?

Explicit

If there is an explicit/implicit biodiversity conservation objective, does it take primacy over other objectives in case of conflict?

No

Does the measure cover all or most elements of biodiversity in the area or only certain species?

All

Is management effectiveness measured? If so, how and what are the results?

Unknown

Conservation Effectiveness

Is the area effectively conserving biodiversity and how is conservation effectiveness measured?

Unknown. The area had been sustainably managed by the community for generations, however with population changes it became increasingly threatened by overexploitation. As a result, the community designated it as an area where no natural resource use is permitted.

How encompassing is measure is, and is the current effectiveness due to the measure, or just the fact that damaging activities haven't been targeted there yet

Unknown. Previous damaging activities have been eliminated.

19. Community-based MPA: Ay and Rhun Island, Maluku (Indonesia)

Overview

Brief description, including natural, cultural and social values, and reasons for considering the area as an OECM

Ay and Rhun Island are two islands located in Eastern Indonesia. In the past, Rhun or Run Island according to the Treaty of Westminster should be returned to England (1652-1654) but it failed. After the second Anglo-Dutch War of 1665-1667 with the Treaty of Breda England and the United Provinces of Netherland agreed on the status quo to formally let the Dutch to take Rhun as source of the value of the nutmeg (*Mystica fragrant*) and England to take Manhattan Island.

Marine Rapid Assessment conducted in 2012 showed that Ay, Rhun, and Hatta Islands have high marine biodiversity and home to Napoleon wrasse. There were 238 coral species identified and 683 fish species found in Banda Sea.

Sasi, traditional wisdom for seasonal closure, is common in the area to harvest sea cucumber and *Trochus* - coneshell. Currently there is an effort to revitalize Sasi to sustain fisheries.

The establishment of community-based MPA in Ay and Rhun Island if succeed in the process will be the first to make use national (government) law and Adat law post issuance of Law No. 23/2014 on Local Government.

The zoning system of the MPA integrated SASI area as local wisdom.

Boundaries & Geographical Space

What size is the area?

47968.74 ha

How is the area and its boundaries defined?

Declared by community with village regulation and traditional law through participatory process.

Governance Type

Description of the area's governance arrangements e.g. private, indigenous etc.

Current: traditional law (adat) and village regulation

The village is managed under national government authority but in Ay and Rhun Island community has traditional rights based on Adat law to manage marine areas.

Do the groups with rights, responsibilities or authority for the area recognize and support its status as an area-based conservation measure?

Yes, but clear legal aspect for establishment is not solely based on traditional. It still need to combine between traditional law and existing district/city/provincial government decree

Permanence

Is there a legal or other instrument/decision that sets out the area's governance and conservation management arrangements, as well as other factors (below)

Yes. Ay and Rhun Island community-based MPA are established under Adat rules that is written in the form of village regulation (Peraturan Negeri).

How easily can the instrument/decision be overturned?

Adat Law is not a written rules; it needs government rules/regulation to officiate. Adat law is strong to set every part of the community to follow, Adat law is not easy to be overturned in Ay and Rhun Island that any change will require approval from all members of ORANG LIMA (sea protector, forest protector, religious leader, women leader, youth leader). Orang Lima is structure of Adat in Ay Island. In making such decision related to Adat rules, the Orang Lima will need to discuss internally within them, then they have to discuss with village government (pemerintah negeri), then socialize to community. If community is not supportive then Orang Lima should try to resolute.

Over what time-frame is the measure in place: long-/medium-/short-term

Medium term; any change in the decision will require long process of communications and consensus with community.

Is the measure in place year round or only part of the year? If the latter, which management practices are applied when the measure is not in effect?

In absence of Adat law, national regulation takes place.

Management Objectives

What are the area's management objectives?

1. To sustain fisheries
2. To develop the area as marine tourism destination
3. To sustain traditional wisdom

Is biodiversity conservation an explicit or implicit management objective?

Yes. The area will protect coral reefs, Napoleon wrasse, hammerhead shark. Bomb fishing, cyanide-poison fishing are prohibited in the area. Sand, stone, woods for government development activities are prohibited to exploit resources from the island. Those resources are only to fulfill the need of internal community (building house).

If there is an explicit/implicit biodiversity conservation objective, does it take primacy over other objectives in case of conflict?

It is explicitly stated all endangered-protected-threatened species

- Turtle
- Hammerhead shark
- Napoleon wrasse
- Giant clam (Tridacna)
- Cetacean

Adat law is stronger in the case of conflict

Does the measure cover all or most elements of biodiversity in the area or only certain species?

Most elements of biodiversity covered in the regulation such as coral reefs protection, turtle and hammerhead shark conservation.

Is management effectiveness measured? If so, how and what are the results?

It is not yet measured using Indonesia MPA Management Effectiveness Evaluation tool (EKKP3K) but it will soon use this tool. The plan is to evaluate management effectiveness once in two year.

Conservation Effectiveness

Is the area effectively conserving biodiversity and how is conservation effectiveness measured?

The area is just recently declared in December 2015 as community-based MPA with Adat rules applied. As it still needs to get formal acknowledgement under Indonesia formal law, there is an effort to ensure the initiative and conservation effort and legalize under Provincial government decree; as part of Provincial Zoning Plan and Marine Spatial Management. To measure effectiveness in term of biodiversity aspect, there is initial effort to train local communities to conduct participatory reef monitoring.

How encompassing is measure is, and is the current effectiveness due to the measure, or just the fact that damaging activities haven't been targeted there yet

If Indonesia MPA Management Effectiveness Evaluation tool come to use, evaluation is more on filling in score cards on data collections and activities implemented to target biophysics, socioeconomic, and governance aspects of the area.

20. Mabaso Community Stewardship Project, KZN Province (South Africa)

Overview

Brief description, including natural, cultural and social values, and reasons for considering the area as an OECM

The Mgundeni Community property, owned by the Mgundeni Community Trust, was identified in 2006 as a pilot site within the KZN Biodiversity Stewardship Programme. Following a detailed biodiversity assessment on the property an area was identified as qualifying for a Nature Reserve. However, due to the landowners' desire to continue with commercial livestock grazing, it was agreed to pursue a Biodiversity Agreement for a portion of the property.

Wakkerstroom Montane Grassland covers most of the property (this grassland type is classified as "Near Threatened"). These grasslands are generally in good condition, and support a high diversity of birds for this habitat type. The grassland provides habitat for five Red Data Book bird species, being potential breeding habitat for Wattled Crane (Critically Endangered), and Rudd's Lark (Critically Endangered) as well as potential forage habitat for Yellow-breasted Pipit (Vulnerable), Grey Crowned Crane (Vulnerable), the Southern Bald Ibis (Vulnerable) and the Secretarybird (Near threatened). Also, the land has significant cultural and heritage value to the Mgundeni community.

The site is essential for achieving the KwaZulu-Natal provincial biodiversity targets and qualified as a Biodiversity Agreement Area. Ownership and use of this land by the Mgundeni community was made possible through the Land Reform programme of the South African government. This community is one many in South Africa that were dispossessed and forcefully removed from their land by the previous colonial/apartheid governments. Conservation agencies have to take this situation into consideration when engaging communities in biodiversity stewardship and protected areas expansion. The focus is mostly on ensuring sustainable land management through providing technical and financial support, with voluntary agreements between the community and conservation agencies. The stewardship status recognizes the conservation value of an area, without placing restrictions such as those in formally declared protected areas.

Boundaries & Geographical Space

What size is the area?

1472 ha (3637 acres)

How is the area and its boundaries defined?

Area surveyed by professional Land Surveyor, and a Survey diagram produced. Size of the area also recorded in title deed.

Governance Type

Description of the area's governance arrangements e.g. private, indigenous etc.

Mgundeni community got their land back in 1994 and the community is currently under the leadership of iNkosi Z.G Mabaso. When they got their land they formed the Mgundeni Trust, as a formal structure to govern the land.

Do the groups with rights, responsibilities or authority for the area recognize and support its status as an area-based conservation measure?

Yes, There was a lengthy community engagement and negotiation process to explain the concept of biodiversity stewardship and options suitable for this land. The Biodiversity Agreement option provides access to incentives and technical support, and does not restrict community land use.

Permanence

Is there a legal or other instrument/decision that sets out the area's governance and conservation management arrangements, as well as other factors (below)

Memorandum of Agreement signed between the community, KZN Ezemvelo Wildlife (conservation agency) and WWF-SA. A management plan was developed and a Community Advisory Forum was also established.

How easily can the instrument/decision be overturned?

The community can opt out when contract lapses

Over what time-frame is the measure in place: long-/medium-/short-term

Minimum duration of 5 years for BA option

Is the measure in place year round or only part of the year? If the latter, which management practices are applied when the measure is not in effect?

Yes, there is an Annual Plan of Operation developed to guide day-to-day management activities

Management Objectives

What are the area's management objectives?

The Mabaso Community Biodiversity Agreement has the following purposes:

- to conserve the indigenous biodiversity on the property, maintaining the ecological integrity and natural character of the area;
- to promote the sustainable utilization of the grazing resources, based on best management practice principles;
- to promote management activities to improve the biodiversity value on the property; and
- to develop a strategy that will support the existence of appropriate business opportunities on the land.

Is biodiversity conservation an explicit or implicit management objective?

Explicit objective. The mission of the BA agreement: To conserve the indigenous biodiversity of the property, and demonstrate an example of a viable conservation land-use in an agricultural landscape in Northern KZN.

If there is an explicit/implicit biodiversity conservation objective, does it take primacy over other objectives in case of conflict?

The future development plans are discussed at the initial phases of the negotiation. Portions of the Land can be used for other developments. However, developments can not infringe on the terms set in the contract.

Does the measure cover all or most elements of biodiversity in the area or only certain species?

It covers most elements of biodiversity. The biodiversity assessment conducted prior to assigning the stewardship status is used to inform the development and operationalization of the management plan.

Is management effectiveness measured? If so, how and what are the results?

Yes. Performance is measured against the objectives set in the management plan.

Conservation Effectiveness

Is the area effectively conserving biodiversity and how is conservation effectiveness measured?

Yes. The conservation agencies conduct annual assessments/audits to ensure compliance and to provide advice on management operations.

How encompassing is measure is, and is the current effectiveness due to the measure, or just the fact that damaging activities haven't been targeted there yet

Overall, the land was in a good state prior to the stewardship agreement. However, the agreement adds a layer of security by raising awareness of the biodiversity on the land, establishing an advisory forum, assessing the biodiversity and developing a management plan. This plan includes the clearing of alien plants and rehabilitation of degraded land. The goal is to maintain and sustain biodiversity on the land.

21. Locally managed marine areas in Antongil Bay (Madagascar)

Overview

Brief description, including natural, cultural and social values, and reasons for considering the area as an OECM

Covering an area of 3,660km², Antongil Bay in northeastern Madagascar is the largest semi-closed bay in Madagascar. As one of the most productive bays in the Indian Ocean, Antongil Bay serves as a mating and nursery ground for many marine species and supports spectacular coral reefs, 13 marine mammal species, three marine turtle species, and over 140 fish species, including 19 shark species. Approximately 150,000 subsistence farmers and fishers live in 95 villages along the Bay, with very high dependence on its aquatic resources for their health and livelihoods.



However, overexploitation due to increasing human population, reduction of productive agricultural land, destructive fishing practices and lack of compliance with restrictions of destructive and unsustainable fishing gears are driving degradation of coastal habitat and the Bay's fisheries, in particular loss of coral reefs and declines in fish and invertebrate populations. Traditional fishery management approaches have proved ineffective in the Bay, mainly due to the open access nature of fisheries in Madagascar. The Wildlife Conservation Society (WCS) has been working in the area since 1993 and have developed a strategy around the creation of OECMs that involve the bay's coastal communities marine resource management by developing a concerted Fishery Management Plan for the Bay including establishment of a number of "Locally Managed Marine Areas (LMMAs).

Boundaries & Geographical Space

What is the size of the area?

To date 25 LMMAs have been established in Antongil Bay, ranging in size from 80 to 700 ha. Each LMMA includes at least one no-take area (NTA), encompassing up to 65% of the LMMA. NTAs carry specific gear and fishing restrictions. Beyond the NTA management regulations, broader LMMA regulations

How are the area and its boundaries defined?

Each LMMA has been identified and zoned by neighbouring fishing communities. The LMMAs are officially "recognised" by surrounding communities and approved by local and national government authorities through the official adoption of the "Fisheries Management Plan" which includes the geographical limitation for each LMMA. All LMMAs have passed through a formal legalisation (gazettment) process in the form of a 'Dina' (a traditional local social convention that sets out the rules and regulations for each LMMA). The physical boundaries of each LMMA are progressively being marked with buoys.

Governance Type

Description of the area's governance arrangements e.g. private, indigenous, etc.

Governance type: shared governance between the Ministry of Fisheries and fishing communities with technical and material support from WCS.

Legal framework: a "Fishery Management Plan" for Antongil Bay is in place and was developed through participation of all stakeholders in the fishing sector of the Bay with

guidance from the Ministry of Fisheries. This is a new model of shared governance for fishery resources in Madagascar.

Institutional framework:

- Successful institutionalisation of fishermen's associations as a recognised co-managers of fisheries' resources and as key actors in control and surveillance activities to enforce regulations
- Successful institutionalisation of the "Dina" (local law) developed by communities to regulate local co-management
- Successful implementation of a shared responsibility concept of the different fishing resource users' categories working in the Bay: Traditional / artisanal / Industrial Fishers)

Do the groups with rights, responsibilities or authority for the area recognize and support its status as an area-based conservation measure?

Development of the "Fishery Management Plan" was based on ecosystem-based management approaches and was developed according to the precautionary principle, which implicitly recognises the conservation of ecosystems and iconic species (the bay is also recognised administratively as a 'shark sanctuary' in Madagascar). The "Fishery Management Plan" officially recognises the sharing of responsibilities of all involved stakeholders in the Antongil Bay.

Permanence

Is there a legal or other instrument/decision that sets out the area's governance and conservation management arrangements, as well as other factors (below)

A traditional legal instrument, the "Dina" has been developed and officially adopted. The Dina defines the conservation measures that are required to ensure the sustainability of local communities' livelihoods. In this context, all associations managing the LMMAs have been recognised and approved by the administrative body of the "Dina".

How easily can the instrument/decision be overturned?

The instrument is based on a solid framework that has been adopted by all stakeholders and governmental bodies. Thus, it would be extremely difficult to overturn the instrument.

Over what time-frame is the measure in place: long-/medium-/short-term

Long term. However, the "Fishery Management Plan" needs to be revised every 5 years. Implicitly the Dina should be updated accordingly.

Is the measure in place year round or only part of the year? If the latter, which management practices are applied when the measure is not in effect?

The measure in place is year-round.

Management Objectives

What are the area's management objectives?

Obj.1- to ensure the sustainability of ecosystem services and to promote the recovery of fisheries resources

Obj.2- to enable sustainable exploitation of fisheries resources in order to improve livelihood of the coastal population

Obj.3: to distribute the wealth created by the fishery equitably

Is biodiversity conservation an explicit or implicit management objective?

Biodiversity conservation is an implicit objective of the Fishery Management Plan of the Antongil Bay and the LMMAs. The focus on community empowerment and co-management is primarily for sustainable livelihoods (Obj. 1 above)

If there is an explicit/implicit biodiversity conservation objective, does it take primacy over other objectives in case of conflict?

There is no conflict between biodiversity conservation objectives and the existing fisheries management.

Does the measure cover all or most elements of biodiversity in the area or only certain species?

Yes, the measures cover all aspects of biodiversity conservation: from the protection of fragile ecosystems (reef, seagrass) over flagship species (sharks, whales ...) to the sustainable utilisation of aquatic resources (monitoring of fishing gears, fisheries closure period ...)

Is management effectiveness measured? If so, how and what are the results?

Measurement of management effectiveness refers to measuring the efficiency and achievements of both co-management bodies: the State (Ministry of Fisheries) and local fishing communities.

To date, the “Fishery Management Plan” is in its first year of implementation and recent activities are mainly focusing on sustainable fishery management measures (access control, control and surveillance of fishing). In addition Governmental agencies as well as communities have taken first management responsibilities by conducting joint patrols. Fishery associations have been legalised and traditional fishing licenses have been issued in cooperation with the Ministry of Fisheries. However, insufficient mobilisation of funds by the State hampers a sound functioning of required fisheries co-management activities, such as the application of rules and regulations.

Conservation Effectiveness

Is the area effectively conserving biodiversity and how is conservation effectiveness measured?

Biodiversity conservation measurement tools have been developed and are under implementation, such as conducting reef survey and measuring CPUEs on a regular basis.

How encompassing is measure is, and is the current effectiveness due to the measure, or just the fact that damaging activities haven't been targeted there yet

A decrease in destructive and unsustainable fishing practices clearly would result in improved productivity of the fishery leading to a healthier and stronger marine ecosystem. Gradually, and with the gathering of scientific data, co-management measures are supposed to be adapted to further maximize conservation impact, such as additional bans on targeting certain species.

ANNEX VI: AICHI TARGETS RELEVANT TO THE OECM DEBATE

The following is a non-exclusive list of targets relevant to area-based conservation, including but not limited to Target 11.

Target 2

By 2020, at the latest, biodiversity values have been integrated into national and local development and poverty reduction strategies and planning processes and are being incorporated into national accounting, as appropriate, and reporting systems.

Target 5

By 2020, the rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced.

Target 6

By 2020 all fish and invertebrate stocks and aquatic plants are managed and harvested sustainably, legally and applying ecosystem based approaches, so that overfishing is avoided, recovery plans and measures are in place for all depleted species, fisheries have no significant adverse impacts on threatened species and vulnerable ecosystems and the impacts of fisheries on stocks, species and ecosystems are within safe ecological limits.

Target 7

By 2020 areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity.

Target 11

By 2020, at least 17 per cent of terrestrial and inland water, 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 landscapes and seascapes.

Target 12

By 2020 the extinction of known threatened species has been prevented and their conservation status, particularly of those most in decline, has been improved and sustained.

Target 13

By 2020, the genetic diversity of cultivated plants and farmed and domesticated animals and of wild relatives, including other socio-economically as well as culturally valuable species, is maintained, and strategies have been developed and implemented for minimizing genetic erosion and safeguarding their genetic diversity.

Target 14

By 2020, ecosystems that provide essential services, including services related to water, and contribute to health, livelihoods and well-being, are restored and safeguarded, taking into account the needs of women, indigenous and local communities, and the poor and vulnerable.

Target 15

By 2020, ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced, through conservation and restoration, including restoration of at least 15 per cent of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification.

Target 18

By 2020, the traditional knowledge, innovations and practices of indigenous and local communities relevant for the conservation and sustainable use of biodiversity, and their customary use of biological resources, are respected, subject to national legislation and relevant international obligations, and fully integrated and reflected in the implementation of the Convention with the full and effective participation of indigenous and local communities, at all relevant levels.

ⁱ <https://www.iucn.org/theme/protected-areas/our-work/green-list>

ⁱⁱ <http://www.iucn.org/protected-areas/world-commission-protected-areas/wcpa/what-we-do/biodiversity-and-protected-areas-0>

ⁱⁱⁱ BirdLife International. 2012. BirdLife International Indonesia Program. UK

^{iv} http://www.env.gov.bc.ca/bcparks/eco_reserve/

^v <http://www.davidsuzuki.org/publications/RockfishConservationAreas-OurCurrentStateofKnowledge-Mar2014.pdf>

^{vi} Robb, C., Bodtker, K., Wright, K. & Lash, J. 2011. Commercial fisheries closures in marine protected areas on Canada's Pacific coast: the exception, not the rule. *Marine Policy* (35) pp.309-316

^{vii} Yamanaka, K.L., Logan, G., 2010. Developing British Columbia's inshore rockfish conservation strategy. *Marine and Coastal Fisheries* 2, 28-46.

^{viii} <http://www.davidsuzuki.org/publications/RockfishConservationAreas-OurCurrentStateofKnowledge-Mar2014.pdf>

^{ix} Lancaster, D., Dearden, P., Ban, N., 2015. Drivers of recreational fisher compliance in temperate marine conservation areas: A study of Rockfish Conservation Areas in British Columbia, Canada. *Global Ecology and Conservation* 4, 645-657.

^x Haggarty, D.R., Martell, S.J., Shurin, J., 2016. Lack of recreational fishing compliance may compromise effectiveness of Rockfish Conservation Areas in British Columbia. *Canadian Journal of Fisheries and Aquatic Sciences*.

^{xi} Lancaster, D., 2015. Conservation and compliance: a quantitative assessment of recreational fisher compliance in Rockfish Conservation Areas In School of Environmental Studies. University of Victoria, Victoria.