



IUCN WCPA's BEST PRACTICE PROTECTED AREA GUIDELINES SERIES

IUCN-WCPA's Best Practice Protected Area Guidelines are the world's authoritative resource for protected area managers. Involving collaboration among specialist practitioners dedicated to supporting better implementation in the field, they distil learning and advice drawn from across IUCN. Applied in the field, they are building institutional and individual capacity to manage protected area systems effectively, equitably and sustainably, and to cope with the myriad of challenges faced in practice. They also assist national governments, protected area agencies, non-governmental organisations, communities and private sector partners to meet their commitments and goals, and especially the Convention on Biological Diversity's Programme of Work on Protected Areas.

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IUCN PROTECTED AREA DEFINITION, MANAGEMENT CATEGORIES AND GOVERNANCE TYPES

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.

The definition is expanded by six management categories (one with a sub-division), summarized below.

Ia Strict nature reserve: Strictly protected for biodiversity and also possibly geological/ geomorphological features, where human visitation, use and impacts are controlled and limited to ensure protection of the conservation values

Ib Wilderness area: Usually large unmodified or slightly modified areas, retaining their natural character and influence, without permanent or significant human habitation, protected and managed to preserve their natural condition

II National park: Large natural or near-natural areas protecting large-scale ecological processes with characteristic species and ecosystems, which also have environmentally and culturally compatible spiritual, scientific, educational, recreational and visitor opportunities

III Natural monument or feature: Areas set aside to protect a specific natural monument, which can be a landform, sea mount, marine cavern, geological feature such as a cave, or a living feature such as an ancient grove

IV Habitat/species management area: Areas to protect particular species or habitats, where management reflects this priority. Many will need regular, active interventions to meet the needs of particular species or habitats, but this is not a requirement of the category

V Protected landscape or seascape: Where the interaction of people and nature over time has produced a distinct character with significant ecological, biological, cultural and scenic value: and where safeguarding the integrity of this interaction is vital to protecting and sustaining the area and its associated nature conservation and other values

VI Protected areas with sustainable use of natural resources: Areas which conserve ecosystems, together with associated cultural values and traditional natural resource management systems. Generally large, mainly in a natural condition, with a proportion under sustainable natural resource management and where low-level non-industrial natural resource use compatible with nature conservation is seen as one of the main aims

The category should be based around the primary management objective(s), which should apply to at least three-quarters of the protected area – the 75 per cent rule.

The management categories are applied with a typology of governance types – a description of who holds authority and responsibility for the protected area. IUCN defines four governance types.

Governance by government: Federal or national ministry/agency in charge; sub-national ministry/agency in charge; government-delegated management (e.g. to NGO)

Shared governance: Collaborative management (various degrees of influence); joint management (pluralist management board; transboundary management (various levels across international borders)

Private governance: By individual owner; by non-profit organisations (NGOs, universities, cooperatives); by for-profit organisations (individuals or corporate)

Governance by indigenous peoples and local communities: Indigenous peoples' conserved areas and territories; community conserved areas – declared and run by local communities

For more information on the IUCN definition, categories and governance type see the 2008 *Guidelines for applying protected area management categories* which can be downloaded at: www.iucn.org/pa_categories

Guidelines for applying the IUCN Protected Area Management Categories to Marine Protected Areas

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Published by: IUCN, Gland, Switzerland

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Citation: Day J., Dudley N., Hockings M., Holmes G., La oley D., Stolton S. & S. Wells, 2012. *Guidelines for*

Contents

Preamble	7
At a Glance	9
1. Introduction.....	11
2. What is a Marine Protected Area?.....	12
3. Characteristics of the marine environment that affect protected area designation and IUCN category application	18
4. The IUCN Protected Area Management Categories as applied to MPAs	19
5. Applying the categories to different zones in an MPA.....	24
6. Relationship between the categories and different activities	27
7. Reporting to the World Database on Protected Areas and the UN List of Protected Areas.....	30
8. Acknowledgments	31
Annex 1. The IUCN protected area matrix: a classification system for protected areas comprising both management category and governance type	32
Annex 2. Examples of MPA Objectives	33

Tables

Table 1: Definition and Primary Objectives of IUCN Protected Area Categories.....	9
Table 2: Explanation of protected area definition	12
Table 3: Characteristics of the marine environment that affect protected areas	18
Table 4: Zone types within the Great Barrier Reef Marine Park.....	25
Table 5: Matrix of marine activities that may be appropriate for each IUCN management category.....	27
Table 6: Compatibility of fishing/collecting activities in different management categories – a preliminary assessment.....	29

ABOUT IUCN

Preamble

In 1996 the World Conservation Congress in Montreal recommended (Resolution 1.37) *inter alia* that, as part of the IUCN Marine and Coastal Programme, World Commission on Protected Areas (WCPA) should "develop guidance on the application of the IUCN Guidelines for Protected Area Management Categories in the marine environment". This was followed by a recommendation by Kelleher and Recchia (1998)¹ that "... an elaboration of the classification scheme to indicate different types of zones occurring within MPAs ", was needed given the difficulty experienced in applying a single IUCN category to multiple use marine protected areas (MPAs). Wells and Day (2004)² subsequently reviewed the problems in applying the IUCN protected area management categories in the marine environment and highlighted issues that needed to be addressed.

In 2007, a discussion paper (La oley *et al.*, 2007)³ was presented at the WCPA Marine Summit in Washington DC explaining the need for further guidance and outlining the main areas to be covered. Prior to the publication in 2008 of the revised IUCN-WCPA's [Guidelines for Applying Protected Area Management Categories](#) (referred to as the [2008 Guidelines](#) throughout the remainder of this document) (Dudley, 2008)⁴, a meeting was held in Almeria, Spain, at which a paper was presented by WCPA Marine (La oley *et al.*, 2008)⁵ re-iterating the need for explanation of how the guidelines should be applied to MPAs. The meeting participants agreed that supplementary guidelines should be prepared.

The development of the supplementary guidelines started in 2010 when members of WCPA Marine undertook an online survey to highlight issues where more guidance was needed. Subsequently, a small working group (Jon Day, Sue Stolton, Nigel Dudley, Aya Mizumura and Marc Hockings) met in Townsville, Australia, to develop a preliminary draft using the results of the survey.

¹ Kelleher, G. and Recchia, C. (1998). 'Editorial – lessons from marine protected areas around the world'. *Parks* 8 (2), IUCN, Gland.

² Wells, S. and Day, J. (2004). 'Application of the IUCN protected area management categories in the marine environment.' *Parks* 14 (3) IUCN, Gland.

³ La oley, D., Day, J., Wood, L. and Barr, B. (2007). 'IUCN Categories – their Application in Marine Protected Areas', Discussion paper presented at WCPA Marine Summit, Washington DC, April 2007.

⁴ Dudley, N. (Editor) (2008). *Guidelines for Applying Protected Area Management Categories*. Gland, Switzerland, see: http://www.iucn.org/about/union/commissions/wcpa/wcpa_puball/wcpa_pubsubject/wcpa_categoriespub/1662/Guidelines-for-applying-protected-area-management-categories

⁵ La oley, D., Day, J., Wood, L. and Barr, B. (2008). 'Marine Protected Areas'. In: Dudley, N. and Stolton, S. (Eds.) (2008). *Defining protected areas: an international conference in Almeria, Spain*. Gland, Switzerland: IUCN. 220pp.

IUCN has developed a set of guidelines which define a protected area and categorise a protected area through six management types and four governance types (Dudley, 2008)

IUCN Category	Definition	Primary Objective
IV	<i>Category IV protected areas aim to protect particular species or habitats and management reflects this priority. Many category IV protected areas will need regular, active interventions to address the requirements of particular species or to maintain habitats, but this is not a requirement of the category.</i>	To maintain, conserve and restore species and habitats.
V	<i>Category V protected areas are where the interaction of people and nature over time has produced an area of distinct character with significant ecological, biological, cultural and scenic value: and where safeguarding the integrity of this interaction is vital to protecting and sustaining the area and its associated nature conservation and other values.</i>	To protect and sustain important landscapes/seascapes and the associated nature conservation and other values created by interactions with humans through traditional management practices.
VI	<i>Category VI protected areas conserve ecosystems and habitats together with associated cultural values and traditional natural resource management systems. They are generally large, with most of the area in natural condition, where a proportion is under sustainable natural resource management and where low-level non industrial use of natural resources compatible with nature conservation is seen as one of the main aims of the area.</i>	To protect natural ecosystems and use natural resources sustainably, when conservation and sustainable use can be mutually beneficial.

Spatial areas which may incidentally appear to deliver nature conservation but **DO NOT HAVE STATED** nature conservation objectives should **NOT** automatically be classified as MPAs, as defined by IUCN. These include:

- Fishery management areas with no **wider stated conservation aims**.
- Community areas managed **primarily** for sustainable extraction of marine products (e.g. coral, fish, shells, etc).
- Marine and coastal management systems managed **primarily** for tourism, which also include areas of conservation interest.
- Wind farms and oil platforms that **incidentally** help to build up biodiversity around underwater structures and by excluding fishing and other vessels.

- Marine and coastal areas **set aside for other purposes** but which also have conservation benefit: military training areas or their buffer areas (e.g. exclusion zones); disaster mitigation (e.g. coastal defences that also harbour significant biodiversity); communications cable or pipeline protection areas; shipping lanes etc.
- Large areas (e.g., regions, provinces, countries) where certain species are protected by law **across the entire region**.

Any of the above management approaches could be classified as an MPA if instead they had a primary stated aim and are managed to deliver nature conservation.

2. What is a Marine Protected Area?

2.1 The Definition of a Marine Protected Area

In applying the categories system, the first step is to determine whether or not the site meets IUCN's definition of a protected area as given in the [2008 Guidelines](#) (Chapter 2, page 8) which states:

A protected area is clearly defined, demarcated and managed for the conservation of nature. It is an area of land or water, or both, which is reserved and managed for the conservation of nature, and which is dedicated to the protection of natural or cultural resources.

If a marine area does not meet this definition, then it cannot be considered to be an MPA.

A detailed explanation of the definition is provided in the [2008 Guidelines](#) (Chapter 2, pages 8-9). This is summarised in Table 2 below, with a discussion of issues to consider when applying the definition to the marine environment and some examples to illustrate the definition.

Table 2: Explanation of protected area definition.

Phrase	Explanation provided in the 2008 Guidelines	Discussion and example of application in the marine realm
Clearly defined	<i>Clearly defined implies a spatially defined area with agreed and demarcated borders. These borders can sometimes be defined by physical features that move over time (e.g., river banks) or by management actions (e.g., agreed no-take zones).</i>	This implies that MPAs must be mapped and have boundaries that are legally defined. However, while some MPAs can be clearly defined (e.g. an entire bay bounded by headlands), for others it may be difficult to mark the boundaries, especially if the MPA is offshore. Even boundaries on the landward side, where tide levels can be used (e.g. Low Water Mark), can be difficult to establish (see Box 1). Increasingly, MPA or zone boundaries are defined by high resolution latitude and longitude coordinates, as determined by modern GPS instruments. Example: ▲ The US National Marine Sanctuary System identifies sanctuaries legislated under the National Marine Sanctuaries Act with boundaries defined in a series of associated maps.
Geographical space	<i>Includes land, inland water, marine and coastal areas or a combination of two or more of these. "Space" has three dimensions, e.g., as when the airspace above a protected area is protected from low-flying aircraft or in marine protected areas when a certain water depth is protected or the seabed is protected but water above is not: conversely subsurface areas sometimes are not protected (e.g., are open for mining).</i>	All protected areas exist in three dimensions, but the vertical dimension in MPAs is often a substantial management consideration. In MPAs, management may need to address the airspace above the sea surface, the actual water surface, the water column (or parts of it), the seabed and the sub-seabed, or just one or a combination of two or more of these elements. For example, some MPAs protect just the seabed/benthos and not the water column above. It is therefore important that an MPA has a clear description of the dimensions that are actually protected. Examples: ▲ In Australia's Great Barrier Reef Marine Park, the boundary is clearly defined by legal proclamation. The zones in the GBRMP are legally defined in the statutory Zoning Plan. The MPA goes to a depth of 1000 metres below the seabed and a height of 915 metres (airspace) above the surface of the water. ▲ In Australia's Heron Commonwealth Marine Reserve in the South-east Marine Reserve Network, zoning is stratified by depth. Within the benthic sanctuary zone, the seabed and adjacent waters are fully protected. Above this, commercial fishing activity is allowed in the water column from the sea surface down to 500 metres depth.

Phrase	Explanation provided in the 2008 Guidelines	Discussion and example of application in the marine realm
Recognised	<i>Implies that protection can include a range of governance types declared by people as well as those identified by the state, but that such sites should be recognised in some way (in particular through listing on the World</i>	

Phrase	Explanation provided in the 2008 Guidelines	Discussion and example of application in the marine realm
Conservation	<i>In the context of this definition conservation refers to the in situ 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, in the surroundings where they have developed their distinctive properties</i>	Examples: Å Ecological Reserves in the Florida Keys National Marine Sanctuary in the United States are designed to provide natural spawning and nursery areas for the replenishment and genetic protection of marine life and aim to protect and preserve all habitats and species found throughout the Sanctuary. Å The inclusion of a minimum of 20% of all 70 bioregions within Australia's Great Barrier Reef Marine Park is designed to provide in situ protection of representative examples of all species and ecosystem processes.
Nature	<i>In this context nature always refers to biodiversity, at</i>	

Box 1**Boundaries of MPAs**

There are a number of issues to consider when determining the boundaries of an MPA. On the landward side, it is important to make it very clear as to exactly what boundary is being used and this must be explained; for example 'Mean Low Water' is a different boundary from that of 'Lowest Astronomical Tide'. Wherever possible highest astronomical tide or high water mark should be used (highest astronomical tide generally suits areas with large tidal ranges, whereas high water mark suits small tidal ranges). Both low water and high water marks can result in boundaries that are difficult in legal and administrative terms because:

- The low water mark is usually covered by water. It is thus difficult to inform the public of its precise location, and therefore to enforce; in addition, low water mark moves with erosion and accretion and is often not marked on charts or defined in any publicly available way.
- Boundaries based on high water mark may cause problems as, for example, what may appear to be relatively stable 'lines' can also be influenced by erosion and accretion. Also established rights of use often respect terrestrial ownership of the adjacent land.
- In rivers, estuaries or narrow bays, there are no clear principles for defining low or high water and it may be unclear as to which bays and channels are part of a MPA, and which may be regarded as 'internal waters'.

Box 2**Offshore waters within and beyond national jurisdiction**

Offshore waters are generally considered to be those that lie beyond a country's territorial seas, i.e. beyond 12 nautical miles from shore in most cases. They include the major part of all Exclusive Economic Zones (EEZs - waters under national jurisdiction out to a maximum of 200 nautical mile), as well as the high seas and seabed beyond the limit of national jurisdiction. For MPAs in offshore waters, designation should follow the [2008 Guidelines](#) as for any protected area. Thus, a site may be considered as an MPA provided it: (a) has defined boundaries that can be mapped; (b) is recognised by legal or other effective means; and (c) has distinct and unambiguous management aims that can be assigned to a particular protected area category.

Example:

The [South Orkney Islands Southern Shelf Marine Protected Area](#)

2.2 Principles associated with the use of the protected area definition and IUCN category

The [2008 Guidelines](#) (Chapter 2, page 10) include the following principles (emphasis has been added to the most fundamental points) to help decide whether an area meets the definition of a protected area and what category it should be assigned to:

- 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, conservation must prevail.
- Protected areas must prevent, or eliminate where necessary, any exploitation or management practice that will be harmful to the objectives of designation.
- The system of protected areas should be based on the following principles:
 - The system is not intended to be hierarchical.
 - All categories make a contribution to conservation but objectives must be chosen with respect to the particular situation; not all categories are equally useful in every situation.
 - Any category can exist under any governance type and vice versa.
 - A diversity of management approaches is desirable and should be encouraged, as it reflects the many ways in which communities around the world have expressed the universal value of the protected area concept.
 - The category should be changed if assessment shows that the stated, long-term management objectives do not match those of the category assigned.
 - However, the category is not a reflection of management effectiveness.
 - Protected areas should usually aim to maintain or, ideally, increase the degree of naturalness of the ecosystem being protected.
 - The definition and categories of protected areas should not be used as an excuse for dispossessing people of their land or sea territory.

2.3 When is a marine area that may achieve conservation outcomes not an MPA?

A **protected area** as defined by IUCN describes a precise set of management approaches with limits, and must have nature conservation as a **primary** rather than a secondary aim, as explained above. There are however many managed areas that protect biodiversity, either indirectly, incidentally or fortuitously. Indeed, it is a principle of the Convention on Biological Diversity's "ecosystem approach" that all land and water management should contribute to conservation, and as a result the distinction between what is and what is not a protected area is sometimes unclear. However, such areas do not necessarily fulfil the IUCN definition of a protected area. This is particularly the case in the marine environment where

there is a long history of spatial fisheries management and a growing interest in spatial planning and spatial management of other activities that often have no stated aim or interest in nature conservation – it is just an incidental or apparent link. Understanding the IUCN protected area definition is thus critically important.

Areas subject to some form of management **could** be MPAs or parts of MPAs in some cases, but MPA status should not be assumed and decisions must be made on a case-by-case basis, the essential criterion being As Area58oy8managetial8Ar

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Programme, that documents indigenous and community conservation areas including in the marine environment. It aims to increase awareness of the biodiversity values of areas managed by communities, and provide a wide range of information. As part of this process, it is hoped that further guidance on implementing the IUCN categories in terrestrial and marine ICCAs will be developed. Additional information is available through the [ICCA Consortium](#), and the primary reference for determining whether marine community conservation area is an MPA should be the [2008 Guidelines](#).

2.4 Governance

e IUCN protected area definition and management categories are 'neutral' about type of ownership or management authority. With respect to who holds decision-making and management

3. Characteristics of the marine environment that affect protected area designation and IUCN category application

The marine environment has particular characteristics that are often absent or relatively uncommon on land. As a result, MPAs present management challenges that may need different approaches to those used for protected areas in terrestrial environments. These are described in Table 3.

Table 3: Characteristics of the marine environment that affect protected areas.

Characteristic	How does this characteristic affect MPAs?
Multi-dimensional environment	MPAs are designated in a fluid multi-dimensional environment. As a result, in some cases different management may be needed at different depths. In some MPAs vertical zoning has been used to achieve this. In others, there may be no vertical zoning, but the management put in place may nevertheless vary with depth. There is a general presumption against the use of vertical zoning, as there is increasing evidence of strong ecological benthic-pelagic coupling (see Section 5.5 below), and the subsequent vertically tiered management is particularly difficult, if not impossible, to effectively police and enforce. The sub-seabed may also need management, if there is a potential impact such as mining below the seabed. This is similar to the situation in terrestrial protected areas where activities such as mining might potentially impact on the protected area below ground.
Currents and tides causing flows/impacts	MPAs are subject to surrounding and deep-current influences from tides and currents. These are generally outside the control of the manager or management agency and cannot be managed. Although similar to the situation of airborne or wind-borne impacts on terrestrial protected areas, MPAs are perhaps more consistently subject to such influences.
Lack of clear tenure or ownership	Tenure and ownership in the marine environment is often different from on land, where there is usually clear public or private ownership. Under the United Nations Convention on the Law of the Sea (UNCLOS), nations have the right to use their Exclusive Economic Zones (EEZs), which extend from shore out to 200 nautical miles, and to establish management regimes such as MPAs. However, within an EEZ, there is generally no individual ownership of either the seabed or water column and the EEZ may often be used and accessed by all those belonging to the nation concerned. There are some exceptions, generally in inshore areas: thus in the UK, the Crown Estate owns about 50% of the foreshore (tidal land between Mean High Water and Mean Low Water as well as most of the seabed from Mean Low Water out to 12 nautical miles (i.e. the territorial sea); and in many countries, coastal communities may own or have tenure and rights over of certain marine areas or resources, as in Fiji where local communities have customary rights over traditional fishing grounds known as <i>iqoliqoli</i> . Outside the EEZs, i.e. on the High Seas, the oceans are invariably considered to be <i>commons</i> which may be used and accessed by all nations. MPAs can represent a legitimate restriction on such rights under the UNCLOS or Regional Sea Agreements, according to provisions of the Convention on Biological Diversity (CBD) or Regional Fisheries Agencies (see box 2 , page 15).
Multiple jurisdictions	Often the water column, seabed, sea life and foreshore are managed by different jurisdictions or government agencies, which may create difficulties for designation and management.
Difficulties in enforcement and management	Restricting entry to, and activities in, an MPA is often more difficult than for terrestrial protected areas (and often impossible) as there are usually multiple access points, the site is often remote and thus difficult and expensive to patrol, and under international law, rights of <i>innocent passage</i> are afforded to all vessels. While controlling activities in the marine environment is more difficult than on land, modern satellite technology is making it easier.
Lack of visibility of features being protected	Being unable to see sub-tidal features poses particular problems in terms of management and enforcement. Illegal or unregulated activities may damage features within an MPA without anyone knowing, unless appropriate monitoring or surveillance is undertaken (and this may be expensive, requiring SCUBA diving).
Boundary demarcation	It is often difficult to know where the boundary of an MPA is, both seawards (where electronic charts, a Global Positioning System (GPS) or similar technology are needed), and on the landward side where boundaries based on high and low water marks may be difficult to locate in the field or may be only loosely defined (see discussion in Section 2.1). In a few cases, vertical zoning has been attempted, and horizontal boundaries have been established at certain depths if an MPA does not extend to either the sea surface (such as a protected area for a seamounts) or to the seabed. However, such boundaries are difficult if not impossible to mark and thus effective and practical compliance is also extremely difficult, if not impossible (see section 5.5).
Connectivity between ecosystems and habitats	The scale over which marine connectivity occurs can be very large. Since the extent of connectivity may be critical to the health of an MPA, sufficiently large areas must be considered to ensure adequate protection of ecosystem values.

4. The IUCN Protected Area management categories as applied to MPAs

The [2008 Guidelines](#) give a full description of each of the six categories of protected area management (Chapter 2, pages 12-23) and Table 9 (Chapter 6, pages 57-58) provides notes on applying the categories to MPAs. This section expands on this information and provides additional notes and examples to improve understanding of how categories can be applied to MPAs.

As outlined in one of the key principles (section [2.2](#) above), the choice of category relates to the primary stated objective(s) of the protected area. Categories may be assigned to a whole MPA or a separate zone within a multiple-zone MPA (see section [5.3](#) below). One problem that is difficult for category assignment in both marine and terrestrial protected areas is the frequent lack of clarity in the wording of the objectives of a protected area. Many MPAs have multiple objectives, having been set up with tourism or fisheries benefits, as well as biodiversity protection, in mind, and thus a **primary** objective may not be clearly identified. Nevertheless, the examples of the application of the categories to the MPAs cited below, and the national initiatives in a number of countries (e.g. Australia, Belize) to assign categories to all components of the MPA system, demonstrate that the categories can apply in the marine environment once they are well understood.

As with terrestrial protected areas, IUCN categories **are independent of the names of an MPA** (see [2008 Guidelines](#), page 11). It is important to understand, given the wide variability in typology of MPAs both between countries and within a single country: e.g. marine park, marine reserve, closed area, marine sanctuary, MACPAs/MCPAs (marine and coastal protected areas), nature reserve, ecological reserve, replenishment reserve, marine management area, coastal preserve, area of conservation concern, sensitive sea area, biosphere reserve, 'no-take area', coastal park, national marine park, marine conservation area, marine wilderness area. In addition to the wide range of names, the same name or title for a MPA may mean different things in different countries. For example, in Kenya 'marine reserves' have a multiple use approach while in neighbouring Tanzania 'marine reserves' are strictly no-take.

Category Ia

Strictly protected areas set aside to protect biodiversity and also possibly geological/geomorphological features, where human visitation, use and impacts are strictly controlled and limited to ensure protection of the conservation values. Such protected areas can serve as indispensable reference areas for scientific research and monitoring.

(CCAMLR) is a large (93,819 km²) strictly protected marine area. It is assigned to category Ia (the entire CCAMLR area is considered to be category IV) – see Annex I for objectives.

- The eleven Marine Reserves within the [Channel Islands National Marine Sanctuary](#), California are assigned to category Ia within the category IV National Park. The Marine Reserves are established for scientific purposes and to preserve biodiversity.

Zones within MPAs

- [Macquarie Island Commonwealth Marine Reserve](#), Australia (See category IV). This MPA has a central Highly Protected Zone of 58,000 km² assigned to category Ia – see Annex 2 for objectives.

Category Ib

Usually large¹⁰ unmodified or slightly modified areas, retaining their natural character and influence, without permanent or significant human habitation, which are protected and managed so as to preserve their natural condition.

Primary objective

- *To protect the long-term ecological integrity of natural areas that are undisturbed by significant human activity, free of modern infrastructure and where natural forces and processes predominate, so that current and future generations have the opportunity to experience such areas.*

Other objectives

- *To provide for public access at levels and of a type which will maintain the wilderness qualities of the area for present and future generations;*
- *To enable indigenous communities to maintain their traditional wilderness-based lifestyle and customs, living at low density and using the available resources in ways compatible with the conservation objectives;*
- *To protect the relevant cultural and spiritual values and non-material benefits to indigenous or non-indigenous populations, such as solitude, respect for sacred sites, respect for ancestors etc.;*
- *To allow for low-impact minimally invasive educational and scientific research activities, when such activities cannot be conducted outside the wilderness area.*

Notes relating to use of Category Ib

- In the [2008 Guidelines](#), Category Ib is called 'wilderness area' but the concept of 'wilderness' is more difficult to apply to the marine environment than to land. Provided a marine area is relatively undisturbed and free from human influences, qualities such as 'solitude', 'quiet appreciation' or 'experiencing natural areas that retain wilderness qualities' can however be achieved by diving beneath the surface.

¹⁰ Size is less often a useful guide for categories in the marine environment; MPAs of all categories may be large; and Category Ib MPAs may be smaller than Category Ia MPAs.

- *To manage visitor use for inspirational, educational, cultural and recreational purposes at a level which will not cause significant biological which*

Category VI

Areas that conserve ecosystems and habitats, together with associated cultural values and traditional natural resource management systems. They are generally large, with most of the area in a natural condition, where a proportion is under low-level non-industrial sustainable natural resource management and where such use of natural resources compatible with nature conservation is seen as one of the main aims of the area.

Primary objective

- *To protect natural ecosystems and use natural resources sustainably, when conservation and sustainable use can be mutually beneficial.*

Other objectives

- *To promote low-level and sustainable use of natural resources, considering ecological, economic and social dimensions;*
 - *To promote social and economic benefits to local communities where relevant; whilst conserving biodiversity;*
 - *To facilitate inter-generational security for local communities' livelihoods – therefore ensuring that such livelihoods are sustainable;*
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5. Applying the categories to different zones in an MPA

5.1. Applying a category to an entire MPA

In many cases, as with terrestrial protected areas, an MPA will have a primary stated aim of nature conservation with a set of objectives that will allow the site in its entirety to be assigned to an IUCN protected area management category. This is the preferred approach, particularly where a site is small. However, since many large MPAs have zones with different objectives, it is possible to assign individual zones to different categories as described in [section 5.4](#) below.

In some exceptional cases, there may be small areas of a protected area allocated to uses that might not be compatible with the primary objective of the protected area, but which are clearly essential or unavoidable. Examples include tourist accommodation in large protected areas, where the revenue is essential for the maintenance of the protected area; or the habitation of people whose livelihoods depend on the area. Fishing cannot generally be considered, however, as one of these essential, unavoidable, or indeed appropriate activities.

In such cases, when assigning a category, the primary objective of the protected area should apply to at least three quarters of the protected area. Known as the '75% rule', as explained in the [2008 Guidelines](#) (chapter 4, page 35), this means that the remaining 25% of land or water within a protected area can be managed for other essential and unavoidable purposes so long as **these uses are compatible with the definition of a protected area and the management category it is being assigned to.**

Examples of MPAs where this applies include:

- Habitation by the Moken (Sea Gypsies) in the Mu Koh Surin Marine National Park, Thailand (category II) (Sudara and Yeemin, 2011)¹³.
- The [Kosi Bay](#) Nature Reserve, a coastal/brackish protected area which is part of the much larger iSimangaliso Wetland Park in KwaZulu Natal, South Africa; within the Nature Reserve only the local Xhosa people may harvest intertidal invertebrates and in the marine reserve of [El Hierro Mar de Las Calmas](#), the Canary Islands, both of which are otherwise strictly protected.

The 75% rule is not an excuse, for example, to allow widespread low level artisanal fishing within the core category I – III area itself. All living parts are inter-related within a marine eco-

system, and closure of an area to extraction of all fish or living resources means just that – it is the core principle for category I-III MPAs as the no-take of mammals, birds and vegetation is for terrestrial category I-III protected areas.

5.2. Combined or adjoining terrestrial and marine protected areas

A separate determination of the relevant IUCN category may be appropriate where a predominantly terrestrial protected area includes a marine component. In such cases, the two components should not necessarily be reported as two separate

¹³ Sudara, S. and Yeemin, T. (2011). *Demonstration Site Baseline Assessment Report: Mu Koh Surin Marine National Park, Thailand*. Unpublished case study for ICRAN.

simply allows for the concept of zoning through, for example, a subsequent management planning process. Figure 2 in the [2008 Guidelines](#) (page 38) gives a decision tree for deciding if a zone is suitable for having its own category. IUCN considers that in most cases it is not necessary to assign different categories to zones in protected areas, but it may be appropriate in much larger protected areas where individual zones are almost protected areas in their own right.

Many MPAs are zoned because of their multiple use nature, with each zone type having different objectives and restrictions (some allowing greater use and removal of resources than

others). Many Australian MPAs have been zoned. One of the first was the Great Barrier Reef (GBRMP) Marine Park, with zoning initially applied in various sections of the park in the 1980s-90s. The initial zoning has been periodically reviewed and updated, and since 2003 the entire GBR has been covered by a single amalgamated [Zoning Plan](#). Zoning schemes subsequently implemented by other jurisdictions in Australia (e.g. for Queensland (State) Marine Parks and the federal marine reserve network) have used the broad zoning framework developed for the GBRMP, but have modified this to suit their own situations. In all cases, the zones have a statutory basis and meet the criteria of the various IUCN categories.

Table 4: Zone types within the Great Barrier Reef Marine Park¹⁴.

Zone Name	Equivalent IUCN category	Objectives	Area (km ²)	% of GBRMP
Preservation Zone	Ia	to provide for the preservation of the natural integrity and values of areas of the Marine Park, generally undisturbed by human activities.	710	<1
Scientific Research Zone	Ia	(a) to provide for the protection of the natural integrity and values of areas of the Marine Park, generally free from extractive activities; and (b) subject to the objective mentioned in paragraph (a), to provide opportunities for scientific research to be undertaken in relatively undisturbed areas.	155	<1
Commonwealth Islands	II	(a) to provide for the conservation of areas of the Marine Park above the low water mark; and (b) to provide for use of the zone by the Commonwealth; and (c) subject to the objective mentioned in paragraph (a), to provide for facilities and uses consistent with the values of the area.	185	<1
Marine National Park Zone	II	(a) to provide for the protection of the natural integrity and values of areas of the Marine Park, generally free from extractive activities; and (b) subject to the objective mentioned in paragraph (a), to provide opportunities for certain activities, including the presentation of the values of the Marine Park, to be undertaken in relatively undisturbed areas.	114530	33
Buffer Zone	IV	(a) to provide for the protection of the natural integrity and values of areas of the Marine Park, generally free from extractive activities; and (b) subject to the objective mentioned in paragraph (a), to provide opportunities for: (i) certain activities, including the presentation of the values of the Marine Park, to be undertaken in relatively undisturbed areas; and (ii) trolling for pelagic species.	9880	3
Conservation Park Zone	IV	(a) to provide for the conservation of areas of the Marine Park; and (b) subject to the objective mentioned in paragraph (a), to provide opportunities for reasonable use and enjoyment, including limited extractive use.	5160	2
Habitat Protection Zone	VI	(a) to provide for the conservation of areas of the Marine Park through the protection and management of sensitive habitats, generally free from potentially damaging activities; and (b) subject to the objective mentioned in paragraph (a), to provide opportunities for reasonable use.	97250	28
General Use Zone	VI	to provide for the conservation of areas of the Marine Park, while providing opportunities for reasonable use.	116530	34
Total			344400	100

¹⁴ The GBRMP does not include State islands, intertidal waters, Queensland internal waters, or port areas.

The GBRMP is a single very large MPA covering 344,400 km² on the north east coast of Australia, in which a wide range of commercial and recreational activities and uses are allowed, including extraction other than mining or drilling for oil. The zones are assigned to different categories as shown in Table 4.

The statutory Zoning Plan for the GBRMP provides details on what, and where, specific activities are allowed, and which activities require a permit. Within each zone type, certain activities are allowed 'as-of-right' (that is, no permit is required, but users must comply with any legislative requirements in force), some specified activities can only be carried out with a permit, and some activities are prohibited. All the zones are mapped, recognised in law, and have unambiguous objectives that mean they can each be assigned to an IUCN category.

5.5. Vertical zoning

In a very few cases, parts of MPAs have been formally vertically zoned, to take account of the three-dimensional nature of the marine environment. Thus a zone may be distinguished for part of the water column with a different management regime from that of the seafloor: benthic fishing is usually prohibited in the zone that that, E 127 (onl-5(g))-45 (a lag6 (ben5ic))-46 (fis5ng)-45is)rti

6. Relationship between the categories and different activities

Fishing and extraction of wild living resources is still very widespread in the marine environment, and more so than on land (marine fisheries are the last wild commercial 'harvest' in the world), though hunting is obviously a significant issue for some terrestrial protected area. Many people thus still make their living from the exploitation of wild marine resources. As a result, the conflict between fishing and MPAs tends to be a much greater issue than that between extraction of living resources in terrestrial protected areas.

is has implications for assignment of the IUCN protected area management categories to MPAs. In the conservation community as a whole, there is a general understanding that the more highly protected areas (Categories I-III) should be closed to extraction, and as a result these categories have become associated with no-take areas. However, there are many who feel that limited extraction (whether for research or traditional use) carried out under appropriate management can still result 4(that3nMlhatsult)-96(4(that3nMlhatsul3:22(ca10(esult w

e extensive debate that has resulted (for example, Fitzsimons (2011) and Robb *et al.* (2011)¹⁵) has meant that people may forget that categories are not applied to protected areas according to management regimes (and therefore the activities being seen to occur), but rather according to the stated objectives. From IUCN's point of view, the key point is that all activities that are allowed to take place within a protected area must be compatible with its stated conservation management objectives regardless of the IUCN category. If categories are assigned according to the **management objective** of an MPA, the issue of whether it is no-take should not be a priority during the assignment process, as strict regulation of exploitation is a management

Table 6: Compatibility of fishing/collecting activities in different management categories – a preliminary assessment.

should not be permitted in category I to IV MPAs. For example, the Great Barrier Reef Marine Park Act 1975 specifically prohibits all mining within the boundaries of the Great Barrier Reef Region.

Carefully managed mining that has been risk assessed as causing minimal impact in a small discreet part of an MPA may be permissible depending on national legislation relating

to mining in protected areas generally or in a specific MPA but these areas should be assigned as category V or VI. In 2000, IUCN called for a moratorium on subsurface exploitation in categories I-IV, and in 2008 extended this to a call for a moratorium on categories V and VI as well (IUCN Resolution 4.136, Barcelona). However, as yet, no such agreement has been reached.

7. Reporting to the World Database on Protected Areas and the UN List of Protected Areas

Once an IUCN category is assigned and governance type allocated, the information should be reported to the UNEP World Conservation Monitoring Centre (UNEP-WCMC), so that information can be included in the World Database on Protected Areas (WDPA) and the UN List of Protected Areas. The WDPA is a joint product of UNEP and IUCN, prepared by UNEP-WCMC and IUCN WCPA working with governments, the Secretariats of MEAs (Multilateral Environmental Agreements) and collaborating NGOs. Reporting to the WDPA is described in the [2008 Guidelines](#) (Chapter 4, pages 40-41) and is the same for both terrestrial and marine protected areas. Since the process for reporting has expanded since 2008, it is summarised here.

There are two ways to report the assignment of a category onto the WDPA:

- **Official reporting:** The official UN reporting system for protected areas requires that the information held on protected areas be approved by governments. Reporting is voluntary, but is requested by a number of UN resolutions and policies, most recently in the CBD Programme of Work on Protected Areas. This form of reporting is government-led, and the process is managed by UNEP-WCMC. Further details are given in the [2008 Guidelines](#) (Chapter 4).
- **Individual site reporting via the internet:** It is now possible for anyone interested in protected areas to provide information and feedback to the WDPA. The public interface protectedplanet.net allows viewers to explore the world of protected areas through user friendly maps, pictures and information and, through a link with Wikipedia, to add information about individual sites. Core data on MPAs held on the WDPA is also available via the MPA-specific site protectplanetoccean.net. MPA information can be accessed at this site via the interactive Marine Protected Area (iMPA) pages, which also allow MPA information to be edited and added. Full instructions concerning editing and adding information to the site (via the Google Groups application), and processes for checking this information, are provided on the iMPA site and updates to the core data are synchronised with the WDPA on a regular basis. Detailed [Data Management Guidelines](#) and [Data Entry Guidelines](#) are available¹⁷.

For areas in the high seas, and thus outside the extent of any national jurisdiction, the reporting mechanism has yet to be developed.

7.1 Reporting multiple categories within a protected area

The reporting of categories for protected areas where different zones have different categories (such as the Great Barrier Reef) is described in the [2008 Guidelines](#) (Chapter 4, pages 36-37) and in section 5.4 above. In the context of MPAs, two situations are worth further discussion:

- When reporting **“nested” protected areas** it is important to ensure spatial data is correct to avoid double counting, and so that databases do not overstate the amount of land or sea that has been designated. For example, the Great Barrier Reef Marine Park is sometimes reported as being category VI overall, but within this broad area several other categories are also recognised, i.e. Ia, II, IV and VI, (see examples given in previous sections). In the case of the [Macquarie Island Commonwealth Marine Reserve](#) (category IV), over one third of the reserve (58,000 km² out of a total of 162,000 km²) is designated IUCN category Ia Highly Protected Zone.
- **Vertical zonation** can result in double counting when reporting on the IUCN categories. IUCN's current advice is that MPAs with vertical zoning should be reported according to the **least** restrictive category that has been applied within the site due to IUCN's serious concerns with compliance and enforcement. For example, if the benthic system is strictly protected and the pelagic area is open to managed resource use compatible with category VI, the whole area should be assigned a category VI. Thus [Huon Commonwealth Marine Reserve](#) (see section 5.5) should be **reported** as IV even though the seabed is **categorised** as Ia.

¹⁷ These can be downloaded from <http://www.wdpa.org/>

Annex 1.

The IUCN protected area matrix: a classification system for protected areas comprising both management category and governance type

[illegible]

Category Ia:

South Orkney Islands Southern Shelf MPA

- the protection of representative examples of marine ecosystems, biodiversity and habitats at an appropriate scale to maintain their viability and integrity in the long term.
- the protection of key ecosystem processes, habitats and species, including populations and life-history stages.
- the establishment of scientific reference areas for monitoring natural variability and long-term change or for monitoring the effects of harvesting and other human activities on Antarctic marine living resources and on the ecosystems of which they form part.
- the protection of areas vulnerable to impact by human activities, including unique, rare or highly biodiverse habitats and features.
- the protection of features critical to the function of local ecosystems.
- the protection of areas to maintain resilience or the ability to adapt to the effects of climate change.

Category II:

Mu Koh Surin Marine National Park, Thailand

The main objectives of the park are:

- Preserve and conserve natural resource and the environment in a condition whereby they can provide sustainable benefits to society.
- Provide opportunities to the public for education, research and recreation that is within the park's carrying capacity.

Category IV:

Macquarie Island Commonwealth Marine Reserve¹⁸ (with a category Ia zone)

Strategic Objectives for the Marine Reserve as a whole:

1. To protect the conservation values of the south-eastern portion of the Macquarie Island Region including protecting:
 - the migratory, feeding and breeding ranges of marine mammals and seabirds.

¹⁸ This is called the Macquarie Island Marine Park in the 2001-2008 Management Plan

Management strategies for the Habitat/Species Management Zones (Category IV) are:

- No mining operations, including petroleum and/or mineral exploration or extraction.
- Commercial fishing in accordance with a fishing concession granted by AFMA will be allowed in the Marine Park, subject to determinations or permits made by the Director under EPBC Regulations.
- Limited commercial tourism will be allowed under a permit issued by the Director under the EPBC Regulations.
- Scientific research that is compatible with the strategic objectives of the Marine Park and management goals for this zone will be allowed.
- In accordance with the EPBC Regulations, no dumping of waste or littering.

Additional management goals and management strategies relate specifically to scientific research and monitoring in the Marine Park.

Category IV:

South Water Caye Marine Reserve, Belize (Wildtrack, 2009)¹⁹

Overall goal:

To provide for the protection, wise use, understanding, and enjoyment of the natural resources of South Water Caye Marine Reserve in perpetuity.

Objectives:

To provide for the protection of the natural resources of South Water Caye Marine Reserve for the benefit of current and future generations.

- Engage fishermen in the management of sustainable fisheries.



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