

**United Nations Environment Programme
World Conservation Monitoring Centre (UNEP-WCMC)**

**Data structure of the World Database on Protected Areas
(WDPA) Annual Release 2009**

New WDPA Schema

Web-Download Version – February 2009



The UNEP World Conservation Monitoring Centre (UNEP-WCMC) was established in 2000 as the biodiversity assessment and policy implementation arm of United Nations Environment Programme (UNEP). The roots of the organisation go back to 1979, when it was founded as the IUCN Conservation Monitoring Centre. Since 1981 UNEP-WCMC, through its Protected Areas Programme, has been compiling this information and making it available to the global community. The WDPA is a joint project of UNEP and IUCN, prepared by UNEP-WCMC, working with IUCN World Commission on Protected Areas, governments and collaborating NGOs. The World Database on Protected Areas (WDPA) is the most comprehensive global spatial dataset on marine and terrestrial protected areas available.



'Data structure of the World Database on Protected Areas (WDPA) Annual Release 2009, New WDPA Schema, Web-download Version – February 2009', prepared by UNEP-WCMC, with support from the Proteus Partnership (<http://proteus.unep-wcmc.org>)

Copyright: UNEP-WCMC 2009

Disclaimer: The contents of this report do not necessarily reflect the views or policies of UNEP-WCMC or contributory organisations.

Document Citation: UNEP-WCMC, February 2009. 'Data structure of the World Database on Protected Areas (WDPA) Annual Release 2009, New WDPA Schema, Web-download Version – February 2009'.

Dataset Citation: *'World Database on Protected Areas (WDPA) Annual Release 2009 (web download version), February 2009. The WDPA is a joint product of UNEP and IUCN, prepared by UNEP-WCMC, supported by IUCN WCPA and working with Governments, the Secretariats of MEAs and collaborating NGOs. For further information: protectedareas@unep-wcmc.org'*

Available From: UNEP-World Conservation Monitoring Centre (UNEP-WCMC)
219 Huntingdon Road, Cambridge CB3 0DL, UK
Tel: +44 1223 277314; Fax: +44 1223 277136
Email: protectedareas@unep-wcmc.org URL: <http://www.unep-wcmc.org>

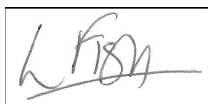

WDPA Dataset Release Date	WDPA Annual Release 2009 - 13/02/2009	WDPA New Schema	Yes
WDPA System version number	1.0	WDPA Attribute Data Structure	1.6
Signature of WDPA Data Manager		Signature of Senior GIS Developer	
Date of Signature:	18/11/2008	Date of Signature:	18/11/2008

Table of Contents

1.0 About the WDPa Annual Release 2009.....	2
1.1 Significant data changes since WDPa Annual Release 2007	2
1.2 Datasets available in the WDPa Annual Release 2009.....	3
1.3 WDPa attribute data structure.....	3
1.4 WDPa data source structure.....	6
2.0 Attribute lookup tables and content definitions	7
2.1 Site Status and Event.....	7
2.2 IUCN Protected Area Management Category.....	8
2.3 No Take Proportion.....	9
2.4 Marine, Subtidal and Intertidal Habitats	9
2.5 Governance	10
2.6 Ownership.....	11
3.0 Appendix.....	i
3.1 Terms of Use for the WDPa Annual Release 2009	i
3.2 Technology behind the WDPa.....	ii

Tables

Table 1 Datasets available in the WDPa Annual Release 2009	3
Table 2 Attribute data structure for protected areas datasets in WDPa Annual Release 2009	4
Table 3 Data source table structure for protected areas datasets in the WDPa Annual Release 2009.....	6
Table 4 Site Status definitions	7
Table 5. Site Event definitions.....	8
Table 6. IUCN Protected Area Management Category definitions	8
Table 7. No Take Proportion definition.....	9
Table 8. Marine Component definition.....	9
Table 9. Subtidal Habitat definition.....	9
Table 10. Intertidal Habitat definition	9
Table 11. Governance Type and Sub-Type options.....	10
Table 12. Governance Type definitions.....	10
Table 13. Ownership Type and Sub-Type definitions	11

1.0 About the WDPa Annual Release 2009

The WDPa is a work in progress, continually being updated once new information becomes available. Each year UNEP-WCMC, under the principles of the Conservation Commons¹, prepares and releases a global GIS dataset of protected areas. The Annual Release includes all nationally designated (e.g. National Parks, Nature Reserves) and internationally recognized protected areas (e.g. UNESCO World Heritage Sites, Ramsar Wetlands of International Importance) currently held in the WDPa, up to end of February 2009. This static version also contains all data improvements made to the WDPa since the previous annual release in December 2007.

The Annual Release serves the global conservation community by providing a standard dataset of our current knowledge of protected areas globally. This dataset acts as a resource for NGOs, researchers, universities and government agencies through supporting and strengthening conservation studies, research and decision making.

In those cases where a protected area boundary has not been mapped (delineated), or the boundary files are unavailable, centre point (geographic) locations are used in the WDPa. Therefore this release will contain both polygon (boundary) and point (geographic location) shapefiles representing the available information. In addition, where publishing or licensing restrictions exist, it is not always possible for the WDPa to include or distribute data for certain countries. For this reason, the UK and the EC Natura 2000 data are not in this release. Although UNEP-WCMC is working with data partners to resolve this issue, it is unknown when these restrictions will be lifted.

The terms of use for the Annual Release are included in this document for your reference (See 3.1) and below is the citation to be applied when utilising this dataset in any format: *'World Database on Protected Areas (WDPa) Annual Release 2009 (web download version), February 2009. The WDPa is a joint product of UNEP and IUCN, prepared by UNEP-WCMC, supported by IUCN WCPA and working with Governments, the Secretariats of MEAs and collaborating NGOs. For further information: protectedareas@unep-wcmc.org'*

1.1 Significant data changes since WDPa Annual Release 2007

Throughout 2008, the extensive redevelopment of the WDPa into a web enabled spatial database platform was ongoing, culminating in the launch of v1.0 of the WDPa portal at the IUCN World Conservation Congress in October 2008. The redevelopment also resulted in changes to the existing data structure and the addition of new attributes (such as those specific to marine protected areas).

During this period, data improvement work was ongoing as well as transfer of legacy data from the old system into the new WDPa. By February 2009, 100% of all legacy data has been transferred and internal data validation processes (geography, geometry, topology and attributes) had been performed. From March 2009 work will continue on the crosschecking of results of the internal data validation processes and making corrections where possible.

Since the last annual release (December 2007):

- ✓ Major update of spatial and attribute data: USA, Australia, Tanzania, Uganda, Republic of Congo, Congo (DRC), Papua New Guinea, Cameroon, Madagascar and Bhutan.
- ✓ Major attribute updates: Republic of Korea, Senegal, Cameroon, Macedonia (FYROM), Serbia, Seychelles, Hungary, Mexico, Argentina, Nigeria and Cape Verde.
- ✓ The global spatial marine protected areas (MPA Global) database was fully integrated.
- ✓ Removal of the following international conventions due to incomplete data coverage, poor and out of date content: Barcelona Convention², Council of Europe Biogenetic Reserves, Helsinki Convention, European Diploma sites
- ✓ UNESCO Cultural World Heritage Sites have been removed as they do not conform to the IUCN definition of a protected area.

¹ The purpose of the Conservation Commons is to ensure open access and fair use of data, information, knowledge, and expertise on the conservation of biodiversity for the benefit of the global conservation community and beyond. See www.conservationcommons.org for more information

² Specially Protected Areas of Mediterranean Importance (SPAMI) under the Barcelona Convention have been maintained and updated.

- ✓ A number of other countries underwent minor data improvements.

From March 2009, we will continue work on:

- ✓ Crosschecking of results from internal data validation processes
- ✓ WDPA portal (website) functionality
- ✓ WDPA user documentation (technical/non-technical)
- ✓ Processing and review of the following datasets: European Common Database on Designated Areas (42 countries/territories), Bolivia, Columbia, Dominica, Ecuador, Namibia, Peru, Uruguay, Venezuela, Kazakhstan, Tajikistan, Turkmenistan, Uzbekistan, Tajikistan, Botswana, Guinea, Liberia, Lebanon, Malawi, St Kitts, Spain, Ghana, Tanzania.

1.2 Datasets available in the WDPA Annual Release 2009

Table 1 contains all files available in the WDPA Annual Release 2009. Data is provided in shapefile (.shp) format and GIS capable software is required to view it. All data is presented in WGS84 (Geographic) projection. Data packages have been compressed, using WinZip software. It is important to note that Datasets 2A – 2H are subsets of the global dataset, so depending on your interest you may not need to download all the datasets. However, to ensure complete coverage of a dataset group you must download all the files listed in that group.

Table 1 Datasets available in the WDPA Annual Release 2009

Dataset number	Dataset Group	Dataset description	File Name
1	Global dataset of protected areas	All national and international protected areas (terrestrial and marine), including national sites not formally declared by government (e.g. proposed). Note: this dataset includes all data in the subsets.	WDPApol2009.shp WDPApnt2009.shp
Following datasets are subsets of the global dataset (dataset 1)			
2A	National protected areas only	All nationally protected areas (marine and terrestrial), including national sites not formally declared by government (e.g. proposed)	WDPA_NATpol2009.shp WDPA_NATpnt2009.shp
2B	International protected areas only	All international protected areas (marine and terrestrial) including UNESCO World Heritage Sites and other international conventions	WDPA_INTpol2009.shp WDPA_INTpnt2009.shp
2C	Global dataset of marine protected areas	All national and international <u>marine protected areas</u> , including national sites not formally declared by government (e.g. proposed). Including MPA Global 2008 and any other sites which have been identified as having a 'marine' component.	WDPA_MPApol2009.shp WDPA_MPApnt2009.shp
Following datasets are subsets for National Protected Areas only (dataset 1 and 2A)			
2D	IUCN category Ia - VI	All designated protected areas (marine and terrestrial) with IUCN management categories Ia – VI only, sites not formally declared by government are excluded (e.g. proposed)	WDPA_IUCNpol2009.shp WDPA_IUCNpnt2009.shp
2E	IUCN category unknown	All designated protected areas (marine and terrestrial) where IUCN management category is unknown. Sites not formally declared by government are excluded (e.g. Proposed, Recommended and sites with Other status)	WDPA_NoIUCNpol2009.shp WDPA_NoIUCNpnt2009.shp
2F	Non-designated protected areas	Includes all sites (marine and terrestrial) not formally declared by government (e.g. Proposed, Recommended and sites with Other status)	WDPA_PROpol2009.shp WDPA_PROpnt2009.shp
Following datasets are subsets for International Protected Areas only (datasets 1 and 2B)			
2G	UNESCO World Heritage Sites, Man and Biosphere Reserves and Ramsar sites	Includes marine and terrestrial UNESCO World Heritage sites (natural/mixed), UNESCO Man and Biosphere Reserves and Wetlands of International Importance (Ramsar).	WDPA_WHRAMpol2009.shp WDPA_WHRAMpnt2009.shp
2H	All other international conventions	Includes Barcelona Convention - SPAMI, ASEAN Heritage Sites	WDPA_INTother_pol2009.shp WDPA_INTother_pnt2009.shp
Accompanying all datasets (automatically contained within zipped dataset)			
	WDPA Data Source information	Table outlining site level source information contained within the WDPA.	WDPAsource2009.dbf

1.3 WDPA attribute data structure

Table 2 outlines the attributes data structure of these files; it includes the field name, an attribute description, field size and whether there a field content definition table is available. In the new schema

national and international protected areas are now stored and distributed in a single shapefile (unless otherwise stated), to distinguish between a national or international protected area use the SITE_TYPE field (see Table 2). For your reference the existing field names used in previous Annual Release data structures prior to October 2008 have been included.

Table 2 Attribute data structure for protected areas datasets in WDPa Annual Release 2009

OLD WDPa	NEW WDPa DATA STRUCTURE				
Old Attribute Field Name	New Attribute Field Name	Attribute Full Name	Attribute Definition	Field Type (Size)	Field Content Definitions Included?
SITE_CODE	SITE_ID	SITE_ID	Unique identification number specific to each site, also known as the SITE_CODE.	Integer	No
AREANAME	NAME_ENG	English Name	Name of protected area in English.	Character (200)	No
	NAME_LOC	Local Name	Name of protected area as known in local area (local language)	Character (200)	
COUNTRY	COUNTRY	Country	Country in which protected area is designated/located	Character (200)	No
ISO3	ISO3	ISO3	Three letter country codes that represent countries, dependent territories and special areas of geographical interest, published by the International Organization for Standardization (ISO).	Character (3)	No
<i>New to WDPa</i>	SUB_NAT	State/Province	State / Province in which protected area is designated/located	Character (200)	No
LON	LON_DD	LONG_DD	Precise location (longitude and latitude) of site in the world in geographic decimal degrees	Integer	No
LAT	LAT_DD	LAT_DD			
DESIGNATE	DESIG_ENG	English Designation	Type of protected area in English e.g. national park, natural monument	Character (100)	No
	DESIG_LOC	Local Designation	Type of protected area in local language e.g. Parques Nacionales, Monumentos Naturales	Character (100)	
CONV_FULL	INT_CONV	International Convention	International convention or agreement that site is declared/recognized under e.g. UNESCO World Heritage Site	Character (100)	No
CRITERIA	INT_CRIT	Criteria	Criteria assigned to protected area under the international convention/agreement	Character (100)	No
STATUS	STATUS	Status	Current legal or 'official' standing of the site e.g. Proposed, legally declared (Designated), Degazetted, Inscribed	Character (100)	Yes (see section 2.1)
EST_DATE	STATUS_D	Status Day	Date of establishment that current status came into force e.g. proposed, legally declared (Designated).	Integer	No
	STATUS_M	Status Month			
	STATUS_YR	Status Year			
STATUS	EVENT	Site Event	Contains developmental changes to a protected area (such as increase/decrease in size, change in IUCN protected area management category) that can occur at any stage of a sites status. Only contains latest developmental change.	Character (100)	Yes (see section 2.1)
EST_DATE	EVENT_D	Event Day	Date that current developmental changes (such as increase/decrease in size, change in IUCN protected area management category) occurred	Integer	No
	EVENT_M	Event Month			
	EVENT_YR	Event Year			
IUCNCAT	IUCNCAT	IUCN Protected Area Management Category	Site classified under IUCN Protected Area Management Categorisation system (Ia – VI)	Character (20)	Yes (see section 2.2)

OLD WDPA	NEW WDPA DATA STRUCTURE				
Old Attribute Field Name	New Attribute Field Name	Attribute Full Name	Attribute Definition	Field Type (Size)	Field Content Definitions Included?
AREA_HA	DOC_AREA_H	Documented Total Area (ha)	Total marine and terrestrial protected area extent (in hectares) as defined in governmental declarations/decrees or management plans	Integer	No
<i>New to WDPA</i>	GIS_AREA_H	GIS Total Area (ha)	Total marine and terrestrial protected area extent (in hectares), as calculated from spatial boundary (GIS) data	Integer	No
MARINE_HA	DOC_M_AREA	Documented Total Marine Area (ha)	Total marine protected area extent (in hectares) as defined in governmental declarations/decrees or management plans	Integer	No
<i>New to WDPA</i>	GIS_M_AREA	GIS Total Marine Area (ha)	Total marine protected area extent (in hectares) as calculated from spatial boundary (GIS) data		
<i>New to WDPA</i>	NO_TAKE	No Take Proportion	Proportion of MPA that is no take	Character (50)	Yes (see section 2.3)
<i>New to WDPA</i>	NO_TK_AREA	Documented No Take Area (ha)	Total no take area extent (in hectares) as defined in governmental declarations/decrees or management plans	Integer	No
<i>New to WDPA</i>	GIS_NO_TK	GIS No Take Area (ha)	Total no take area extent (in hectares) as calculated from spatial boundary (GIS) data		
MANAGEMENT / ADMIN	GOVN_TYPE	Governance Type	Outline of the decision-making structure of the protected area and is closely linked to the ownership. Type and Sub type are closely related.	Character (100)	Yes (see section 2.5)
	GOVN_SUB	Governance Sub Type			
<i>New to WDPA</i>	MANG_AUTH	Management Agency	Name of managing authority/agency responsible for governance of the site	Character (200)	No
OWNER	OWN_TYPE	Ownership Type	Outline of the owners/key stakeholders in the protected area. Type and Sub type are closely related.	Character (100)	Yes (see section 2.6)
	OWN_SUB	Ownership Sub Type			
<i>New to WDPA</i>	OWNER_AUTH	Owner Name	Name of authority/agency, community, private organization responsible who owns the site	Character (200)	No
MARINE	MARINE_C	Marine Component	Does the site contain a 'marine' component?	Character (20)	Yes (see section 2.4)
MARINE_CLASS	SUBTIDAL	Subtidal Habitat	Does the site contain subtidal habitat?	Character (20)	Yes (see section 2.4)
	INTERTIDAL	Intertidal Habitat	Does the site contain intertidal habitat?	Character (20)	Yes (see section 2.4)
<i>New to WDPA</i>	SITE_TYPE	Site Type	Is the site a national or international protected area, or is contained within an area beyond national jurisdiction (ABNJ)?	Character (20)	No
NOTES	NOTES	Legacy WDPA notes	Original attribute notes field extracted from previous WDPA	Character (254)	No
SOURCE	SOURCE	Legacy reference source	Original attribute source field extracted from previous WDPA	Character (254)	No
SOURCE_ID	METADATAID	Metadata ID	Unique ID that links to metadata (data source) table	Integer	No

1.4 WDPa data source structure

To enable accurate sourcing of both spatial (GIS) data and bibliographic (journals, books, reports) data sources, we took commonly required attributes from three international standards³ and combined them to build a WDPa data source (metadata) standard (Table 3). In addition, the redeveloped WDPa has the ability to store ‘metadata’ from site level down to field and feature level. Although, currently only site level metadata is being provided in this release.

In the old WDPa the attribute data source (and additional site information) was contained within the ‘Notes’ and ‘Source’ fields within the database. These fields have been transferred to the new WDPa as part of legacy data archiving process and have been linked, where available, to the attribute tables of the spatial data (see Table 2). However, these legacy fields will be gradually phased out as new data sources are integrated. In the past spatial (GIS) source information was contained within the ‘Source_ID’ table. This information has now been transferred into the new metadata table structure which can be linked, via the ‘METADATAID’ field, to the main spatial data attribute tables.

Table 3 Data source table structure for protected areas datasets in the WDPa Annual Release 2009

OLD WDPa	NEW WDPa DATA SOURCE STRUCTURE			
Old Attribute Field Name	New Attribute Field Name	Attribute Full Name	Attribute Definition	Field Type (Size)
SOURCE_ID	METADATAID	Metadataid	Unique identification number specific to each data source.	Integer
TITLE	TITLE	Title	Title of dataset or publication	Character (200)
YEAR / APPROX_YR	REF_DATE	Reference_Date	Date of creation	Date
PUBLISHER	RESP_PARTY	Responsible_Party	Dataset creator	Character (200)
<i>New to WDPa</i>	G_LOCATION	Geographic_Location	Extent of Dataset (e.g. national, global, single site)	Character (254)
<i>New to WDPa</i>	LANGUAGE	Language	Language that the dataset is written in	Character (200)
<i>New to WDPa</i>	CHAR_SET	Character_Set	Character set used for creation of the data	Character (254)
<i>New to WDPa</i>	TOPIC_CAT	Topic_Category	The topic of dataset or publication (e.g. protected areas)	Character (254)
SOURCE	ABSTRACT	Abstract	Abstract describing the dataset or publication	Character (254)
ORIGIN_ID	D_FORMAT	Distribution_Format	Format that the dataset is made available for distribution (e.g. GIS shapefile, paper map)	Character (254)
<i>New to WDPa</i>	SP_TYPE	Spatial_Representation_Type	GIS data type (e.g. point, line or polygon)	Character (254)
O_PROJECT / O_DATUM	REF_SYSTEM	Reference_System	Projection system used	Character (254)
SCALE	SCALE	Scale	Scale of map or dataset	Character (254)
COMMENT / AUDIT	LINEAGE	Lineage	Historic information about where the dataset came from	Character (254)
<i>New to WDPa</i>	ONLINE_REF	On_Line_Reference	URL linking to where the dataset or document can be obtained	Character (60)
<i>New to WDPa</i>	ADDRESS	Address	Address of publisher	Character (200)

³ Dublin Core, ISO 19115 and Federal Geographic Data Committee (FGDC)

OLD WDPA	NEW WDPA DATA SOURCE STRUCTURE			
Old Attribute Field Name	New Attribute Field Name	Attribute Full Name	Attribute Definition	Field Type (Size)
<i>New to WDPA</i>	AUTHOR	Author	Author of Publication	Character (50)
<i>New to WDPA</i>	CHAPTER	Chapter	Chapter within a publication	Integer
<i>New to WDPA</i>	EDITION	Edition	Edition of publication	Integer
<i>New to WDPA</i>	EDITOR	Editor	Name of person/s who edited report or collection of articles	Character (60)
<i>New to WDPA</i>	JOURNAL	Journal	Name of Journal	Character (150)
<i>New to WDPA</i>	MONTH	Month	Month of publication	Integer
<i>New to WDPA</i>	NUMBER	Number	Journal or publication number	Integer
<i>New to WDPA</i>	PAGES	Pages	Range of pages for a publication/article	Integer
<i>New to WDPA</i>	PUBLISHER	Publisher	Publisher Name	Character (50)
<i>New to WDPA</i>	SERIES	Series	Name of a series of books or reports	Integer
<i>New to WDPA</i>	TYPE	Type	Type of publication	Character (50)
<i>New to WDPA</i>	VOL	Volume	Volume of a journal or series	Integer
<i>New to WDPA</i>	YEAR	Year	Year of publication	Integer

2.0 Attribute lookup tables and content definitions

The following section outlines the field content definitions for a number of key protected area attributes including: site status, site event, IUCN Protected Area Management Category, no take area type, marine component, site governance, ownership and site type. These attribute options have either been specifically designed to enable the World Database on Protected Areas (WDPA) to store protected areas information more efficiently and/or they can be practically applied by external data partners or providers.

2.1 Site Status and Event

As shown in Table 4, for a single protected area a number of sequential stages can occur during its lifecycle. These stages will occur only once during the lifecycle of a single site and are distinct from improvements in site information or developmental changes such as increase in protected area extent.

Table 4 Site Status definitions

Option	Definition	Type	Applies to
Voluntary - unrecognized	Site is functional but is not recognized by the government as a protected area and has not undergone legal decree process	NA	National sites only
Voluntary - recognized	Site is functional and is recognized by the government as a protected area but has not undergone legal decree process.	NA	National sites only
Recommended	Site has been put forward by local/international, non governmental organization or national agency representative to be considered as protected area.	Pre designation	National sites only
Proposed	Site has approval on a local governmental level but is awaiting legal declaration/decree	Pre designation	National sites only
Designated	Site has been legally decreed (or officially recognized under the an international convention/agreement)	Designation	National & selected International conventions
Inscribed	Site has been inscribed upon the World Heritage List of the Convention concerning the Protection of the World Cultural and Natural Heritage.	NA	UNESCO World Heritage Sites only
Degazetted	Site no longer legally or physically exists.	Post	National sites only

		Designation	
Retired	Site legally exists on paper but is no longer functioning	Post Designation	National sites only
Not Known	Current status of this site is no known	NA	National sites only

Throughout the lifecycle of a site a number of developmental events can occur (Table 5). These include changes in protected area extent, reclassification and IUCN category change. They are separate to status changes as they can occur multiple times and in any order throughout a sites recommendation, proposal and designation.

Table 5. Site Event definitions

Options	Definition	Order of occurrence
Extended	Site has been legally extended	These changes can occur during any site status and in any order.
Reduced	Site has been legally reduced	
Reclassified	Site has legally changed its designation	
IUCN Protected Area Management Category change	Site has had a change in IUCN Management Category.	This option is only available where site status has been confirmed as designated.
Adjustment - exact nature not known	Following designation, subsequent event dates have been documented however the exact nature of event change is not known.	

2.2 IUCN Protected Area Management Category

The IUCN has defined a series of protected area management categories based on primary management objective (Table 6), for use at a global scale. The classification system provides an agreed set of international standards, helps demonstrate the range of purposes protected areas serve and facilitates international comparison and reporting. However assignment to a category is not a comment on management effectiveness.

Table 6. IUCN Protected Area Management Category definitions

Options	Definition ⁴
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 conservation values. Such protected areas can serve as indispensable reference areas for scientific research and monitoring (i.e. Strict Nature Reserve)
Ib	Protected areas that are usually large 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 (i.e. Wilderness Area)
II	Protected areas that are large natural or near natural areas set aside to protect large-scale ecological processes, along with the complement of species and ecosystems characteristic of the area, which also provide a foundation for environmentally and culturally compatible spiritual, scientific, educational, recreational and visitor opportunities (i.e. National Park).
III	Protected areas that are set aside to protect a specific natural monument, which can be a landform, seamount, submarine cavern, geological feature such as a cave or even a living feature such as an ancient grove. They are generally quite small protected areas and often have high visitor value (i.e. Natural Monument or Feature).
IV	Protected areas that 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.e. Habitat/Species Management Area)
V	A protected area where the interaction of people and nature over time has produced an area of distinct character with significant ecological, biological, cultural and scenic value. Safeguarding the integrity of this interaction is vital to protecting and sustaining the area and its associated nature conservation and other values (i.e. Protected Landscape/Seascape).
VI	Protected 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 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.e. Protected area with sustainable use of natural resources).
Not Known	Site needs to be reviewed and a category assigned or category has not been provided by data source.

⁴ Dudley, N. (Editor) (2008). *Guidelines for Applying Protected Area Management Categories*. Gland, Switzerland: IUCN. x + 86pp.

In addition to the existing IUCN category options (Ia – VI), in the new WDPA data structure we are able to distinguish where the category is unknown.

2.3 No Take Proportion

'No-Take Zone' is an area of sea that has been temporarily or permanently closed to fishing and other extractive activities to protect fish stocks and natural habitats (Table 7).

Table 7. No Take Proportion definition

Options	Definition
All	All of the MPA is no-take
Part	Part of the MPA is no-take
None	None of the MPA is no-take
Not Known	Unknown if any of the MPA is no-take

2.4 Marine, Subtidal and Intertidal Habitats

The 'marine' component option (Table 8), currently available in the existing WDPA data structure and maintained in the new WDPA, indicates that a protected area may contain a 'marine component'. This may be due to its designation (e.g. Marine Park), through spatial analyses or from review by MPA Global.

Table 8. Marine Component definition

Site may contain a 'marine component' due to its designation (e.g. Marine Park), through spatial analysis or from review by MPA Global.	
Options	Definition
Yes	Due to its designation (e.g. Marine Park) and/or following spatial analyses this site may contain a 'marine component' (although this assessment has not been verified). Also, site may have been assessed through MPA Global (see data source) and confirmed to have a 'marine component'.
No	Spatial analyses has been conducted and it has been determined that this site may not contain a 'marine component' (although this assessment has not been verified) or it may be located in a land-locked country. Refer to data source to confirm whether site has been reviewed via MPA Global.
Unsure	No assessment of the presence or absence of a 'marine component' for this site has been carried out.

In MPA Global an assessment was made on whether the MPA contained subtidal or intertidal habitats, these attribute options are an addition to the new WDPA data structure (Table 9 and Table 10).

Table 9. Subtidal Habitat definition

Subtidal Habitat Definition ⁵	
A marine or estuarine environment that lies below mean low-water; always (or almost always) submerged in a tidally-influenced area.	
Options	Definition
Yes	Subtidal habitat present.
No	Subtidal habitat absent.
Unsure	No assessment of the presence or absence of a subtidal habitat for this site has been carried out.

Table 10. Intertidal Habitat definition

Intertidal Habitat Definition ⁴	
Refers to the environment between high and low tides (mean high water and mean low water) that are alternately exposed to the air and to the sea.	
Options	Definition
Yes	Intertidal habitat present.
No	Intertidal habitat absent.
Unsure	No assessment of the presence or absence of a subtidal habitat for this site has been carried out.

⁵ Extracted from MPA Global – Instructions for submitting edits into MPA Global v1.5. MPA Global, an online and searchable database on marine protected areas (MPA), was launched in January 2005 as a collaborative effort to improve the marine specific contents of the WDPA. It ran until January 2008 and has since been fully integrated into the WDPA (see www.wdpa-marine.org for more information).

2.5 Governance

Governance describes the decision-making structure of a site and is closely linked to ownership. Although Table 11 shows how governance type and sub-type are related they will be stored in two separate fields. In addition there is a field that contains the name of the managing authority/agency (where available). As the new governance structure (Table 11 and Table 12) is more extensive and comprehensive than the existing WDPA system, there will be a period of transition and translation between the two structures.

Table 11. Governance Type and Sub-Type options⁶

Governance Type ^{6,7}	Sub-Type ^{6,7}
Government Managed Protected Areas	Federal or national ministry or agency in charge
	Local/municipal ministry or agency in charge
	Government-delegated management (e.g. to an NGO)
Co-managed Protected Areas	Trans-boundary management
	Collaborative management
	Joint management
Private Protected Areas	Declared and run by individual land-owner
	Declared and run by non-profit organisations (e.g. NGOs, universities, etc.)
	Declared and run by for profit organisations (e.g. individual or corporate land-owners)
Community Conserved Areas	Declared and run by Indigenous Peoples
	Declared and run by Local Communities

Table 12. Governance Type definitions

Governance Type ⁶	Long Definition
Government Managed Protected Areas	<ul style="list-style-type: none"> Authority, responsibility and accountability for managing the protected area rest with a government ministry or agency that has formally subjected it to a conservation objective (such as the ones that distinguish the IUCN categories). The government level in charge may be the national (provincial in case of a federal country) or the local/municipal. The government may also have delegated the management to a body (a para-statal organisation, NGO or even a private operator or community) but it retains full land ownership and control/ oversight. The government may or may not have a legal obligation to inform or consult other identified stakeholders prior to making or enforcing management decisions.
Private Protected Areas	<ul style="list-style-type: none"> Authority and responsibility for managing the protected area rest with one or more private landowners. In some cases the owner is a non-profit organization (e.g. an NGO, foundation, research institute or university) but in others it is a for-profit corporation. The owners of the land and natural resources subject them to a specific conservation objective (such as the ones that distinguish the IUCN categories), and are fully responsible for decision-making, subject to applicable legislation and the terms of any agreements with the government. Their accountability to the larger society is usually quite limited. Some forms of accountability may be negotiated with the government in exchange for specific incentives (as in the case of Land Use Trusts).

⁶ Extracted from 'Background Note no. 1 on Protected Areas Governance', Workshop Stream iii, Governance of Protected Area, Vth World Parks Congress (WPC). Durban (South Africa), Sept. 11-13, 2003

⁷ Where the governance type and/or sub-type are unknown, the option of 'Not Known' will be used.

Governance Type ⁶	Long Definition
Co-managed Protected Areas	<ul style="list-style-type: none"> Authority, responsibility and accountability for managing the protected area are shared in various ways among a variety of actors, likely to include one or more government agencies, local communities, private landowners and other stakeholders. The actors recognize the legitimacy of their respective entitlements to manage the protected area, and agree on subjecting it to a specific conservation objective. In collaborative management, formal decision-making authority, responsibility and accountability still rest with one agency (often a national governmental agency), but law or policy requires the agency to collaborate with other stakeholders. ‘Collaboration’ means that a multi-stakeholder body develops and approves <i>by consensus</i> a number of technical proposals for protected area regulation and management, to be later submitted to the decision-making authority. In joint management, various actors sit on a management body with decision-making authority. Joint management is stronger where decision-making is carried out by consensus. When this is not the case, the balance of power reflected in the composition of the joint management body may <i>de facto</i> transform it into a different governance type (e.g. when government actors or private landowners hold an absolute majority of votes). A special case of multi-stakeholder management is the one of trans-boundary PAs, whereby two or more national governments manage co-operatively an area beyond the limits of national sovereignty or jurisdiction of any one of them. This setting has been suggested also for high seas marine PAs beyond the jurisdiction of any one country.
Community Conserved Areas	<ul style="list-style-type: none"> Authority and responsibility for managing the concerned territory and resources rest with the indigenous peoples and/or local communities with customary and/or legal claims over the land and natural resources through a variety of specific forms of ethnic governance or locally agreed organisations and rules. Land and resources are usually collectively managed, a fact that may or may not have been legally sanctioned in the specific national context. The community customarily (and/or legally) owning the land and natural resources formally subjects them to a conservation objective (such as the ones that distinguish the IUCN categories) and/or to other objectives that demonstrate long-term success in achieving the conservation objectives. Management is through a locally agreed form of governance, which often has roots in traditional, customary or ethnic practices. The community’s accountability to society may be defined as part of broader negotiations with the national government and other partners, possibly as a counterpart to being assured, for example, the recognition of collective land rights, the respect for customary practices, the provision of economic incentives, etc. Such negotiations may even result in a joint management arrangement among indigenous and local communities, government actors and other stakeholders.

2.6 Ownership

Ownership is closely linked to governance and although it is present in the existing WDPA structure, it has been clearly re-defined into distinct types and sub-types (Table 13) for the new WDPA system. As with governance the ownership type and sub type will be stored in two separate fields and there will be a period of translation between the existing and new ownership structures. In addition, there is a field that contains the name of the authority/agency, community, private organization responsible who owns the site (where available).

Table 13. Ownership Type and Sub-Type definitions

Ownership Type ⁸	Sub-Type ⁸	Definition
Public	National/Federal	Land belongs to all citizens, held by the national/federal government
	State/Province	Land belongs to all citizens, held by the state/provincial government
	Local/Municipal	Land belongs to all citizens, held by the local/municipal government
Community Conserved Areas	Community	Land belongs to one or more communities
	Indigenous	Land belongs to one or more indigenous groups

⁸ Where the ownership type and/or sub-type are unknown, the option of ‘Not Known’ will be used.

Joint or Co-Ownership	NA	Joint/Co-Ownership by two or more entities (e.g. public and private, public and community)
Private	NA	Land not under public control e.g. NGO, individuals, corporations

3.0 Appendix

The following section includes the terms of use for the WDPA Annual Release 2009 and an outline of the technology employed in the new WDPA.

3.1 Terms of Use for the WDPA Annual Release 2009

Access to all WDPA data (or the "WDPA materials") is provided on the understanding that the end-user read and consents to be bound to the terms outlined in these Terms and Conditions of Use.

PLEASE READ THESE TERMS AND CONDITIONS CAREFULLY. IF YOU DO NOT AGREE TO ANY OF THE TERMS AND CONDITIONS DO NOT DOWNLOAD

NO COMMERCIAL USE

The WDPA and any derivatives must not be used or made available for any Commercial Purpose without permission. Any use of WDPA content by an individual or entity operating within or on behalf of or to the benefit of any organisation other than a not-for-profit organisation will be deemed to be for a Commercial Purpose and will constitute a breach of the Terms and Conditions. To apply for permission for commercial use please send an email to wdpacommercial@unep-wcmc.org outlining your needs.

NO SUB-LICENSING OR REDISTRIBUTING OF WDPA DATA

The WDPA may not be sub-licensed in whole or in part without permission. You may not redistribute the attributes or spatial data contained in the WDPA in whole or in part by any means including (but not limited to) digitally, via web downloads, through web services, interactive web maps or file transfer protocols. If you know of others who wish to use the WDPA we suggest you refer them to this website. If you wish to provide a service through which the attributes and/or spatial data of the WDPA are downloadable or otherwise made available for redistribution, please contact protectedareas@unep-wcmc.org for further guidance.

PUBLISHING THE WDPA

You may publish the WDPA in whole or in part, including on-line, providing the attributes and spatial data are not downloadable. You must ensure that the latest released version of the WDPA Materials is being used and the year of release is visible. Material published online must provide a clear link to the original WDPA and the attribution below must be clearly visible in all publications. We recommend that you have the material reviewed by UNEP-WCMC and/or the IUCN-WCPA prior to publication and we require two copies of all published materials be lodged free of charge with the supplier of the dataset, preferably in electronic format via: protectedareas@unep-wcmc.org

ATTRIBUTION

You must ensure that the attribution set out below is always clearly reproduced in the use of any part of the WDPA in any format, so that individual users are made aware of it:

World Database on Protected Areas (WDPA) Annual Release 2009 (web download version), February 2009. The WDPA is a joint product of UNEP and IUCN, prepared by UNEP-WCMC, supported by IUCN WCPA and working with Governments, the Secretariats of MEAs and collaborating NGOs. For further information: protectedareas@unep-wcmc.org

WDPA UPDATES

Unless required to do so for specific analyses, you should not use any version of the WDPA after it has been superseded by a subsequent version. It is your responsibility to check if an update of the WDPA is available.

NO WARRANTY AND WAIVER OF LIABILITY

The WDPa is provided to you ‘as is’, and no warranty of any kind is given. In consideration of the rights granted in this download, you hereby waive and release UNEP, IUCN and WCMC 2000 from any liability whatsoever and howsoever arising in connection with use of the WDPa. You agree that this waiver and release is effective in any and every jurisdiction in the world. UNEP, IUCN and WCMC 2000 will not be responsible for negligence, strict liability or otherness in the use of WDPa data by you or other users as a result of WDPa data being posted on any website following this download. You download the WDPa at your own discretion and risk and are solely responsible in the event of any damage occurring to computer systems as a result of attempts to download WDPa data.

FEEDBACK AND REVISED INFORMATION

In order to keep the WDPa up to date, UNEP and IUCN would like you to provide feedback on the quality, reliability and accuracy of the WDPa. We also welcome revised information on the WDPa in the form of GIS data, electronic images, paper maps, tables, GPS coordinates, and/or in any other useable format. Such contributions should be free of restrictions. The objective is to improve the WDPa for the benefit of the global conservation community. You can register to submit electronic protected area data via the WDPa website.

LAW AND JURISDICTION

Any dispute arising out of or in connection with this download and the subsequent use of the WDPa shall be settled by amicable negotiation between you and the supplier of the dataset. Should attempts at amicable negotiation fail, any such dispute shall, upon request by either you or the supplier of the WDPa, be referred to arbitration in accordance with the UNCITRAL arbitration rules then prevailing.

COMMUNICATION

Any communication with respect to these Terms and Conditions and any issue arising from them shall be in writing, in English, and sent by email. The address for communication with the WDPa supplier is: protectedareas@unep-wcmc.org

3.2 Technology behind the WDPa

The redeveloped WDPa is a web enabled spatial database platform built using GIS, web and database technologies. The spatial database platform is supported by ESRI ArcGIS Server 9.3 and SQL Server 2005. The web interface has been built using ASP.NET, ArcGIS Server Map Services and the Google Earth plug-in for map display. Internal data validation processes (geography, geometry, topology and attributes) have been developed using the ArcGIS Geoprocessing framework, Safe Software’s Feature Manipulation Engine (FME) and ESRI’s ArcObjects.

During 2009 new functionality, such as online data upload, tabular download and statistical tools will be added. Further assistance and guidelines on submission of data and technical instructions on the restructuring or translation between datasets to comply with the WDPa data structure can be obtained from UNEP-WCMC, please contact protectedareas@unep-wcmc.org for more information.