

Protected Areas Resilient to Climate Change, PARCC West Africa



2015

PARCC Project Training Manual Module 1. Protected areas and the WDPA



ENGLISH



DICE
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INTERNATIONAL



UNEP-WCMC

2015

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Chapter 1. What is a protected area

Protected Area Data and the World Database on Protected Areas (WDPA)



A closer look at the definition of a Protected Area

A clearly defined geographical space...	A spatially defined area of land, inland water, coast or sea with agreed and demarcated borders...
...through legal or other effective means...	Implies specific binding commitment to designate the area through gazetted/non-gazetted means: statutory law, international convention/agreement, traditional or community rules or the policies of private institutions and NGOs.
...to achieve the long-term conservation of nature	The in-situ maintenance of biodiversity and good diversity in perpetuity
...and associated ecosystem services and cultural values.	Those that are related to but do not interfere with the aim of nature conservation.



What is a Protected Area?



Yellowstone NP, USA
Grand Canyon NP, USA
Galapagos Islands NP, Ecuador
Namib Naukluft NP, Namibia



All six protected area categories share some common objectives

- Conserve the composition, structure, function and evolutionary potential of biodiversity
- Contribute to regional conservation strategies
- Maintain diversity of landscape or habitat and of associated species and ecosystems
- Be of sufficient size to ensure the integrity and long-term maintenance of the specified conservation targets or be capable of being increased to achieve this end
- Maintain the values for which it was assigned in perpetuity
- Be operating under the guidance of a management plan, and a monitoring and evaluation programme that supports adaptive management
- Possess a clear and equitable governance system.



The WDPA uses the IUCN definition of a protected area

IUCN definition
"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."
Dudley et al., [Ed] 2008. Guidelines for applying protected areas management categories

<http://data.iucn.org/dbtw-wpd/edocs/PAPS-016.pdf>



Category Ia: Strict nature reserve

Description	Strictly protected areas: human visitation, use and impacts are strictly controlled and limited
Primary objective	To conserve regionally, nationally or globally outstanding ecosystems, species (occurrences or aggregations) and/ or biodiversity features: these attributes will have been formed mostly or entirely by non-human forces and will be degraded or destroyed when subjected to all but very light human impact.
Likely size	Often small – no-go areas
Key features	<ul style="list-style-type: none"> Largely complete set of expected native species in ecologically significant densities Full set of expected native ecosystems, largely intact with intact ecological processes Be free of significant direct intervention by modern humans Be surrounded when feasible by land uses that contribute to the achievement of the area's specified conservation objectives Be capable of being managed to ensure minimal disturbance



Category Ib: Wilderness area	
Description	Usually large unmodified or slightly modified areas without permanent or significant human habitation
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
Likely size	Usually large – rationale is to protect a large-scale natural ecosystem
Key features	<ul style="list-style-type: none"> Be free of modern infrastructure, development and industrial extractive activity, including but not limited to roads, pipelines, power lines, cellphone towers... other permanent structures, mining... preferably with highly restricted or no motorized access Be characterized by a high degree of intactness: containing a large percentage of the original extent of the ecosystem Be free of inappropriate or excessive human use or presence...

Category IV: Habitat/species management area	
Description	Protect particular species or habitats. May need regular, active interventions to address the requirements of particular species or to maintain habitats
Primary objective	To maintain, conserve and restore species and habitats
Likely size	Often small – Where sites protect individual species they may be relatively small
Key features	<ul style="list-style-type: none"> Protect floral or faunal species of international, national or local importance <p>This may include:</p> <ul style="list-style-type: none"> Protection of particular species Protection of habitats Active management to maintain target species Active management of natural or semi-natural ecosystems Active management of culturally-defined ecosystems

Category II: National park	
Description	Large natural or near natural areas set aside to protect large-scale ecological processes
Primary objective	To protect natural biodiversity along with its underlying ecological structure and supporting environmental processes, and to promote education and recreation.
Likely size	Usually large – conservation of ecological processes suggests areas should contain said processes
Key features	<ul style="list-style-type: none"> Large enough to conserve a functioning "ecosystem", although to be able to achieve this, the PA may need to be complemented by sympathetic management in surrounding areas contain representative examples of major natural regions, and biological and environmental features or scenery be of sufficient size and ecological quality so as to maintain ecological functions and processes should be to a great degree in a "natural" state or have the potential to be restored to such a state

Category V: Protected landscape/seascape	
Description	Interaction of people and nature over time has produced an area of distinct character with significant ecological, biological, cultural and scenic value
Primary objective	To protect and sustain important landscapes/seascapes and the associated nature conservation and other values created by interactions with humans through traditional management practices.
Likely size	Usually large – mosaics of different approaches to achieve conservation across a landscape
Key features	<ul style="list-style-type: none"> Landscape and/or coastal and island seascape of high and/or distinct scenic quality and with significant associated habitats, flora and fauna and associated cultural features; A balanced interaction between people and nature that has endured over time and still has integrity, or where there is reasonable hope of restoring that integrity; Unique or traditional land-use patterns, e.g., as evidenced in sustainable agricultural and forestry systems and human settlements that have evolved in balance with their landscape

Category III: Natural monument or feature	
Description	set aside to protect a specific natural monument – often with a high visitor value
Primary objective	To protect specific outstanding natural features and their associated biodiversity and habitats.
Likely size	Usually small – natural monuments and features would typically be small
Key features	<ul style="list-style-type: none"> Focus on one or more prominent natural features and the associated ecology, rather than on a broader ecosystem <p>"Natural Monuments" might include:</p> <ul style="list-style-type: none"> Natural geological and geomorphological features Culturally-influenced natural features Natural-cultural sites Cultural sites with associated ecology

Category VI: Sustainable use of natural resources	
Description	Conserve ecosystems and habitats, together with associated cultural values and traditional natural resource management systems where low-level non-industrial use of natural resources compatible with nature conservation
Primary objective	To protect natural ecosystems and use natural resources sustainably, when conservation and sustainable use can be mutually beneficial.
Likely size	Usually large – extensive management approach
Key features	<ul style="list-style-type: none"> Uniquely amongst the IUCN categories system, have the sustainable use of natural resources as a means to achieve nature conservation Aim to conserve ecosystems and habitats, together with associated cultural values and natural resource management systems IUCN recommends that a proportion of the area is retained in a natural condition

There are different designations of protected areas in the WDPA

National	Regional	International
<ul style="list-style-type: none"> IUCN Categories I-VI Indigenous & Community Conserved Areas Private Protected Areas 	<ul style="list-style-type: none"> Natura 2000 sites Barcelona Convention sites ASEAN Heritage Parks 	<ul style="list-style-type: none"> UNESCO World Heritage Sites Ramsar Wetlands of International Importance UNESCO Man & Biosphere Reserves



International Sites don't receive an IUCN management category

In practice, almost all **World Heritage Sites** overlay a national protected area, which should have an IUCN category



Many **Ramsar Sites** also overlay a national site – but note that the boundaries of Ramsar sites may not follow the underlying national site




Reminder: The *Biodiversity A-Z glossary* has information on these designations




World Heritage Sites are created for their “Outstanding Universal Value”

- Created as Natural, Cultural or Mixed sites
- Total of 936 sites exist (Mar 2012)
- 183 are Natural, 27 Mixed
- WHS must be legally protected
- A list of WHS in danger is maintained
- Some sites have been delisted due to threats; the first example of such was due to extractive activity



Governance types vary by protected area and country

Who has responsibility and is held accountable for decisions about a given protected area?

- The government (and its agencies at various levels)
- Various parties (co-management)
- Owners of the concerned land and natural resources (individuals, corporate actors...)
- Indigenous peoples and local communities



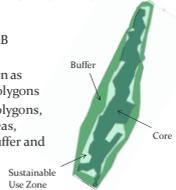
Ramsar sites are created to protect an international network of wetlands

- There are 1,997 sites globally
- They are recognised by 160 contracting parties (governments) as Wetlands of International Importance
- The designation was created by an international convention
...but Ramsar sites do not necessarily have to be legally protected



UNESCO MAB reserves have a Core Area, Buffer and Transition Zone

- Data quality for UNESCO MAB reserves varies
- The majority of sites are shown as buffered points rather than polygons
- Where the WDPA contains polygons, some may be only the core areas, whereas other may include buffer and transition zones



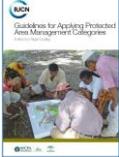
The diagram illustrates a protected area with three distinct zones. The innermost zone is labeled 'Core', the middle zone is labeled 'Buffer', and the outermost zone is labeled 'Sustainable Use Zone'. The zones are represented by concentric, irregular shapes.



IUCN also provide guidance on protected areas

Includes:

- A full explanation of the definition of a protected area
- Principles associated with the use of the definition
- Full explanation of each of the categories and examples
- Introduction to governance types and zones
- Detailed discussion



The image shows the cover of a document titled 'Guidelines for Applying Protected Area Management Categories' published by IUCN. The cover features a photograph of people in a field and the IUCN logo.

 <http://data.iucn.org/dbtw-wpd/edocs/PAPS-016.pdf>

Chapter 2. The WDPA

How do we identify and map protected areas?

Logos shown: UNEP, IUCN, WCPA, PAD-US, Ramsar, IUCN, WCPA, CCEA, KNPS, BirdLife, WWF, The Nature Conservancy.

Pyramid levels:
 - Top: WDPA
 - Middle: Regional data providers: International secretariats, NGOs
 - Bottom: National data providers: World Commission on Protected Areas, Local Authorities and Experts

The WDPA is a baseline data set with a 30+ year history...

1981: 40,000 protected areas covering 7,000,000 km²

The WDPA is managed in Partnership with UNEP and IUCN

Timeline milestones:
 - 1962: UN List of National Parks and Equivalent Reserves
 - 1978: IUCN Categories First Developed
 - 1981: World Database on Protected Areas established
 - 2006: Protected Planet partnership focuses on improving WDPA
 - 2008: WDPA.org makes WDPA publicly accessible on-line
 - 2010: Protected Planet.org crowd-sourcing the WDPA and promoting stewardship
 - 2012

...and has emerged as the authoritative global inventory of PAs

2011: 180,000+ protected areas covering 12% of the world

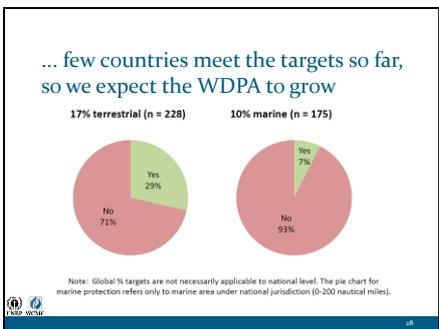
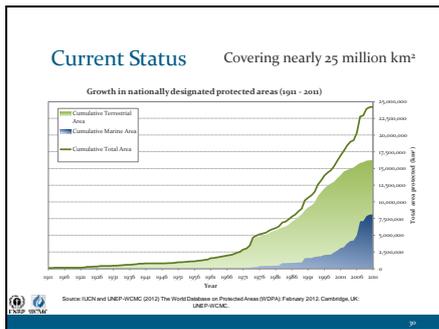
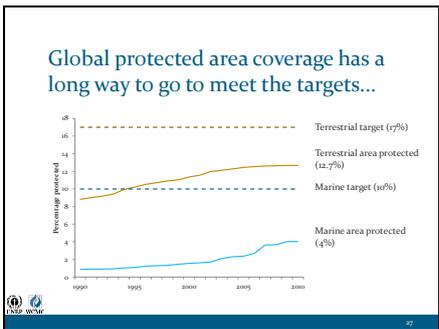
Uses of the WDPA

- Global reporting: MDGs, GBO, GEO
- Governments and NGOs: gap and threat analyses; coverage of protected areas; decision making
- Scientists: global analyses of the protection status of the world's ecosystems, forests, etc...
- Private sector: consult the WDPA to comply with environmental safeguard policies

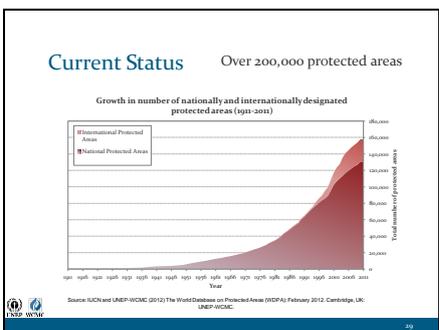
International conservation targets are driving protection 2011-2020

Target 11 of the Aichi Targets on protected areas coverage :

"By 2020, at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes."



- ### 2011 was a record year for data updates
- 40% of sites in the WDPA were reviewed or updated
 - 40,000 new sites
 - 35,000 updated sites
 - 5,000 sites removed
 - Significant New Data Sets (Natura 2000, Arctic PAs - CAFF, Ospar High Seas Marine PAs, Helcom Baltic Sea Marine PAs)
- UNEP WFP



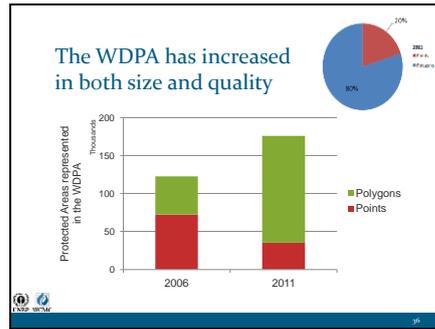
- ### Good Quality is achieved through: Standards, Updates and Validation
- Standards setting:** WDPA Data Standards
 - Updates:** Every country in the world in five years
 - Validation:** Expert Reviews, World Commission on Protected Areas, Stakeholder Engagement
- Focus on Quality**
- UNEP WFP

WDPA Standards for Global Interoperability

1. All protected areas must fit the IUCN definition of protected area
2. The data must be spatial
3. Minimum attributes for each protected area must be included
4. Source information must be provided for the data



IUCN WFP

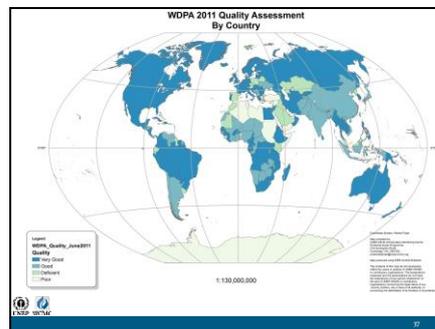


WDPA attribute data standards

- 22 fields
- Uses ISO and IUCN terminology
- Supports multiple languages
- Sets clear requirements: Minimum/Core/Enhanced
- Encourages data stewardship



IUCN WFP

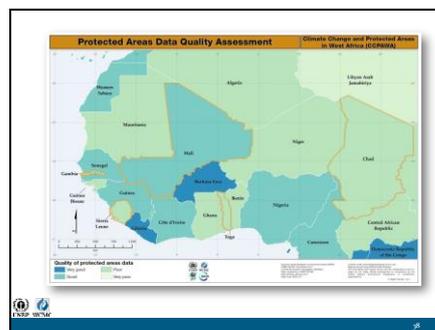


Validation, Verification and Expert Review improves WDPA quality

- Focused Expert Reviews on regions of the world
- As a result of data sharing partnerships
- Dialogue with providers
- Protected Planet.net




IUCN WFP



Importance of protected area conservation standards

Allow for:

- Comparison between countries
- Regional strategies
- Measure and monitor at global scale

Most important for international work from IUCN:

- Definition of a protected area
- Management objective
- Governance type



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Protected Planet Screenshot for West Africa




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Through Protected Planet the WDPA is interactive and searchable

Goal: Protected Planet is the global platform for the acquisition, exchange and communication of information and knowledge on protected areas [...]

1. Improve data quality
2. Add context
3. Improve search functionality
4. Build framework for interoperability
5. Reduce burden on UNEP-WCMC
6. Improve interactions with all users





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Standing on the shoulders of Giants

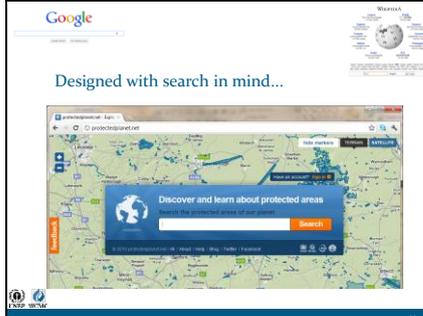



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Designed with search in mind...




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It is international: Search in any language, any character set (UTF-8)

Discover and learn about protected areas

Search the protected areas of our planet

Search

- Національний парк Схід
- Национальный парк Сибирь
- Ардан
- Ардан Мундир
- Национальный парк Сибирь

protectedplanet.net

Sofeevka Romanivshchina Regional Zakaznik

Each PA has a page, with the official record and contextual info

Serengeti National Park

From each protected area page you can access species information

protected area

Official Data Provider

Species information

185

Registered users can interact with the data

- Rank photos and add Wikipedia descriptions
- Edit data on-line
- Edit boundaries
- View users' (stakeholder) opinions
- Reconcile data

Species data are provided through integration with the IUCN RedList

185 species - other ranges matching with the protected area boundaries

Filter species

IUCN Red List of Threatened Species™

Each species panel links directly to RedList range maps



The screenshot shows a web interface for a species' range map. The map displays the geographical distribution of the species in West Africa, with a yellow highlighted area indicating the range. The map includes labels for countries such as Nigeria, Chad, Sudan, and the Democratic Republic of the Congo. A sidebar on the right contains a search bar and a list of species, with the selected species highlighted in red. The interface also features a legend and a scale bar.

UNEP WWF

Now it's your turn...
www.protectedplanet.net



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