Convention on Biological Diversity

UNDP

Aichi Biodiversity Target 11 Country Dossier: PERU

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TABLE OF CONTENTS

GLOSSARY

AZEs	Alliance for Zero Extinction sites
CEPF	Critical Ecosystem Partnership Fund
EBSA	Ecologically or Biologically Significant Marine Area
EEZ	Exclusive Economic Zone
GCF	Green Climate Fund
GD-PAME	Global Database on Protected Area Management Effectiveness
GEF	Global Environment Facility
IBA	Important Bird and Biodiversity Area
ICCAs	Indigenous and Community Conserved Area Area (may also be referred to as territories and areas conserved by Indigenous peoples and local communities or "territories of life")
IPLC	Indigenous Peoples and Local Communities
KBA	Key Biodiversity Area
MEOW	Marine Ecosystems of the World
MPA	Marine Protected Area
NBSAP	National Biodiversity Strategy and Action Plan
OECM	Other Effective Area-Based Conservation Measures
PA	Protected Area
PAME	Protected Area Management Effectiveness
PPA	Privately Protected Area
PPOW	Pelagic Provinces of the World
ProtConn	Protected Connected land indicator
SOC	Soil Organic Carbon
TEOW	Terrestrial Ecosystems of the World
WDPA	World Database on Protected Areas
WD-OECM	World Database on Other Effective Area-Based Conservation Measures

Disclaimer

The designations employed and the presentation of material in this dossier do not imply the expression of any opinion whatsoever on the part of the Secretariat of the Convention on Biological Diversity (SCBD) or United Nations Development Programme (UNDP) concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. The information contained in this publication do not necessarily represent those of the SCBD or UNDP.

This country dossier is compiled by the UNDP and SCBD from publicly available information. It is prepared, within the overall work of the Global Partnership on Aichi Biodiversity Target 11, for the purpose of attracting the attention of the Party concerned and other national stakeholders to facilitate the verification, correcting, and updating of country data. The statistics might differ from those reported officially by the country due to differences in methodologies and datasets used to assess protected area coverage and differences in the base maps used to measure terrestrial and marine area of a country or territory. Furthermore, the suggestions from the UNDP and SCBD are based on analyses of global datasets, which may not necessarily be representative of national policy or criteria used at the national level. The analyses are also subject to the limits inherent in global indicators (precision, reliability, underlying assumptions, etc.). Therefore, they provide useful information but cannot replace analyses at a national level nor constitute a future benchmark for national policy or decision-making.

The preparation of this dossier was generously supported by: the Government of the Federal Republic of Germany, *Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GMbH*; the European Commission; the Government of the United Kingdom of Great Britain and Northern Ireland; and the Government of Japan (Japan Biodiversity Fund). The dossier does not necessarily reflect their views.

EXECUTIVE SUMMARY

This document provides information on the coverage of protected areas (PAs) and other effective area-based conservation measures (OECMs), as currently reported in global databases (the World Database on Protected Areas (WDPA) and World Database on Other Effective Area-Based Conservation Measures (WD-OECM)). It also includes details on the status of the other qualifying elements of Aichi Biodiversity Target 11 based on this data. These statistics might differ from those reported officially by countries due to difference in methodologies and datasets used to assess protected area coverage, differences in the base maps used to measure terrestrial and marine area of a country or territory, or if global datasets differ from the criteria and indicators used at the national level. This dossier also provides a summary of commitments made under Aichi Biodiversity Target 11, and a summary of potential opportunities regarding elements of the target for future planning.

The dossier has been developed in consultation with the UN Environment Programme World Conservation Monitoring Centre (UNEP-WCMC), which manages the WDPA, WD-OECM and Global Database on Protected Area Management Effectiveness (GD-PAME). Parties to the CBD are requested to contact protectedareas@unep-wcmc.org with any updates to the information in these databases.

Aichi Biodiversity Target 11 Elements: Current status and opportunities for action

Coverage - Terrestrial & Marine

- **Status:** as of May 2021, terrestrial coverage in Peru is 280,940.6 km^2 (21.6%) and marine coverage is 4,036.8 km^2 (0.5%).
- **Opportunities for action:** opportunities for the near-term include updating the WDPA with any unreported PAs, and the recognizing and reporting OECMs to the WD-OECM. In the future, focus on relatively intact areas, while addressing the elements in the following sections, could be considered when planning new PAs or OECMs.

Ecological Representativeness– Terrestrial & Marine

- **Status:** Peru contains 18 terrestrial ecoregions, 3 marine ecoregions, and 1 pelagic province: the mean coverage by reported PAs and OECMs is 21.3% (terrestrial), 4.2% (marine), and 0.0% (pelagic); 1 terrestrial ecoregion has no coverage by reported PAs and OECMs (1 marine ecoregion and 1 pelagic province have <0.1% coverage).
- **Opportunities for action:** there is opportunity for Peru to increase protection in terrestrial and marine ecoregions and pelagic provinces that have lower levels of coverage by PAs or OECMs. Ecoregions which currently have no coverage by PAs or OECMs are key areas for action.

Areas Important for Biodiversity

- **Status:** Peru has 155 Key Biodiversity Areas (KBAs): the mean protected coverage of KBAs by reported PAs and OECMs is 29.9%, while 80 KBAs have no coverage by reported PAs and OECMs.

- **Opportunities for action:** there is opportunity for Peru to increase protection of KBAs that have lower levels of coverage by PAs and OECMs; priority could be given to those with no current coverage.

Areas Important for Ecosystem Services

- **Status:** coverage of areas important for ecosystem services: In Peru, 30.6% of aboveground biomass carbon, 28.5% of belowground biomass carbon, 22.6% of soil organic carbon, 0.5% of carbon stored in marine sediments is covered by PAs and OECMs.

- **Opportunities for action:** for carbon, there is opportunity for Peru to increase PA and OECM coverage in both marine and terrestrial areas with high carbon stocks. Protecting areas with high carbon stocks secures the benefits of carbon sequestration in the area.

- For water, there is opportunity to increase the area of the water catchment under protection by PAs and OECMs, or in cases where there is high levels of protection, focus on effective management for these areas. Protecting the current area of forested land and potentially reforesting would have benefits for improving water security.

Connectivity and Integration

- **Status:** coverage of protected-connected lands is 8.3%.

- **Opportunities for action:** there is opportunity for a targeted increase in connecting PAs or OECMs and to focus on PA and OECM management for enhancing and maintaining connectivity. Improving connectivity increases the effectiveness of PAs and OECMs and reduces the impacts of fragmentation.

- As well, a range of suggested steps for enhancing and supporting integration are included in the voluntary guidance on the integration of PAs and OECMs into the wider land- and seascapes and mainstreaming across sectors to contribute, inter alia, to the SDGs (Annex I of COP Decision 14/8),

Governance Diversity

- **Status:** the most common governance type(s) for reported PAs in Peru is: 37.9% under Government (22.7% Federal or national ministry or agency; 9.1% sub-national ministry or agency; 6.1% Government-delegated management).

- **Opportunities for action:** explore opportunities for governance types that have lower representation, for Peru this could relate to shared governance, etc.

- There is also opportunity for Peru to complete governance and equity assessments, to establish baselines and identify relevant actions for improvement. Examples of existing tools and methodologies include: Governance Assessment for Protected and Conserved Areas (Franks & Brooker, 2018), Social Assessment of Protected Areas (Franks et al 2018), and Site-level assessment of governance and equity (IIED, 2020). As well, a range of suggested actions are included in the voluntary guidance on effective governance models for management of protected areas, including equity (Annex II of COP Decision 14/8).

Protected Area Management Effectiveness

- **Status:** 65.2% of terrestrial PAs and 99.8% of marine PAs have completed Protected Area Management Effectiveness (PAME) assessments reported.

- **Opportunities for action:** the 60% target for completed management effectiveness assessments (per COP Decision X/31) **has** been met for terrestrial PAs and **has** been met for marine PAs. Further increasing this percentage for terrestrial PAs could be beneficial overall for understanding how well protected areas are being managed.

- There is also opportunity to implement the results of completed PAME evaluations, to improve the quality of management for existing PAs and OECMs (e.g. through adaptive management and information sharing, increasing the number of sites reporting 'sound management') and to increase reporting of biodiversity outcomes in PAs and OECMs.

INTRODUCTION

The Strategic Plan for Biodiversity 2011-2020 was adopted at the tenth meeting of the Conference of the Parties (COP) to the Convention on Biological Diversity (CBD) held in Nagoya, Aichi Prefecture, Japan from 18-29 October 2010. The vision of the Strategic Plan is one of "Living in harmony with nature" where *"By 2050, biodiversity is valued, conserved, restored and wisely used, maintaining ecosystem services, sustaining a healthy planet and delivering benefits essential for all people"* (CBD, 2010). In addition to this vision, the Strategic Plan is composed of 20 targets, under five strategic goals. Aichi Biodiversity Target 11 states that *"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."*

With the conclusion of the Aichi Biodiversity Targets in 2020, Target 11 on area-based conservation has seen success in the expansion of the global network of protected areas (PA) and other effective area-based conservation measures (OECMs). The negotiation of the post-2020 Global Biodiversity Framework (GBF) and its future targets provide an essential opportunity to further improve the coverage of PAs and OECMs, to improve other aspects of area-based conservation, to accelerate progress on biodiversity conservation more broadly, while also addressing climate change, and the Sustainable Development Goals. This next set of global biodiversity targets are to be adopted at the fifteenth meeting of the Conference of the Parties to the Convention on Biological Diversity. These new targets must aim to build upon lessons learned from the last decade of progress to deliver transformative change for the benefit of nature and people, to realize the 2050 Vision for biodiversity.

The United Nations Development Programme (UNDP) and the Secretariat of the Convention on Biological Diversity have developed the Aichi Biodiversity Target 11 Country Dossiers, which provide countries with an overview of the status of Target 11 elements, opportunities for action, and a summary of commitments made by Parties over the last decade. Each dossier can support countries in assessing their progress on key elements of Aichi Biodiversity Target 11 and identifying opportunities to prioritize new protected areas and OECMs.

This dossier provides an overview of area-based conservation in Peru. Section I of the dossier presents data on the current status of Peru's PAs and OECMs. The data presented in Section I relates to each element of Target 11. Section I also presents the PA and OECM coverage for two critical ecosystem services: water security and carbon stocks. In addition, the dossier presents potential opportunities for action for Peru, in relation to each Target 11 element. The analyses present options for improving Peru's area-based conservation network to achieve enhanced protection and benefits for livelihoods and climate change. Section II presents details on Peru's existing PA and OECM commitments as a summary of existing efforts towards achieving Target 11. This gives focus not only to national policy and actions but also voluntary commitments to the UN. Furthermore, where data is

available, this dossier provides information on potential OECMs, Indigenous and Community Conserved Areas (ICCAs; also, often referred to as territories and areas conserved by Indigenous peoples and local communities or "territories of life") and Privately Protected Areas (PPAs) and the potential contribution they will have in achieving the post-2020 targets.

The information on PAs and OECMs presented here is derived from the World Database on Protected Areas (WDPA) and World Database on Other Effective Area-Based Conservation Measures (WD-OECM). These databases are joint products of UNEP and IUCN, managed by UNEP-WCMC, and can be viewed and downloaded at www.protectedplanet.net. Parties are encouraged to provide data on their PAs and OECMs to UNEP-WCMC for incorporation into the databases (see e.g., Decisions 10/31 and 14/8). The significant efforts of Parties in updating their data in the build up to the publication of the Protected Planet Report 2020 (UNEP-WCMC and IUCN, 2021) were greatly appreciated. UNEP-WCMC welcomes further updates, following the data standards described here (www.wcmc.io/WDPA_Manual), and these should be directed to protectedareas@unep-wcmc.org. The statistics presented in this dossier are derived from the May 2021 WDPA and WD-OECM releases, unless explicitly stated otherwise. Readers should consult www.protectedplanet.net for the latest coverage statistics (updated monthly).

Some data from the WDPA and WD-OECM are not made publicly available at the request of the data-provider. This affects some statistics, maps, and figures presented in this dossier. Statistics provided by UNEP-WCMC (terrestrial and marine coverage) are based upon the full dataset, including restricted data. All other statistics, maps, and figures are based upon the subset of the data that is publicly available.

Where data is less readily available, such as for potential OECMs, ICCAs and PPAs, data has also been compiled from published reports and scientific literature to provide greater awareness of these less commonly recorded aspects. These data are provided to highlight the need for comprehensive reporting on these areas to the WDPA and/or WD-OECM. Parties are invited to work with indigenous peoples, local communities and private actors to submit data under the governance of these actors, with their consent, to the WDPA and/or WD-OECM.

Overall, PAs and OECMs are essential instruments for biodiversity conservation and to sustain essential ecosystem services that support human well-being and sustainable development, including food, medicine, and water security, as well as climate change mitigation and adaptation and disaster risk reduction. The data in this dossier, therefore, aims to celebrate the current contributions of PAs and OECMs, whilst the gaps presented hope to encourage greater progress, not just for the benefit of biodiversity and the post-2020 GBF, but also to recognize the essential role of PAs and OECMs to the Sustainable Development Goals and for addressing the climate crisis.

SECTION I: CURRENT STATUS

Aichi Biodiversity Target 11 refers to both protected areas (PAs) and other effective area-based conservation measures (OECMs). This section provides the current status for all elements of Aichi Biodiversity Target 11 where indicators with global data are available. Statistics for all elements are presented using data on both PAs and OECMs (where this data is available and reported in global databases like the WDPA and WD-OECM). It is recognized that statistics reported in the WPDA and WD-OECM might differ from those reported officially by countries due to differences in methodologies and datasets used to assess protected area coverage and differences in the base maps used to measure terrestrial and marine area of a country or territory. Details on UNEP-WCMC's methods for calculating PA and OECM coverage area available here. The global indicators adopted here for presenting the status of other elements of Target 11 may also differ from those in use nationally.

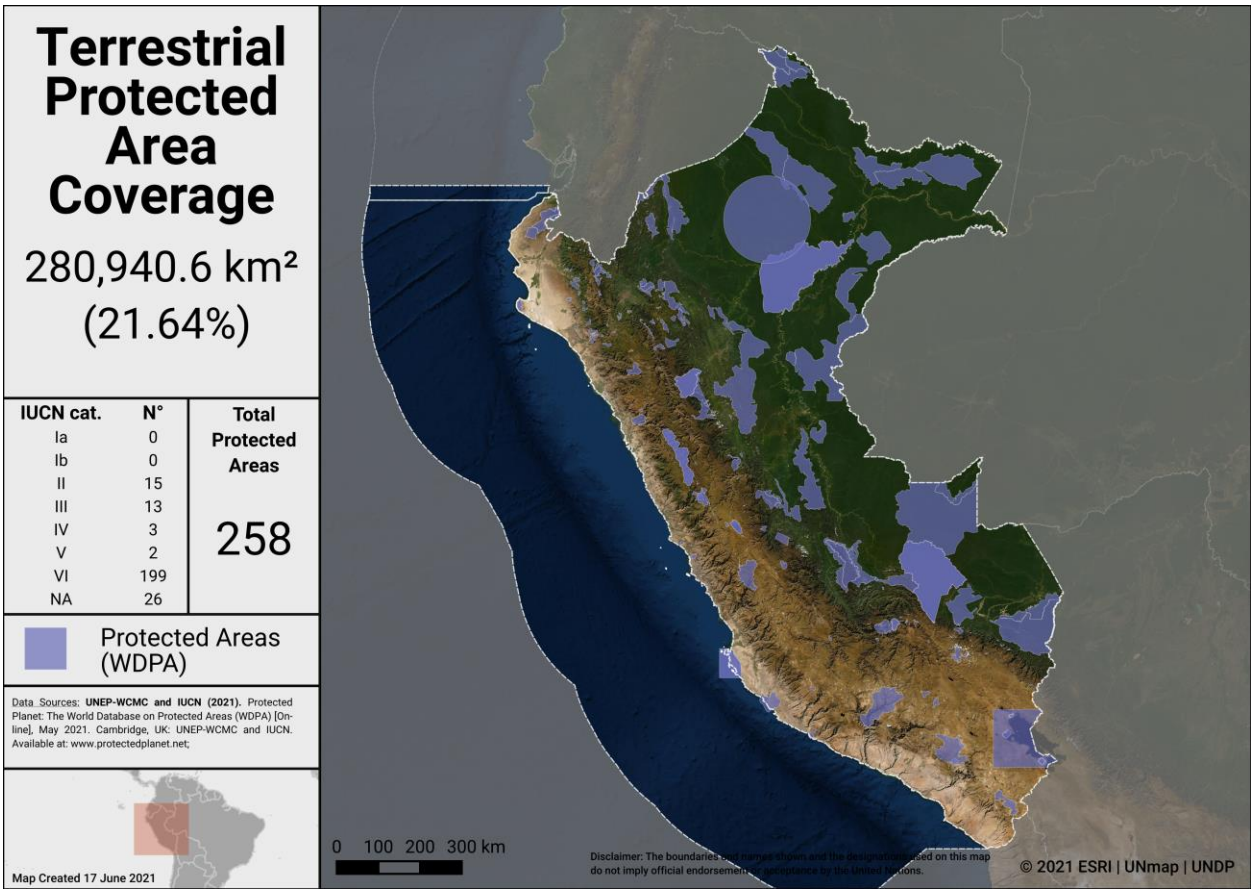
COVERAGE - TERRESTRIAL & MARINE

As of May 2021, Peru has **263** protected areas reported in the World Database on Protected Areas (WDPA). 4 UNESCO-MAB Biosphere Reserves are not included in the following statistics (see details on UNWP-WCMC's methods for calculating PA and OECM coverage **here**).

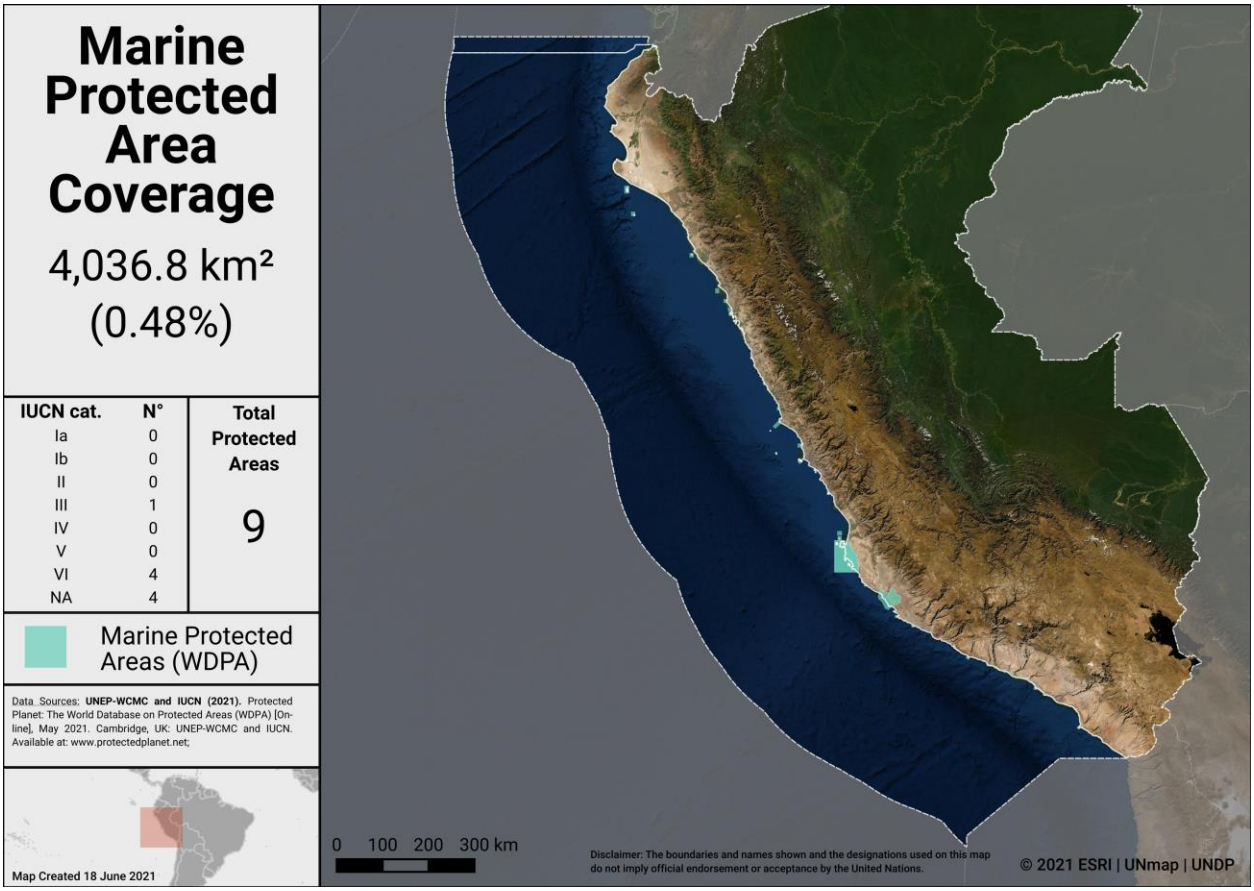
As of May 2021, Peru has **0** OECMs reported in the world database on OECMs (WD-OECM).

Current coverage for Peru:

- 21.6% terrestrial (258 protected areas, 280,940.6 km^2)
- 0.5% marine (9 protected areas, 4,036.8 km^2)



Terrestrial Protected Areas in Peru



Marine Protected Areas in Peru

Potential OECMs

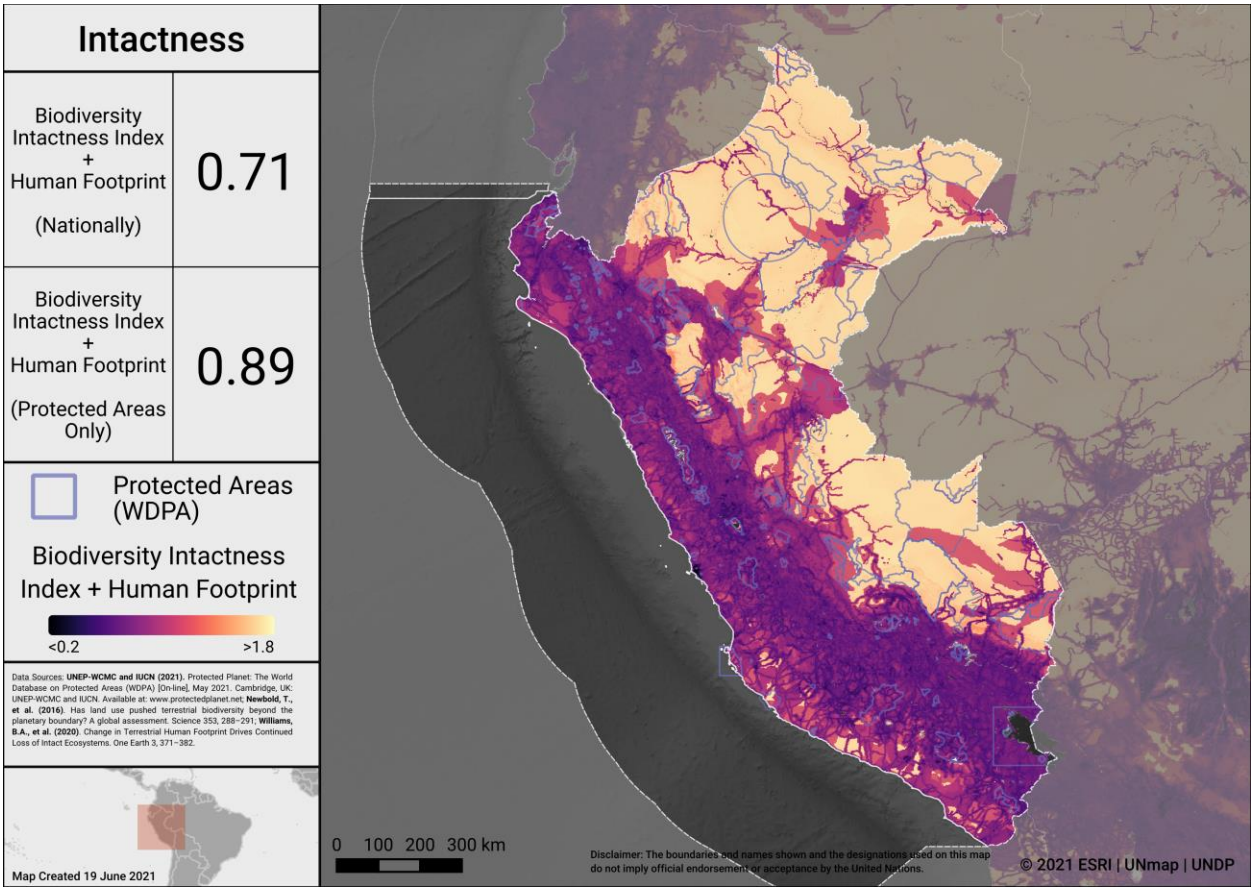
Examples of potential OECMs in Peru (identified in a collation of case studies; for full details see IUCN, 2017):

Potential OECM example	Area covered
Complejo de Humedales del Abanico del Río Pastaza	Not defined
"El Breo" Conservation Concession	113,000 ha

For additional details on these sites, see Annex I in this dossier.

Opportunities for action

Opportunities for the near-term include updating the WDPA with any unreported PAs, and the recognizing and reporting OECMs to the WD-OECM. In the future, as Peru considers where to add new PAs and OECMs, the map below identifies areas in Peru where intact terrestrial areas are not currently protected. Focus on relatively intact areas, while addressing the elements in the following sections, could be considered when planning new PAs or OECMs.



Intactness in Peru

To explore more on intactness visit the UN Biodiversity Lab: map.unbiodiversitylab.org.

ECOLOGICAL REPRESENTATIVENESS – TERRESTRIAL & MARINE

Ecological representativeness is assessed based on the PAs and OECMs coverage of broad-scale biogeographic units. Globally, ecoregions have been described for terrestrial areas (Dinerstein et al, 2017), marine coastal and shelf ecosystems (to a depth of 200m; Spalding et al 2007) and surface pelagic waters (Spalding et al 2012).

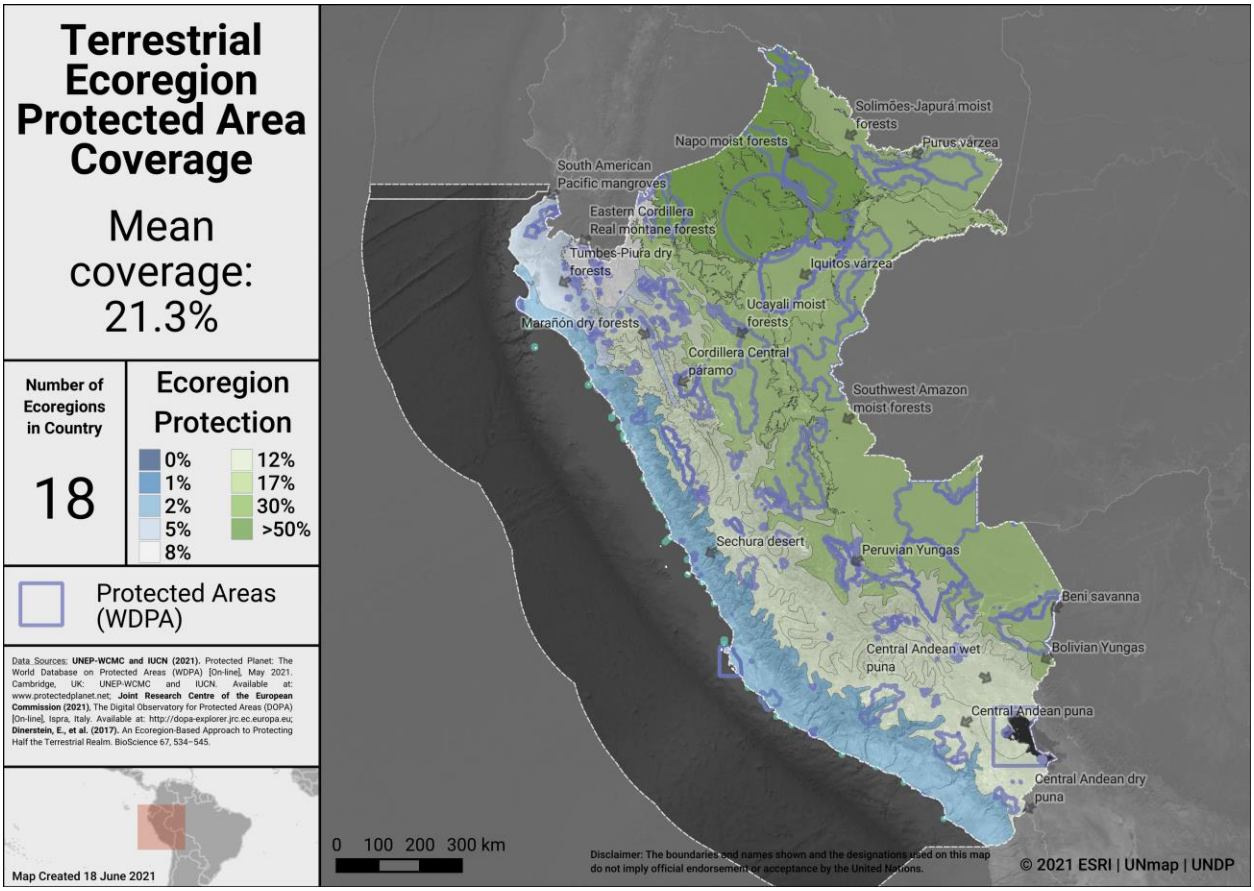
Peru has 18 **terrestrial** ecoregions. Out of these:

- 17 ecoregions have at least some coverage from PAs and OECMs.
- 7 ecoregions have at lea17% protected within the country.
- The average terrestrial coverage of ecoregions is 21.3%.

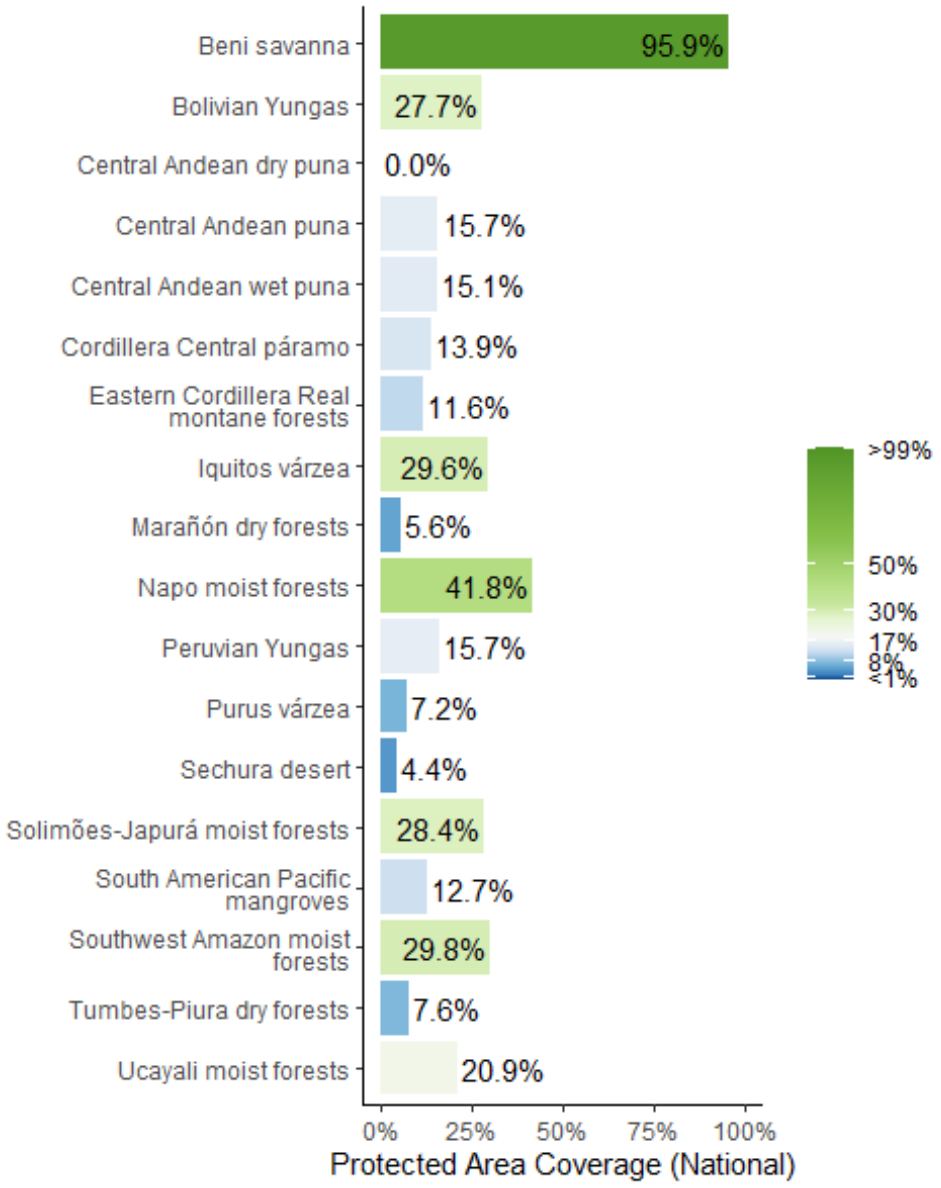
Peru has 3 **marine** ecoregions and 1 **pelagic province**. Out of these:

- All 3 marine ecoregions and 1 pelagic province have at least some coverage from reported PAs and OECMs.
- 1 marine ecoregion and 0 pelagic provinces have at least 10% protected within Peru's exclusive economic zone (EEZ).
- The average protected area coverage of marine ecoregions is 4.2% and the average protected area coverage of Pelagic Provinces is 0.0%.

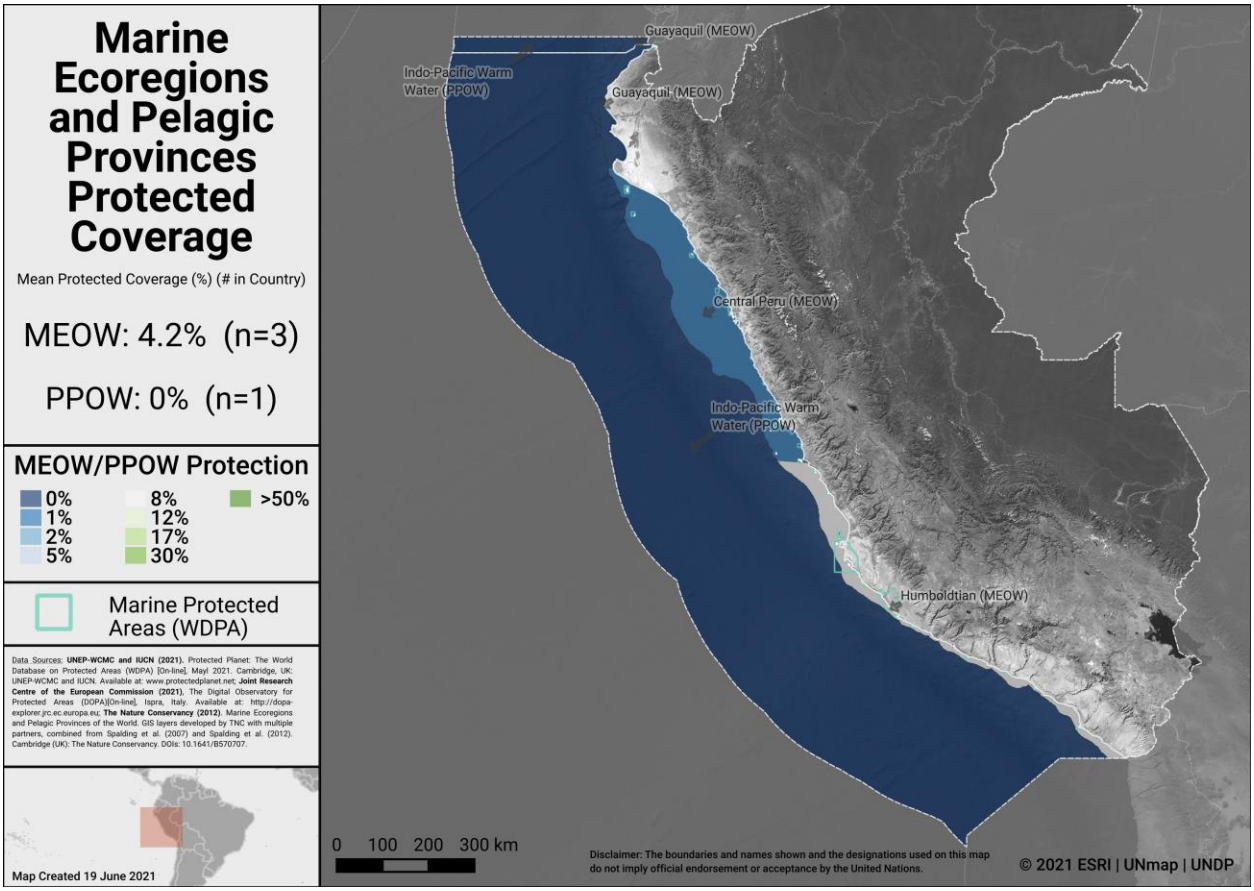
A full list of terrestrial ecoregions in Peru is available in Annex II.



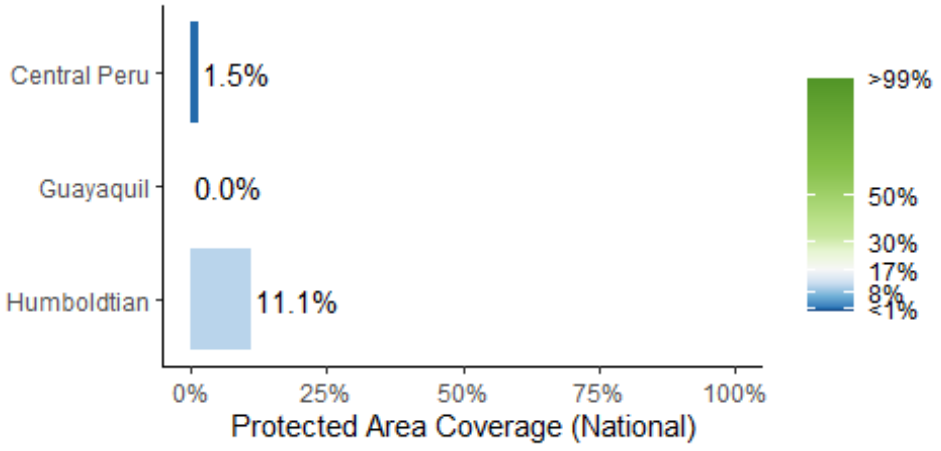
Terrestrial ecoregions in Peru



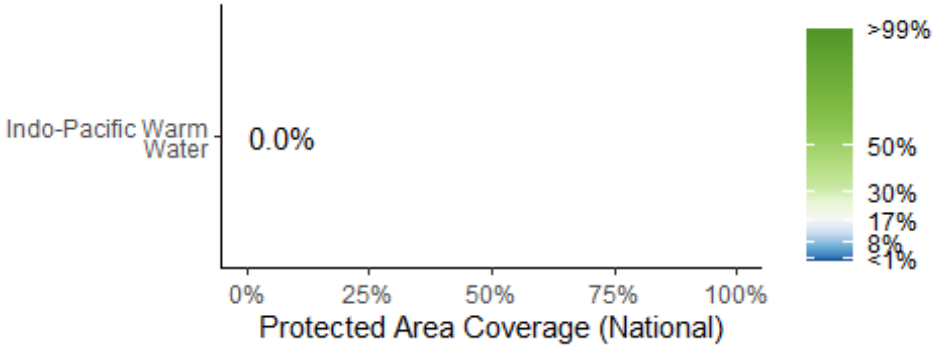
Terrestrial ecoregions of the World (TEOW) in Peru



Marine ecoregions and pelagic provinces



Marine Ecoregions of the World (MEOW) in Peru



Pelagic Provinces of the World (PPOW) in Peru

Opportunities for action

There is opportunity for Peru to increase protection in terrestrial and marine ecoregions and pelagic provinces that have lower levels of coverage by PAs or OECMs. Ecoregions which currently have no coverage by PAs or OECMs are key areas for action.

AREAS IMPORTANT FOR BIODIVERSITY

Key Biodiversity Areas (KBAs)

Protected area and OECM coverage of Key Biodiversity Areas (KBAs) provide one proxy for assessing the conservation of areas important for biodiversity at national, regional and global scales. KBAs are sites that make significant contributions to the global persistence of biodiversity (IUCN, 2016). The KBA concept builds on four decades of efforts to identify important sites for biodiversity, including Important Bird and Biodiversity Areas, Alliance for Zero Extinction sites, and KBAs identified through Hotspot ecosystem profiles supported by the Critical Ecosystem Partnership Fund. Incorporating these sites, the dataset of internationally significant KBAs includes Global KBAs (sites shown to meet one or more of 11 criteria in the Global Standard for the Identification of KBAs, clustered into five categories: threatened biodiversity; geographically restricted biodiversity; ecological integrity; biological processes; and irreplaceability), Regional KBAs (sites identified using pre-existing criteria and thresholds, that do not meet the Global KBA criteria based on existing information), and KBAs whose Global/Regional status is Not yet determined, but which will be assessed against the global KBA criteria within [illegible] years. Regional KBAs are often of critical international policy relevance (e.g., in EU legislation and under the Ramsar Convention on Wetlands), and many are likely to qualify as Global KBAs in future once assessed for their biodiversity importance for other taxonomic groups and ecosystems. To date, nearly 16,000 KBAs have identified globally, and information on each of these is presented in the World Database of Key Biodiversity Areas: www.keybiodiversityareas.org.

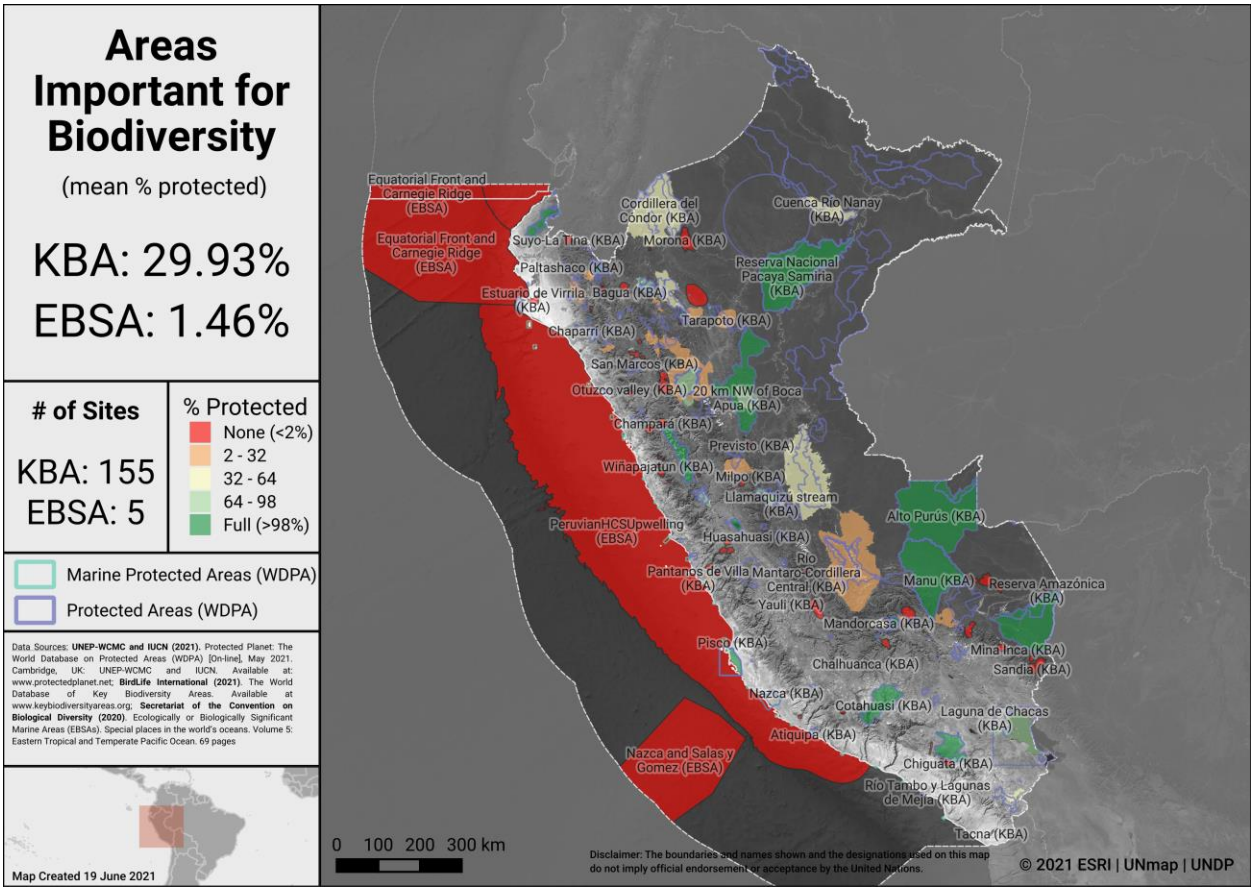
Peru has **155** Key Biodiversity Areas (KBAs).

- Mean percent coverage of all KBAs by PAs and OECMs in Peru is **29.9%**.
- **26** KBAs have full (>98%) coverage by PAs and OECMs.
- **49** KBAs have partial coverage by PAs and OECMs.
- **80** KBAs have no (<2%) coverage by PAs and OECMs.

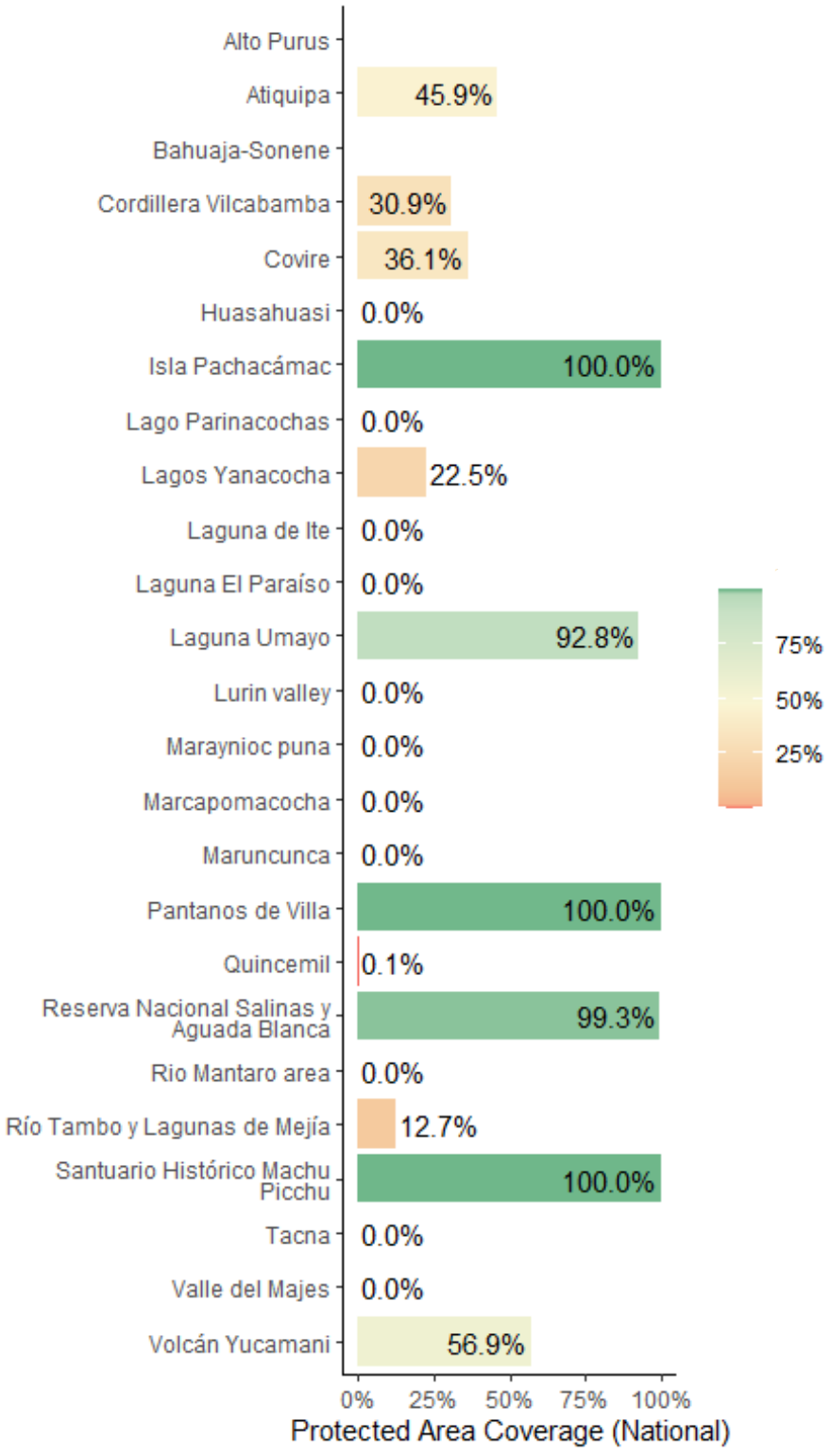
Ecologically or Biologically Significant Marine Areas (EBSAs)

Other important areas for biodiversity may also include Ecologically or Biologically Significant Marine Areas (EBSAs), which were identified following the scientific criteria adopted at COP-9 (Decision IX/20; see more at: https://www.cbd.int/ebsa/). Sites that meet the EBSA criteria may require enhanced conservation and management measures; this could be achieved through means including MPAs, OECMs, marine spatial planning, and impact assessment.

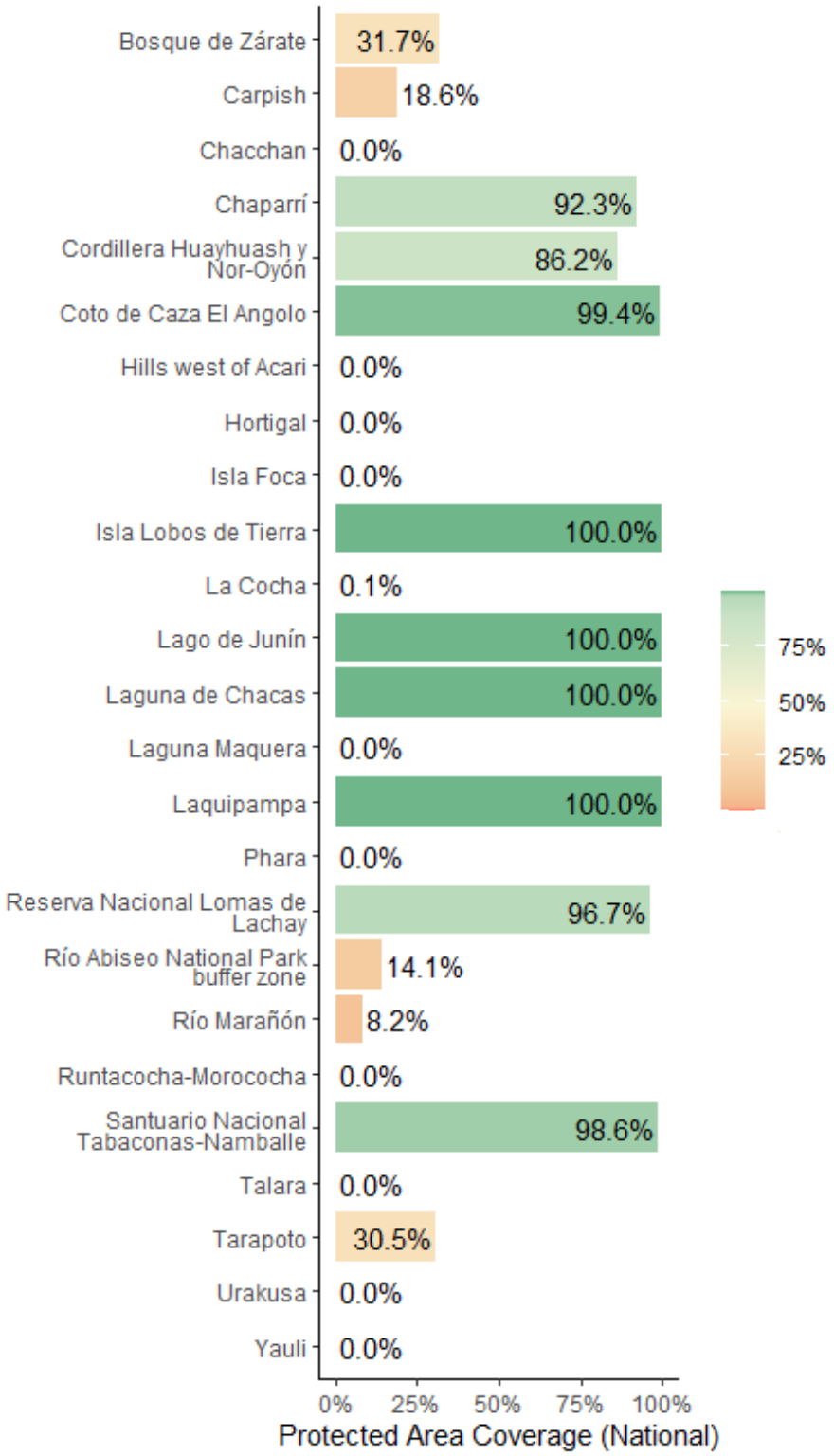
There are 5 EBSAs with some portion of their extent within Peru's EEZ, of which 3 EBSAs have <0.1% coverage from PAs and OECMs.



Areas Important for Biodiversity in Peru



Key Biodiversity Area Coverage (KBA) in Peru



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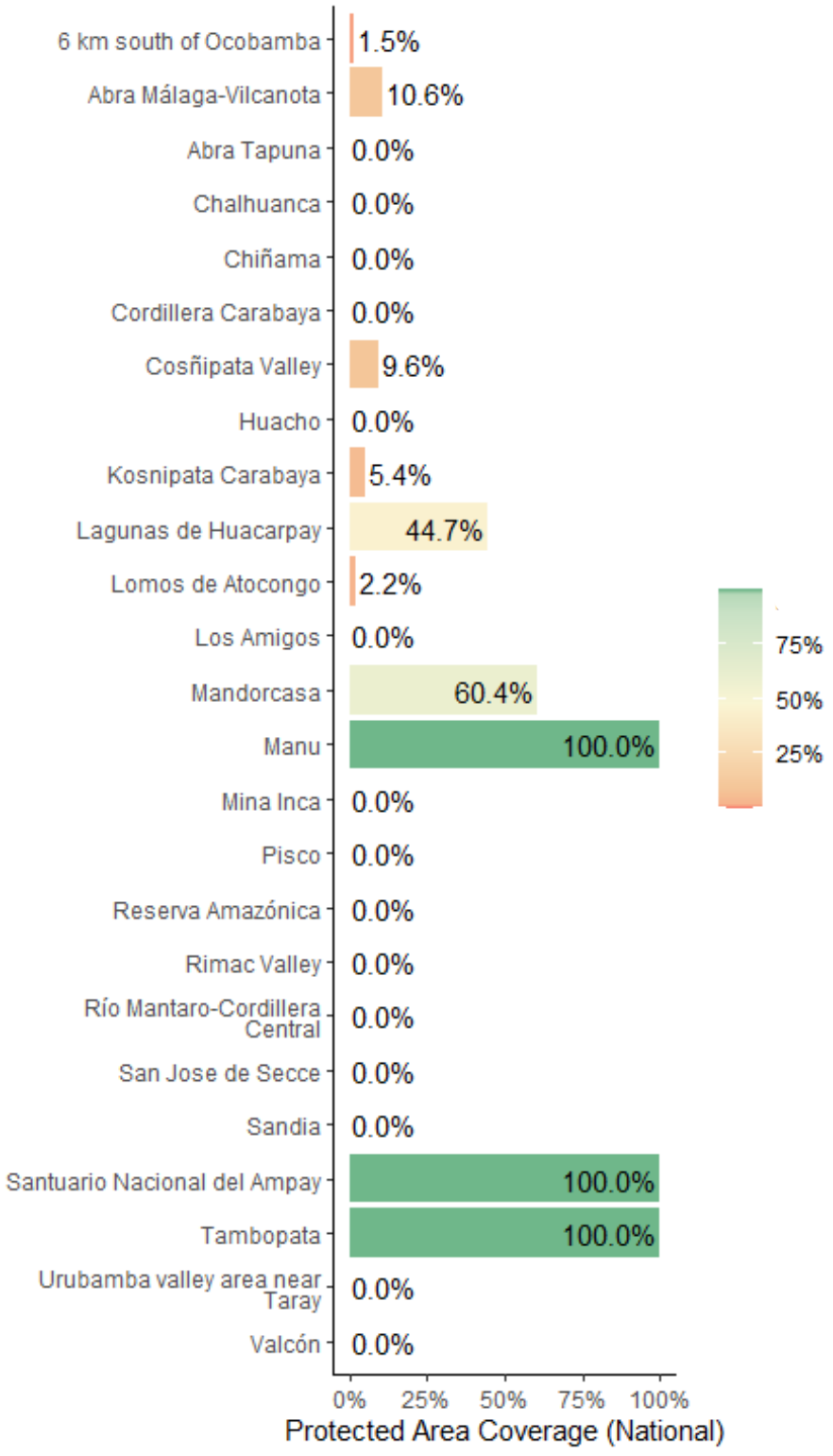
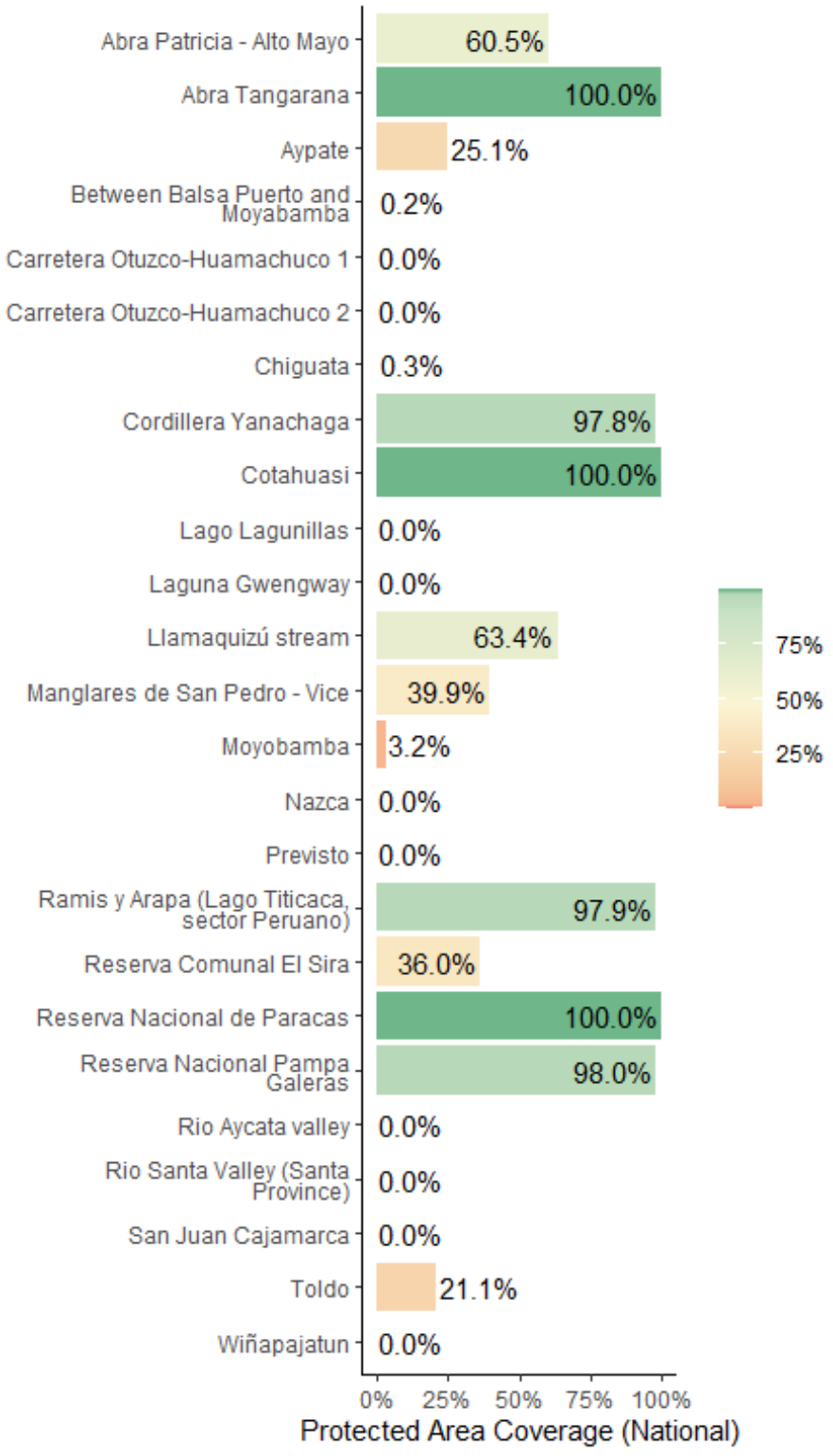
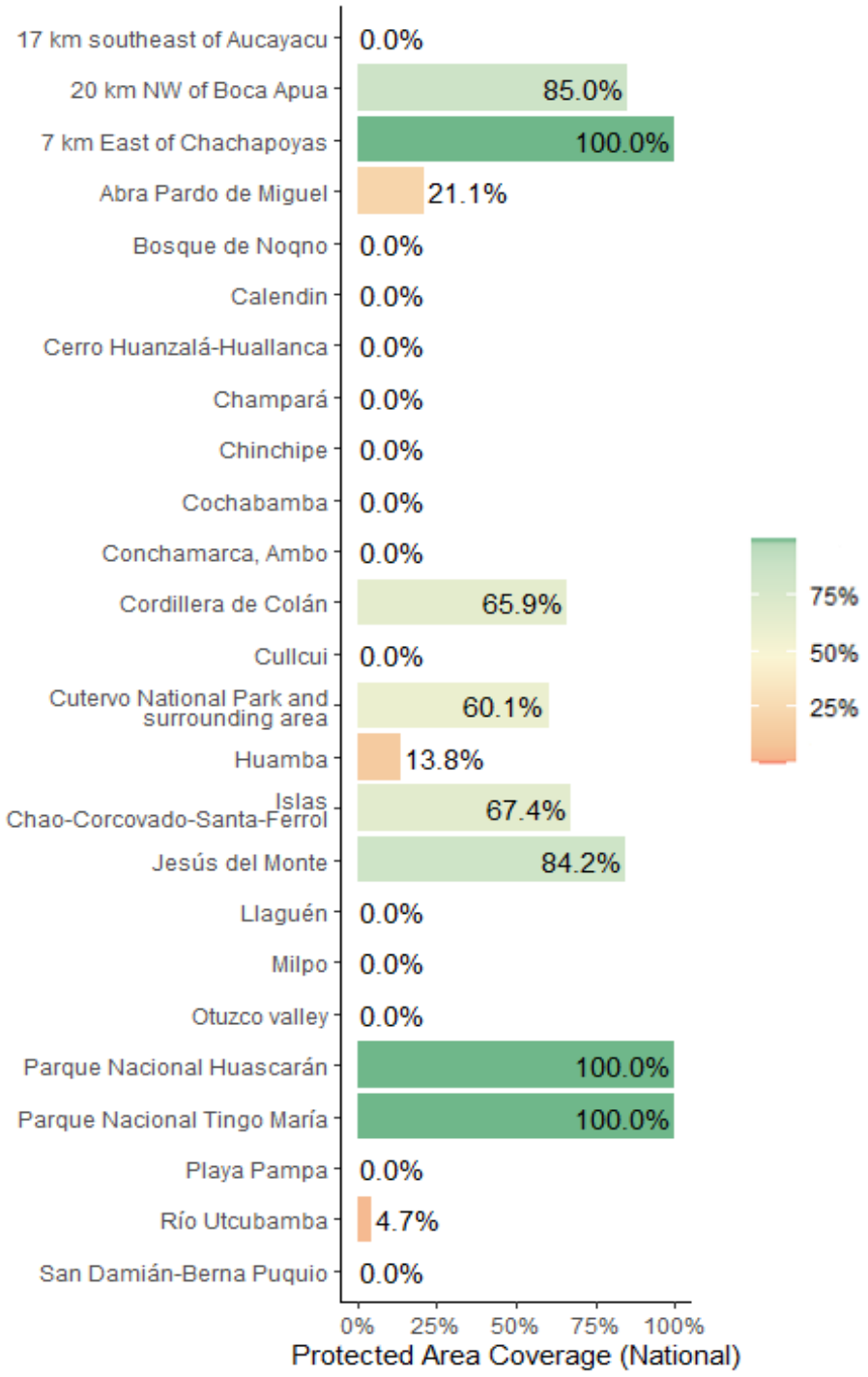


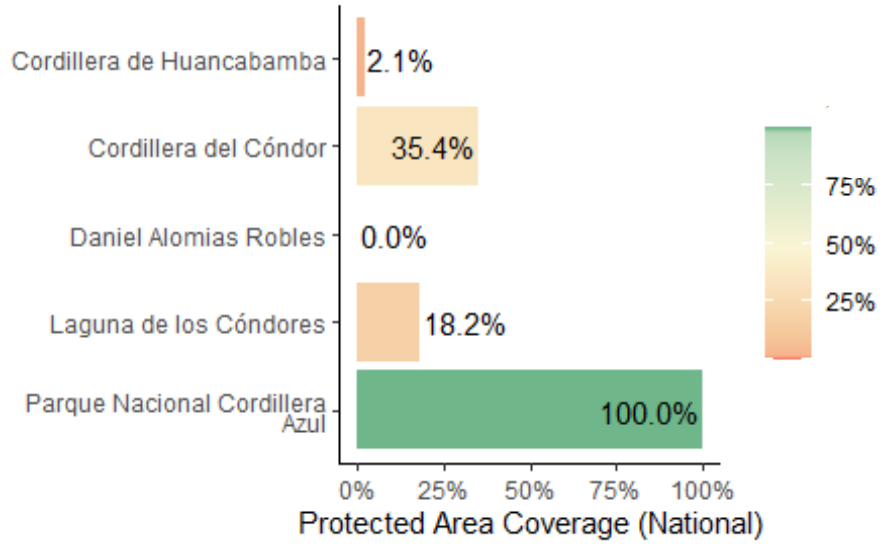
Key Biodiversity Area Coverage (KBA) in Peru



Key Biodiversity Area Coverage (KBA) in Peru



Key Biodiversity Area Coverage (KBA) in Peru



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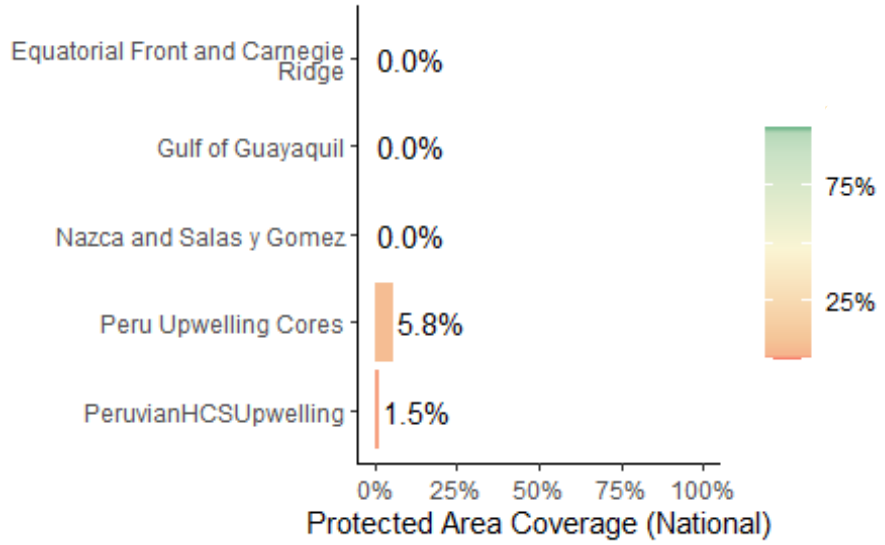


Ecologically or Biologically Significant Marine Areas (EBSAs) in Peru

Opportunities for action

There is opportunity for Peru to increase protection of KBAs that have lower levels of coverage by PAs and OECMs; priority could be given to those with no current coverage

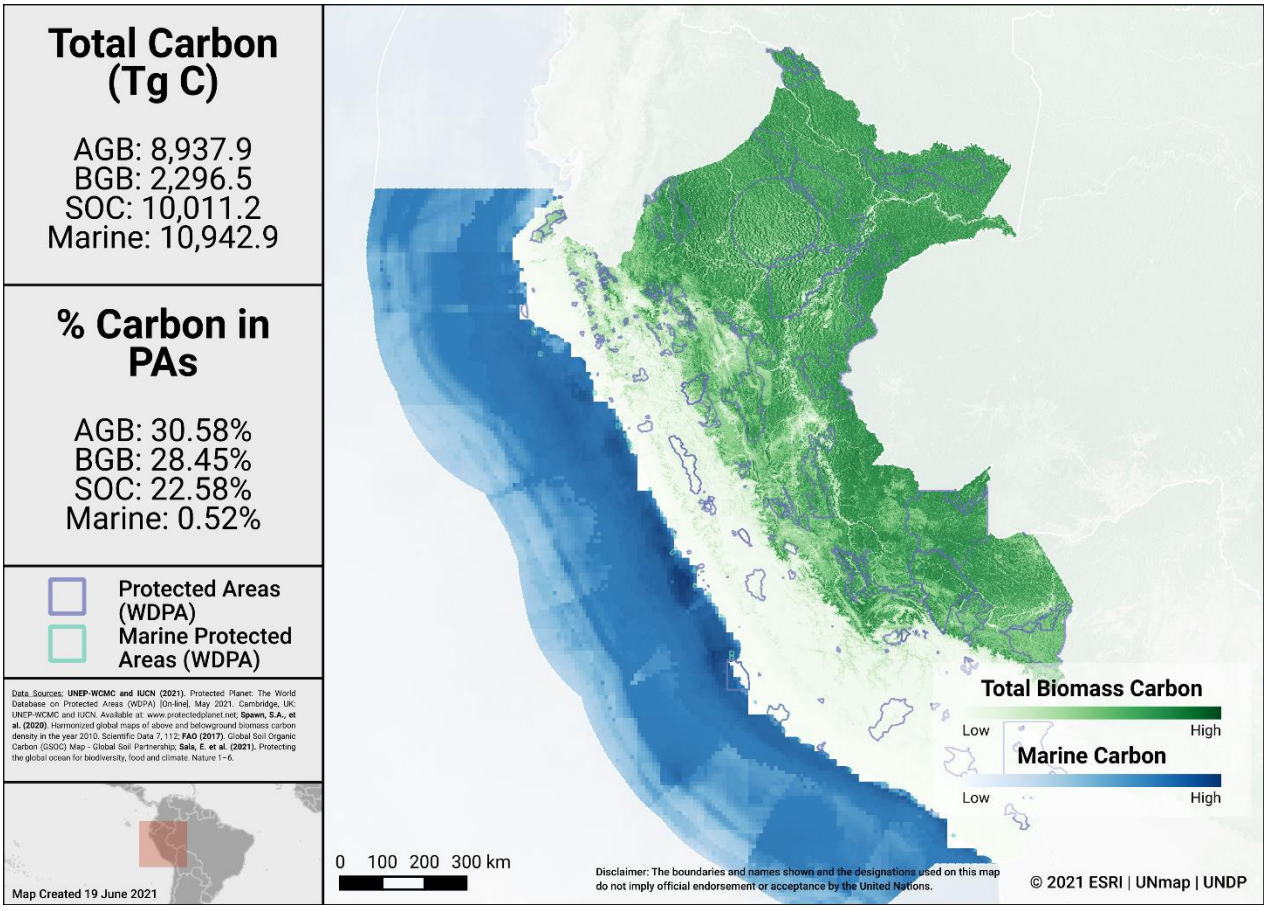
AREAS IMPORTANT FOR ECOSYSTEM SERVICES

There is no single indicator identified for assessing the conservation of areas important for ecosystem services. For simplicity, two services with available global datasets are assessed here (carbon and water). In future, other critical ecosystem services could be explored.

Carbon

Data for biomass carbon comes from temporally consistent and harmonized global maps of aboveground biomass and belowground biomass carbon density (at a 300-m spatial resolution); the maps integrate land-cover specific, remotely sensed data, and land-cover specific empirical models (see Spawn et al., 2020 for details on methodology). The Global Soil Organic Carbon Map present an estimation of SOC stock from 0 to 30 cm (see FAO, 2017). Data is also presented from global maps of marine sedimentary carbon stocks, standardized to a 1-meter depth (see Sala et al., 2021, and Atwood et al., 2020).

The map below presents the total carbon stocks in Peru and the percent of carbon in protected areas. The total carbon stocks is 8,937.9 Tg C from aboveground biomass (AGB), with 30.6% in protected areas; 2,296.5 Tg C from below ground biomass (BGB), with 28.5% in protected areas; 10,011.2 Tg C from soil organic carbon (SOC), with 22.6% in protected areas; and 10,942.9 Tg C from marine sediment carbon, with 0.5% in protected areas.



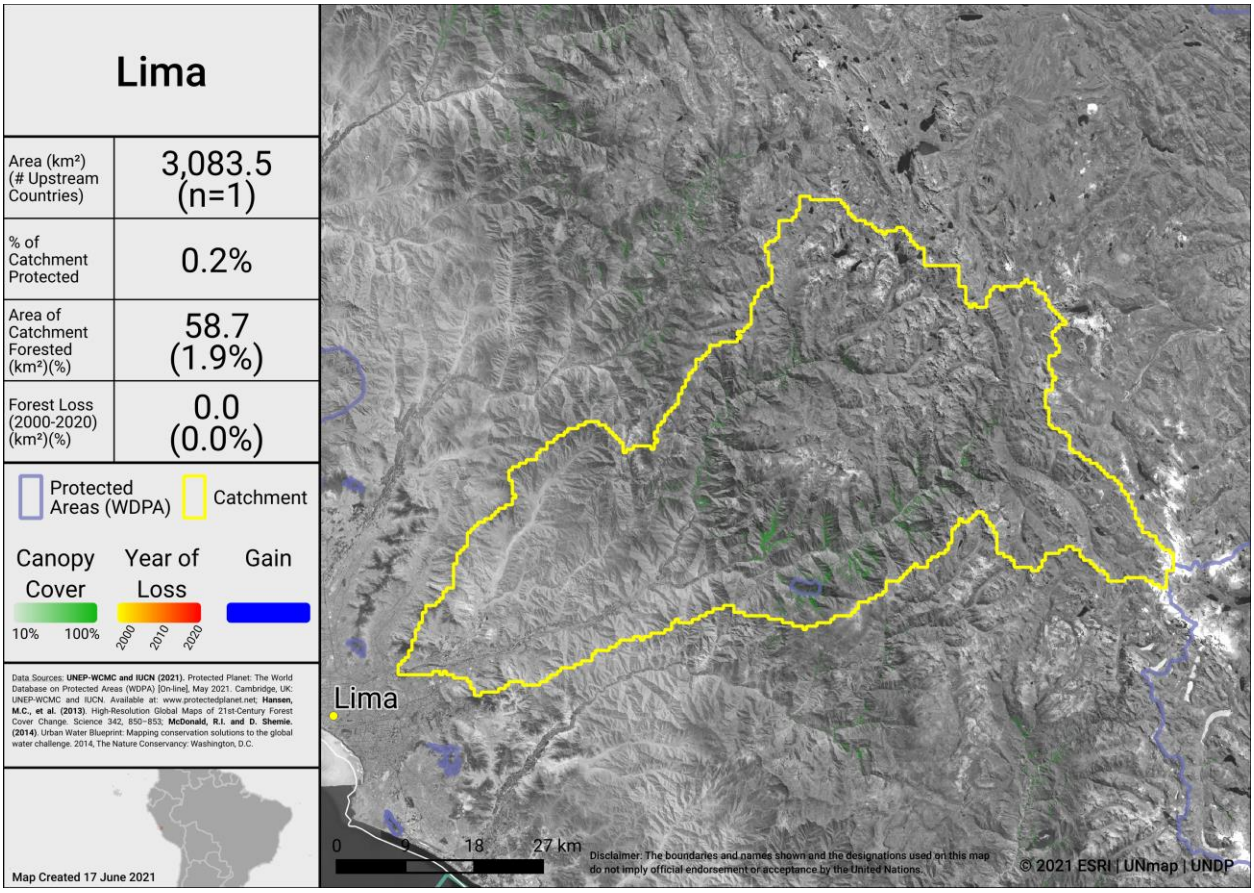
Carbon Stocks in Peru

Water

Information on the water sources for 534 cities is available via the City Water Map (CWM) and provides details on the catchment area of the watershed that supplies these cities (see McDonald et al., 2014 for details on methodology).

Forests support stormwater management and clean water availability, especially for large urban populations. Research that has examined the role of forests for city drinking water supplies shows that of the world's 105 largest cities, more than 30% (33 cities) rely heavily on the local protected forests, which provide ecosystem services that underpin local drinking water availability and quality (Dudley & Stolton, 2003).

Drinking water supplies for cities in Peru may similarly depend on protected forest areas within and around water catchments. The map below shows the percentage forest and PA cover and the forest loss from 2000-2020 in the most heavily populated water catchment of Peru. Intact catchments can support more consistent water supply and improved water quality.



Water supply area for the city of Lima

Opportunities for action

For carbon, there is opportunity for Peru to increase PA and OECM coverage in both marine and terrestrial areas with high carbon stocks, as identified in the map above. Protecting areas with high carbon stocks secures the benefits of carbon sequestration in the area.

For water, there is opportunity to increase the area of the water catchment under protection by PAs and OECMs, or in cases where there is high levels of protection, focus on effective management for these areas. Protecting the current area of forested land and potentially reforesting would have benefits for improving water security.

CONNECTIVITY & INTEGRATION

Two global indicators, the Protected Connected land indicator (ProtConn; EC-JRC, 2021; Saura et al., 2018) and the PARC-Connectedness indicator (CSIRO, 2019), have been proposed for assessing the terrestrial connectivity of PA and OECM networks. To date there is no global indicator for assessing marine connectivity, though some recent developments include proposed guidance for the treatment of connectivity in the planning and management of MPAs (see Lausche et al., 2021).

Protected Connected Land Indicator (Prot-Conn)

As of January 2021, as reported in the Joint Research Centre of the European Commission's Digital Observatory for Protected Areas (DOPA) (JRC, 2021), the coverage of protected-connected lands (a measure of the connectivity of terrestrial protected area networks, assessed using the ProtConn indicator) in Peru was 8.3%.

PARC-Connectedness Index

In 2019, as assessed using the PARC-Connectedness Index (values ranging from 0-1, indicating low to high connectivity), connectivity in Peru is 0.51. This represents an increase from 0.50 in 2010.

Corridor case studies

There are no corridor case studies available for Peru (but see general details on conserving connectivity through ecological networks and corridors in Hilty et al 2020).

Opportunities for action

There is opportunity for a targeted designation of PAs or OECMs in strategic locations for connectivity and to focus on PA and OECM management for enhancing and maintaining connectivity. Improving connectivity increases the effectiveness of PAs and OECMs and reduces the impacts of fragmentation.

As well, a range of suggested steps for enhancing and supporting integration are included in the voluntary guidance on the integration of PAs and OECMs into the wider land- and seascapes and mainstreaming across sectors to contribute, inter alia, to the SDGs (Annex I of COP Decision 14/8).

GOVERNANCE DIVERSITY

There is a lack of comprehensive global data on governance quality and equity in PAs and OECMs. Here, we provide data on the diversity of governance types for reported PAs and OECMs.

As of May 2021, PAs in Peru reported in the WDPA have the following governance types:

- 37.9% are governed by **governments**
  - 22.7% by federal or national ministry or agency
  - 9.1% by sub-national ministry or agency
  - 6.1% by government-delegated management
- 0.0% are under **shared** governance
- 33.0% are under **private** governance
  - 29.9% by individual landowners
  - 1.1% by non-profit organisations
  - 1.9% by for-profit organisations
- 21.2% are under **IPLC** governance
  - 0.0% by Indigenous Peoples
  - 21.2% by local communities
- 8.0% **do not** report a governance type
  - (All of which are international designations)

OECMs

As of May 2021, there are **0** OECMs in Peru reported in the WD-OECM, therefore there is no data available on OECM governance types. Governance of potential OECMs is under collaborative governance by Indigenous Peoples and an NGO (*Complejo de Humedales del Abanico del Río Pastaza*) and private governance (*El Breo Conservation Concession*).

Privately Protected Areas (PPAs)

From Gloss et al. (2019), a UNDP study on PPA data for Peru:

- There are **124** Private Conservation Areas, covering **366,540.66 ha**.
- PPAs **are** formally defined in PA legislation.
- PPAs **are** directly identified in Peru's recent NBSAP.
- PPAs **are** included as part of the current PA network.

See additional information in Peru's country profile and summarized in Annex II.

Territories and areas conserved by Indigenous Peoples and local communities (ICCAs)

From Kothari et al. (2012), potential ICCAs (or similar designations) in Peru include: *

- 10 communal reserves (exclusively located in Amazonian ecosystems)
  - These cover 21,666 km^2.

- While Indigenous communities have titled territories, communal reserves belong to the State, and are considered as areas where communities can undertake traditional use of natural resources and develop resource management plans.

An example of an ICCA in Peru is the *Matsesën Tsusedpabon Nidaid* (an ICCA located in Peru that extends over **~5,120 km²** of terrestrial area, inhabited and managed by the Matsés Native Community); see full case study details in the **ICCA Registry**.

Other Indigenous lands

Lands managed and/or controlled by Indigenous Peoples cover an area of 371,789.0 km², of which 258,084.0 km² falls outside of formal protected areas. Indigenous lands with a human footprint less than 4 (considered as 'natural landscapes') cover an area of 236,091.0 km² (for details on analysis see Garnett et al., 2018).

For Peru evidence for the presence of Indigenous Peoples comes from: Indigenous Work Group on Indigenous Affairs. Indigenous World 2017 (Indigenous Working Group on Indigenous Affairs, 2017).

Boundaries of the lands Indigenous Peoples manage or have tenure rights over come from: Amazônia Socioambiental. Rede Amazônica de Informação Socioambiental Georreferenciada. https://www.amazoniasocioambiental.org/mapas/ (2017);

GEO GPS Peru. Mapa de Comunidades Campesinas – COFOPRI. http://www.geogpsperu.com/2015/10/mapa-de-comunidades-campesinascofopri.html (2017)

Instituto del Bien Común. Comunidades nativas georreferenciadas en campo: IBC-SICNA. Incluye información levantada en gabinete. http://191.98.188.187/ibcmap (2017).

Opportunities for action

Explore opportunities for governance types that have lower representation, for Peru this could relate to shared governance, etc. There is also opportunity for Peru to complete governance and equity assessments, to establish baselines, and identify relevant actions for improvement. Examples of existing tools and methodologies include: Governance Assessment for Protected and Conserved Areas (Franks & Brooker, 2018), Social Assessment of Protected Areas (Franks et al 2018), and Site-level assessment of governance and equity (IIED, 2020). As well, a range of suggested actions are included in the voluntary guidance on effective governance models for management of protected areas, including equity (Annex II of COP Decision 14/8).

Equator Prize Projects

The Equator Initiative brings together the United Nations, governments, civil society, businesses and grassroots organizations to recognize and advance local sustainable development solutions for people, nature and resilient communities.

The Equator Prize projects provide examples of unique and locally based governance of natural resources. Peru has the following Equator Prize winners that showcase examples of local, sustainable community action:

Organization	Year	Project Description
Asociación para la Investigación y el Desarrollo Integral (AIDER)	2006	Asociación para la Investigación y el Desarrollo Integral (AIDER, Association for Research and Integrated Development) is a participatory initiative that provides capacity building and technology transfer to enable community-based conservation of forest resources across Peru. By providing technical assistance to forest-based communities in both the humid tropical forests of central eastern Peru and the tropical dry forest in the country's northern coastal region, the initiative has enhanced local capacity to improve livelihoods, protect the environment and mitigate desertification for more than a quarter of a century. Much of this work has benefitted Indigenous forest-dwelling communities, including the Shipibo-Conibo people of Ucayali. AIDER mobilizes a vast partnership model to bring technical expertise to these marginalized groups, helping them to assume autonomous control of productive forest resources.
Comunidades Nativas de Nuevo Saposoa y Patria Nueva de Mediación Callería	2019	Comunidades Nativas de Nuevo Saposoa y Patria Nueva de Mediación Callería (Native Communities of Nuevo Saposoa and Patria Nueva de Mediación Callería) brings together two Indigenous Shipibo communities in the Peruvian province of Ucayali to monitor and protect 15,000 hectares of ancestral territories. The association has developed an innovative approach to community-led monitoring using satellite imagery and mobile phone apps that enable them to rapidly detect and respond to illegal deforestation. By involving diverse community members, including youth, in monitoring efforts these communities have successfully reduced illegal deforestation from a rate of five percent annually to zero. The results of this community-led monitoring have led to unprecedented coordination with the regional government authorities and law enforcement, enabling the Shipibo communities to regain ancestral rights to lands illegally seized by loggers and coca growers.

Organization	Year	Project Description
Asociación de Pobladores por el Progreso y Desarrollo de Campo Amor Zarumilla	2008	Asociación de Pobladores por el Progreso y Desarrollo de Campo Amor, Zarumilla (ASPOPRODECAZ, Residents' Association for the Progress and Development of Campo Amor, Zarumilla) represents the 11,000 inhabitants of Campo Amor, a coastal town in the buffer zone of the Tumbes National Mangrove Sanctuary. The region is a gateway to this important protected area, and home to many community members who depend on the aquatic products provided by the mangroves ecosystem. ASPOPRODECAZ was created in response to the pressures on this fragile natural reserve resulting from population growth, logging, and solid waste pollution. In response, the association has reforested the surrounding mangrove swamps, devised environmental education programmes, and established the first tree nursery in the region. A key innovation of the organization's work is a sustainable waste management program that employs 250 families in recycling and solid waste collection.
Ejecutor de Contrato de Administración Tuntanain (ECA Tuntanain)	2019	In the Amazonas Department of Peru, Ejecutor de Contrato de Administración Tuntanain (ECA Tuntanain, Executor of the Administrative Contract of Tuntanain) has created a powerful collaboration with the National Service of Protected Areas (SERNANP) to co-manage 94,967 hectares of forest. Bringing together 23 Indigenous communities within the Tuntanain Communal Reserve, the group's primary aim is to reduce vulnerability to climate change through climate change mitigation, sustainable production, and inclusive governance. Through these activities, ECA Tuntanain has increased income for local communities by 160 percent, protected the headwaters of three rivers essential for water security, reduced food insecurity, and created an inclusive governance plan for territorial conservation and development to ensure long-term sustainability. The protection of a large area of intact forest contributes significantly to the mitigation of climate change.

Organization	Year	Project Description
Ejecutor de Contrato de Administración de la Reserva Comunal Amarakeri (ECA-RCA)	2019	In the South Peruvian Madre de Dios Department, ten Indigenous communities came together with government authorities to form Ejecutor de Contrato de Administración de la Reserva Comunal Amarakaeri (ECA-RCA, Executor of the Administrative Contract of the Amarakaeri Communal Reserve) to protect their ancestral rainforest. In a powerful example of the potential for shared governance and co-management, the group has worked hand-in-hand with the National Service of Protected Areas (SERNANP) to mitigate climate change through the sustainable management of the Amarakaeri Communal Reserve. Covering 402,335 hectares, the reserve is recognized by IUCN and protects primary forest in its entirety in an area under threat from illegal mining. ECA-RCA places priority on the engagement of youth and women, with youth comprising 60 percent of the reserve surveillance team and women occupying key leadership positions. ECA-RCA is a positive example of polycentric governance that shows how co-management of ecologically vulnerable natural resources between state and local communities can be effective.

Photo from Equator Prize Project: Comunidades Nativas de Nuevo Saposoa y Patria Nueva de Mediación Callería

PROTECTED AREA MANAGEMENT EFFECTIVENESS

This section provides information on the coverage of PAs and OECMs with completed protected area management effectiveness (PAME) assessments as reported in the global database (GD-PAME). The proportion of terrestrial and marine PAs with completed PAME assessments is also calculated and compared with the 60% target agreed to in COP-10 Decision X/31. Information is also included regarding changes in forest cover nationally within PAs and OECMs.

Protected area management effectiveness (PAME) assessments

As of May 2021, Peru has 263 PAs reported in the WDPA; of these PAs, 74 (28.0%) have management effectiveness evaluations reported in the global database on protected area management effectiveness (GD-PAME).

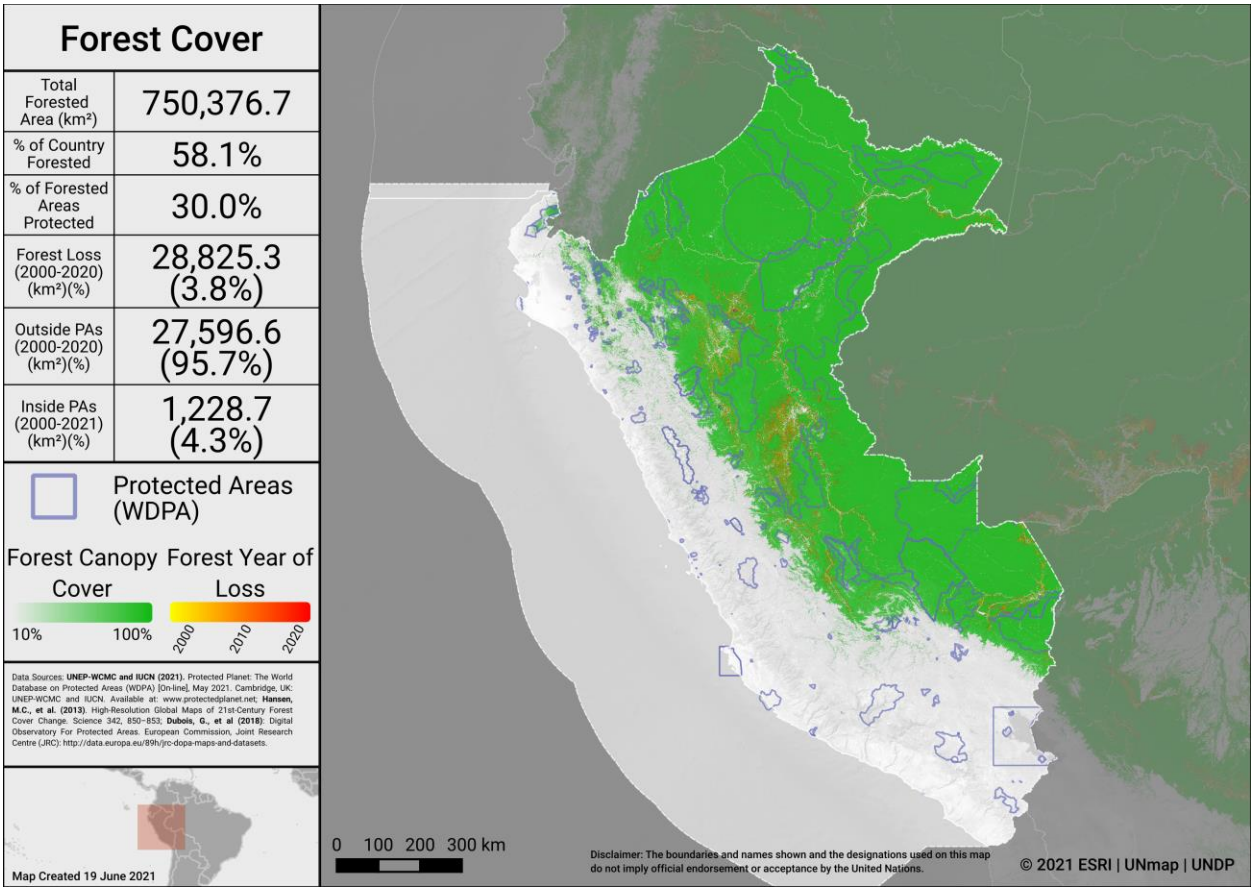
- 14.1% (183,112 km^2) of the terrestrial area of the country is covered by PAs with completed management effectiveness evaluations.
  - 65.2% of the area of terrestrial PAs have completed evaluations.
- 0.5% (4,031 km^2) of the marine area of the country is covered by PAs with completed management effectiveness evaluations.
  - 99.8% of the area of marine PAs have completed evaluations.

The 60% target for completed management effectiveness assessments (per COP Decision X/31) **has** been met for terrestrial PAs and **has** been met for marine PAs.

As of May 2021, there are 0 OECMs in Peru reported in the WD-OECM and no information available on the management effectiveness of potential OECMs; but see details on conservation effectiveness of potential OECMs in Annex I.

Changes in forest cover in protected areas and OECMs

Forested areas in Peru cover approximately 58.1% of the country, an area of 750,376.7 km^2. Approximately 30.0% (224,984.2 km^2) of this is within the protected area estate of Peru. Over the period 2000-2020 loss of forest cover amounted to over 28,825.3 km^2, or 2.2% of the country (3.8% of forest area), of which 1,228.7 km^2 (4.3% of forest loss) occurred within protected areas. The map below shows how forest cover has changed in Peru from 2000-2020 both inside and outside of PAs. This can indicate how effective PAs are in reducing forest cover loss



Forest Cover and Forest Loss in Peru

Opportunities for action

The 60% target for completed management effectiveness assessments (per COP Decision X/31) **has** been met for terrestrial PAs and **has** been met for marine PAs. Further increasing this percentage for terrestrial PAs could be beneficial overall for understanding how well protected areas are being managed.

There is also opportunity to implement the results of completed PAME evaluations, to improve the quality of management for existing PAs and OECMs (e.g. through adaptive management and information sharing, increasing the number of sites reporting 'sound management') and to increase reporting of biodiversity outcomes in PAs and OECMs.

SECTION II: EXISTING PROTECTED AREA AND OECM COMMITMENTS

PRIORITY ACTIONS FROM 2015-2016 REGIONAL WORKSHOPS

National priority actions for Aichi Biodiversity Target 11 were provided by Parties following a series of regional workshops in 2015 and 2016. The Capacity-building workshop for Latin America and the Caribbean on achieving Aichi Biodiversity Targets 11 and 12 took place 28 September - 1 October 2015 in Curitiba, Paraná, Brazil. Progress towards the quantitative targets for marine and terrestrial coverage has been assessed based on data reported in the WDPA and WD-OECM as of 2021. For more information, see the workshop report at: https://www.cbd.int/meetings/

The following actions were identified during the workshops:

Terrestrial coverage: No actions were identified for this element of Target 11.

Marine coverage: Increase the percentage of protected areas in marine environment.

Ecological representation: Increase the representativeness of marine ecoregions with the creation of PAs in the Guayaquil ecoregion.

Areas Important for biodiversity and ecosystem services:

1) Complement the coverage of important ecosystems for biodiversity through the different important natural areas protected by the state conservation areas.

2) Complement the coverage of important ecosystems for ecosystem services through the different important natural areas protected by the state conservation areas.

Connectivity: Strengthen regional conservation systems that help connectivity of PAs.

Management effectiveness:

1) Quarterly MEA through the methodology “State Analysis Ecosystem Conservation within the ANP”, by evaluating the effects generated by economic activities. The evaluation covered 68 ANP of national administration.

   Incorporate the assessment of Regional Conservation Areas.

Governance and Equity:

1) Strengthen the capacities of regional governments for coordinated management of the in situ conservation of biological diversity.

2) Develop regulatory technical instruments for co-management of the coastal marine system.

Integration: Strengthen the capacities of regional governments with macro regional approach and creating opportunities for interregional coordination.

OECMs:

1) Strengthen management for private conservation areas and other forms of different natural areas protected by the state conservation.
2) Drawing up the list of fragile ecosystems, guidelines and criteria for their management.
3) Mapping of fragile coastal marine ecosystems and glaciers.

NATIONAL BIODIVERSITY STRATEGY AND ACTION PLANS (NBSAPs)

Peru has submitted an NBSAP during the Strategic Plan for Biodiversity 2011-2020 (most recent NBSAP is available at: https://www.cbd.int/nbsap/search/).

Target 1. By 2021 sustainable and effective management of biodiversity in at least 17% of the land area and 10% of the marine environment in various forms of conservation and management consolidated in situ.

Sub-target 1. By the end of the second semester of 2018 there is at least 14% of the land area and 4% of the marine area under some form of effective biodiversity management.

This NBSAP **did** include a quantitative target for **terrestrial** PAs or OECMs.

- As of May 2021 (based on the WDPA/WD-OECM) has the target been met: **YES (also surpassed target for 2021)**

This NBSAP **did** include a quantitative target for **marine** protected areas or OECMs.

- As of May 2021 (based on the WDPA/WD-OECM) has the target been met: **NO**
- The 4% target will be surpassed following the addition of the National Reserve of the Grau Tropical Sea and Nazca MPA (see other commitments section)
  - an additional ~16,250 km^2 would be required to reach the 10% target by 2021).

Actions from the NBSAP will also address other elements of Aichi Biodiversity Target 11:

NBSAP Action number	Action (original language from NBSAP)	Action (English translation)
1.1.1	Al final de la primera mitad del año 2015 existe una guía para implementar procedimientos de conservación in situ.	At the end of the first half of 2015 there is a guide to implement procedures for in situ conservation.
1.1.2	Para mediados del año 2015, 20 gobiernos regionales evaluarán anualmente el progreso en la implementación de los sistemas de conservación regional.	At the end of the first half of 2015 twenty regional governments have a permanent space for interregional coordination, which will meet annually to assess progress in the implementation of regional systems of conservation of biological diversity.

NBSAP Action number	Action (original language from NBSAP)	Action (English translation)
1.1.4	A inicios del segundo semestre del 2015 veinte gobiernos regionales e instituciones competentes reportan al MINAM de manera anual los avances en la conservación in situ de las ANPs	Early in the second half of 2015 twenty regional governments, SERNANP and other relevant entities, report annually to MINAM the conservation status of the ANP and other forms of in situ conservation.
1.1.7	A finales del segundo semestre del 2015 se cuenta con al menos diez iniciativas del sector privado que contribuyen a la conservación in situ de la diversidad biológica.	At the end of the second semester of 2015 there are at least ten private sector initiatives that contribute to the in situ conservation of biodiversity.
1.1.9	A finales del primer semestre del 2016 se han consolidado algunos mecanismos técnicos, legales y financieros necesarios para fortalecer los sistemas regionales de conservación de la diversidad biológica.	At the end of the first half of 2016 some necessary technical, legal and financial mechanisms have been consolidated to strengthen regional biodiversity conservation systems
1.1.10	A finales del primer semestre del 2016 se han establecido lineamientos y criterios para la gestión de la lista de ecosistemas frágiles priorizados.	At the end of the first half of 2016 guidelines and criteria have been established for the management of a list of prioritized fragile ecosystems.
1.1.13	A inicios del segundo semestre del 2016 se han identificado las zonas nacionales y regionales prioritarias para la gestión de ecosistemas terrestres, marinos, costeros y de aguas continentales, incluyendo centros de origen de agrobiodiversidad.	Early in the second half of 2016 national and regional priority areas for the management of terrestrial, marine, coastal and inland water ecosystems have been identified, including centers of origin of agricultural biodiversity
1.1.16a	A finales del segundo semestre del 2017 las autoridades vinculadas a la conservación in situ de la diversidad biológica han evaluado de manera integrada y articulada el estado de conservación de biodiversidad a nivel nacional, proponiendo, de ser necesario, actualizaciones a los planes y programas presupuestales correspondientes	At the end of the second semester of 2017, the authorities linked to the in situ conservation of biological diversity have evaluated in an integrated and articulated manner the state of biodiversity conservation at the national level, proposing, if necessary, updates to the corresponding budget plans and programs.

NBSAP Action number	Action (original language from NBSAP)	Action (English translation)
1.1.18	A finales del segundo semestre del 2018 se cuenta con unmapa de ecosistemas marino costeros que identifique áreas de importancia ecológica tales como bancos naturales y áreas de reproducción de especies priorizadas o desove, entre otros, con el objeto de evitar la depredación de especies.	At the end of the second half of 2018 there is a map of coastal marine ecosystems identifying ecologically important areas such as natural banks and prioritized breeding or spawning species, among others
1.1.19	A finales del segundo semestre del 2018 se ha concluido el mapa de humedales del Perú; y al 2021 el mapa nacional de ecosistemas frágiles, según lo dispuesto en el artículo 99° de la Ley N° 28611, y el mapa de glaciares, con la participación de todos los sectores ministeriales correspondientes.	From the end of the second half of 2018 to 2021 three maps of Peru (wetlands, fragile ecosystems and and glaciers) have been completed with the participation of all relevant ministerial sectors.
1.1.20	A finales del segundo semestre del 2018 se ha impulsado cuatro experiencias de cogestión de áreas de importancia ecológica marino costeras, con participación activa de asociaciones locales de pescadores, empresas u otros actores clave.	At the end of the second half of 2018 four experiences of co-management of marine areas of coastal ecological importance have been boosted with participation of local stakeholders.
3.2.7	A finales del segundo semestre del 2016, al menos tres zonas marinas fuera de ANP estarán bajo un programa de manejo orientado a la recuperación del ecosistema con participación de actores locales.	At the end of the second half of 2016 at least three marine areas beyond ANP will be under a management program aimed at the recovery of the ecosystem, with the participation of local actors.
4.1.1	A finales del segundo semestre del 2014 se cuenta con un mecanismo de coordinación intersectorial para la gestión integrada de los ecosistemas marino costeros.	Towards the end of the second half of 2014 there is a sectoral coordination mechanism for integrated management of coastal marine ecosystems.

NBSAP Action number	Action (original language from NBSAP)	Action (English translation)
4.1.2	A finales del primer semestre del 2015 se ha elaborado un diagnóstico preliminar sobre las capacidades institucionales para la gestión de la biodiversidad en los tres niveles de gobierno. Este diagnóstico incluye propuestas para el fortalecimiento de las instituciones consideradas y mecanismos para mejorar la coordinación, la cooperación y el apoyo mutuo entre instituciones públicas. Las propuestas priorizadas en este diagnóstico se ejecutan anualmente.	At the end of the first half of 2015 a preliminary diagnosis of the institutional capacities for the management of biodiversity in the three levels of government has been prepared.
4.1.10	A finales del primer semestre del 2016 se cuenta con una estrategia de fortalecimiento de capacidades para la gestión de la diversidad biológica, elaborada multisectorialmente y acordada entre los diferentes niveles de gobierno, que considera a las diferentes instituciones públicas, niveles de gobierno y sociedad civil, pueblos indígenas y comunidades campesinas; las actividades priorizadas en esta estrategia se implementan gradualmente hasta el 2018.	At the end of the first half of 2016 an agreed government-multi sectoral strategy for capacity building develops biodiversity management in every stakeholder and level of civil society.
5.2.3	A finales del segundo semestre del 2018 se ha identificado, delimitado y caracterizado zonas importantes para la conservación de al menos ocho especies o grupos de especies priorizadas.	Towards the end of the second half of 2018 important areas have been identified, defined and characterized for the conservation of at least eight species or groups of prioritized species

APPROVED GEF-5, GEF-6, & GCF PROTECTED AREA PROJECTS

Approved GEF-5 and GEF-6 PA-related biodiversity projects

This includes biodiversity projects from the fifth and sixth replenishment of the Global Environment Facility (GEF-5 and GEF-6) with a clear impact of the quantity or quality of PAs; also including some projects occurring within the wider landscapes/seascapes around PAs. Only those with a status of 'project approved' or 'concept approved' as of June 2019 were considered. The qualifying elements likely benefiting from each GEF project is assessed based on a keyword search of Project Identification Forms (PIF). Where spatial data for the proposed PAs was available, further details (based on an analysis by UNDP) regarding their impacts for ecological representation, coverage of KBAs, and coverage of areas important for carbon storage is included.

GEF ID	PA increase?	Area to be added (km^2)	Type of new protected area	Qualitative elements potentially benefitting (based on keyword search of PIFs)
4505	No	N/A	N/A	Effectively managed; Equitably managed; Integration
4773	No	N/A	N/A	All except Ecosystem services and Connectivity
4808	No	N/A	N/A	All except Connectivity and Integration
5080	No	2,210	Terrestrial	All except Ecologically representative and Ecosystem services
5458	No	135	Terrestrial	All except Ecosystem services and Connectivity
9044	No	N/A	N/A	Effectively managed; Equitably managed; Integration
9374	No	N/A	N/A	Effectively managed
9387	No	N/A	N/A	Effectively managed; Equitably managed; Integration

Based on spatial data available for GEF project 957, 1446, 5080 and 5458, benefits will arise for several elements of Target 11:

Coverage of Terrestrial and Marine Ecoregions:

- 6 terrestrial ecoregions will have improved coverage. These ecoregions are: Central Andean wet puna; Iquitos várzea; Peruvian Yungas; Sechura desert; Southwest Amazon moist forests; Ucayali moist forests.

- The average increase in coverage of Terrestrial Ecoregions will be 0.08%.

Coverage of KBAs:

- Coverage will improve for 12 KBAs.

Ecosystem services:

- 0.2 % increase in the PA coverage of aboveground biomass.
- 0.2 % increase in the PA coverage of important aboveground biomass areas.
- 0.517 % increase in the PA coverage of soil organic carbon (SOC).
- 0.44 % increase in the PA coverage of areas important for SOC.

Approved Green Climate Fund (GCF) Protected Area-related biodiversity projects

The Green Climate Fund's investments listed as approved projects as of May 2021 were considered. The GCF supports paradigm shifts in both climate change mitigation and adaptation that may impact quality of PAs or contribute to better integration within the wider land- and seascapes around PAs. Only projects with result areas for either or both *Forest and Land Use and Ecosystems and Ecosystem Services result areas* were included.

GCF ID	Project theme	Result area	Target 11 element
FP001	Cross-cutting	Forest and land use	Integration; Effectively managed

OTHER ACTIONS/COMMITMENTS

Leaders' Pledge for Nature

Peru **has** signed onto the Leaders' Pledge for Nature.

Political leaders participating in the United Nations Summit on Biodiversity in September 2020, representing 84 countries from all regions and the European Union, have committed to reversing biodiversity loss by 2030. By doing so, these leaders are sending a united signal to step up global ambition and encourage others to match their collective ambition for nature, climate, and people with the scale of the crisis at hand.

High Ambition Coalition for Nature and People

Peru **has** joined the High Ambition Coalition for Nature and People.

The High Ambition Coalition for Nature and People (HAC) is an intergovernmental group, co-chaired by France and Costa Rica [currently including 65 countries and the European Commission]. Its objective is to support the adoption of a target aiming to protect 30% of the planet's land and 30% of its oceans by 2030 (30x30 target), within the future global framework of the Convention on Biological Diversity (CBD) for the protection of biodiversity, which is to be adopted at the next COP in China this autumn.

Other commitments addressing improved coverage of PAs or OECMs

The designation of two recently proposed MPAs, if completed as proposed, will increase coverage of marine areas by **63,548 km^2**.

These MPAs include:

- *National Reserve of the Grau Tropical Sea* (~1,156 km^2)
- *Nazca MPA* (62,392.0575 km^2)

Commitments for PAs and OECMs from Other National Policies

Policy document	Ecosystem	Policy text
Nationally Determined Contribution	Forest ecosystems	Promote comprehensive land management with a landscape approach, oriented to increase forests resilience to CC, and reduce the vulnerability of local populations
Nationally Determined Contribution	Grasslands & Agricultural systems	Reduce the negative impact of climate change on agrarian activity (agriculture, livestock and forestry)
National Development Plan	Forest ecosystems	By 2021, increase to 75% the percentage of forests of permanent production under forest management
National Development Plan	Forest ecosystems	By 2021, reach 80% protected natural areas with a master plan in execution
National Development Plan	Forest ecosystems	By 2021, reach 0% of deforested Amazon forest area annually
Action Plan for Adaptation and Mitigation against Climate Change	Forest ecosystems	Conserve ecosystems, maintain or increase soil fertility and organic matter content, produce crops free from chemical residues, and reduce chemical pollution from agricultural sources
Action Plan for Adaptation and Mitigation against Climate Change	Forest ecosystems	Conserve 54 million ha. of tropical forests to mitigate climate change and generate income for the most vulnerable population
Vision of Peru to 2050	Coastal ecosystems	Protect our marine, coastal, Andean and Amazonian geographic diversity -including glaciers-, conserve the biological wealth and use natural resources efficiently and sustainably
Action Plan for Adaptation and Mitigation against Climate Change	Coastal ecosystems	Promote the adequate use of territory and natural resources of coastal marine zones, through the elaboration of integrated management plans in prioritized areas
National Development Plan	Grasslands & Agricultural systems	By 2021, increase to 15% the percentage of agricultural producers with technological irrigation
National Development Plan	Grasslands & Agricultural systems	Promote organic agriculture, organic farming, agroforestry and aquaculture, establishing a framework of norms and promotional measures that bring them closer to internationally accepted standards

Policy document	Ecosystem	Policy text
Reducing emissions from deforestation and forest degradation	Forest ecosystems	Promote the identification, dissemination and application of sustainable forest management techniques, including low impact forest extraction, in concessions, communities and farms
Reducing emissions from deforestation and forest degradation	Forest ecosystems	Promote community forest management, articulated with the vision of development embodied in the life plans of each community
Reducing emissions from deforestation and forest degradation	Forest ecosystems	Develop technological packages considering technical, financial and productivity aspects per hectare for commercial crops free of deforestation and low carbon footprint
Reducing emissions from deforestation and forest degradation	Forest ecosystems	Promote specific programs to strengthen conservation systems and sustainable use of Amazonian forests, seasonally dry forests and Andean forests
Reducing emissions from deforestation and forest degradation	Forest ecosystems	Promote the development of incentives for forest conservation, such as conditional direct transfers (ToC) and other mechanisms, particularly associated to compensate for ecosystem services
Reducing emissions from deforestation and forest degradation	Forest ecosystems	Consolidate the National System of Natural Areas Protected by the State and the regional conservation systems
National Biodiversity Strategy Action Plan	Forest ecosystems	By 2021, sustainable and effective management of biodiversity is consolidated in at least 17% of the terrestrial environment and 10% of the marine environment under different modalities of conservation and on-site management
National Biodiversity Strategy Action Plan	Forest ecosystems	By 2021, the rate of degradation of ecosystems has been reduced by 5%, with an emphasis on forest and fragile ecosystems
National Biodiversity Strategy Action Plan	Forest ecosystems	By 2021, at least 15 conservation plans for threatened species have been developed and implemented
Protected Area Plan	Forest ecosystems	Reach 21.4% of terrestrial protected areas

Policy document	Ecosystem	Policy text
Peru's Wetland Strategy	Wetland ecosystems	Assess the status of wetlands and their biodiversity status to determine their vulnerability
Peru's Wetland Strategy	Wetland ecosystems	Modernize the systems and tools to coordinate and enhance communication for wetland conservation between national, regional, and local governments, integrating intersectoral entities, civil society, Indigenous Peoples and private sector
Reducing emissions from deforestation and forest degradation	Grasslands & Agricultural systems	Promote agroforestry systems, with small, medium and large producers
Reducing emissions from deforestation and forest degradation	Grasslands & Agricultural systems	Promote initiatives with the private sector that generate better environmental and social standards in the agricultural and livestock sector, especially at the level of investors, associated with the financing of enterprises in the sector

ANNEX I

ADDITIONAL DETAILS ON POTENTIAL OECMs

Complejo de Humedales del Abanico del Río Pastaza

- **Overview:** An enormous alluvial fan composed of 105 volcanic sediments brought down from the Andes of Ecuador and deposited along the river Pastaza and associated streams and secondary rivers leading to the river Marañon. The site contains an extraordinary diversity of both permanent and seasonal wetland types, with abundant lakes and remnant islands. Some 9 species of fauna from CITES Appendix I are supported, as well as 70 from Appendix II, and 17 species found in IUCN's Red List are present. Parts of the site near the river Urituyacu are particularly important for the palms Phytelephas tenuicaulis and Aphandra natalia, and the Pastaza supports a large population of the palm Elaeis oleifera, seen only a few places elsewhere in Peru. Nearly 300 species of fish have been recorded. Human occupation, largely restricted to the banks of the principal rivers, is a low-density mix of Indigenous and settler communities who cultivate banana, cassava, and maize. Studies of the area by WWF Perú and the Centro de Datos para la Conservación of the Universidad Nacional Agraria La Molina facilitated the preparation of the site's designation. Ramsar site no. 1174.
- **Boundaries & Geographical Space:** 3,827,329 ha, 04°00'S 075°25'W.
- **Governance Type:** Governed by Indigenous Peoples and NGO – WWF.
- **Permanence:** There are measures in place year-round, for the long-term.
- **Management Objectives:** As the site was declared a Ramsar site in 2002, the Peruvian government has committed to: ensure the maintenance of its ecological characteristics; promote a rational use; conduct environmental impact assessments before making changes in the area; and to promote training for the research, management and rational use of wetlands.
- **Conservation Effectiveness:** Community management of natural resources, in a sustainable and participatory way, ensures the conservation of critical habitats for important species. Conservation objectives take primacy in cases of conflict among objectives, management approaches or activities. The current effectiveness is due to the area's governance and management. It is important recognize the strong work developed by WWF. This NGO has been leading conservation and sustainable management activities there

El Breo Conservation Concession

- **Overview:** This concession covers the Yungas Ecoregion, also known as Selva Alta, located between 800 and 3800 masl. It is characterized by its humid or subhumid steep slopes forests, with dense to semi-dense vegetation, trees whose average height varies between 9 and 25 m. This concession has been included into one of the priority hotspots for the Tropical Andes. It is part of the conservation corridor of Abiseo-CóndorKutukú, and is located within one of the 9 conservation priority areas

of the Peruvian Yungas. A feature that stands out is the presence of endemic mammals, amphibians and birds of the montane forest.

- **Boundaries & Geographical Space:** 113 000 ha. In the Region San Martin
- **Governance Type:** Private governance, the government granted concession to a person, company or NGO, for a period of 40 years. The concessionaire is responsible for implementing biodiversity conservation projects, in accordance with the concession scope
- **Permanence:** There is a 40 year concession agreement, that is renewable..
- **Management Objectives:** The primary objective is the conservation of biological diversity.
- **Conservation Effectiveness:** The current effectiveness is due to the area's governance and management.

See full details in IUCN (2017) Collation of case studies on OECMs.

ANNEX II

FULL LIST OF TERRESTRIAL ECOREGIONS

Ecoregion Name	Area (km^2)	% of Global Ecoregion in Country	% of Country in Ecoregion	Area Protected (km^2)	% Protected in Country
Beni savanna	150.6	0.1	0.0	144.4	95.9
Bolivian Yungas	4,711.4	5.2	0.4	1,305.7	27.7
Central Andean dry puna	114.0	0.0	0.0	0.0	0.0
Central Andean puna	67,279.8	31.8	5.2	10,562.6	15.7
Central Andean wet puna	99,095.2	84.8	7.7	15,006.4	15.1
Cordillera Central páramo	11,671.6	96.3	0.9	1,621.6	13.9
Eastern Cordillera Real montane forests	25,845.5	25.3	2.0	2,994.3	11.6
Iquitos várzea	83,151.8	72.6	6.4	24,586.1	29.6
Marañón dry forests	11,322.3	100.0	0.9	633.4	5.6
Napo moist forests	139,974.8	55.9	10.8	58,443.7	41.8
Peruvian Yungas	185,961.9	100.0	14.4	29,251.7	15.7
Purus várzea	2,885.3	1.6	0.2	206.6	7.2
Sechura desert	182,803.0	99.2	14.1	8,047.6	4.4
Solimões-Japurá moist forests	58,787.3	35.2	4.5	16,689.0	28.4
South American Pacific mangroves	332.0	2.5	0.0	42.3	12.7
Southwest Amazon moist forests	260,999.9	35.0	20.2	77,691.9	29.8
Tumbes-Piura dry forests	38,074.5	92.6	2.9	2,881.9	7.6

Ecoregion Name	Area (km^2)	% of Global Ecoregion in Country	% of Country in Ecoregion	Area Protected (km^2)	% Protected in Country
Ucayali moist forests	114,443.0	100.0	8.9	23,946.0	20.9

ANNEX III

ADDITIONAL DETAILS ON PPAs

•Peru has several tools through which private individuals and organizations can conserve land. Registered Private Conservation Areas are included in the national system of protected areas. Other tools, like easements and trusts, rely on legally binding contracts between private individuals to manage land for conservation, and conservation concessions allow private actors to manage public land for conservation. Peru also has several regional PPA networks that support the development and recognition of these tools.

• In Peru, private landholders have access to a formalized titling process to obtain legal tenure of their lands. Currently, the legislative decree that regulates access to the formal titling procedure for rural property is Legislative Decree 1089 and its associated regulations, approved through Supreme Decree Nº 032-2008-VIVIENDA

• ACPs are "areas under individual or collective ownership, and possessing biodiversity conservation value, the owners of which voluntarily decide to establish specific conditions for use and conservation, and request the government to recognize them as such."

• Because ACPs are viewed as a complement to state-owned protected areas, their recognition requires that they fulfill certain biological and environmental criteria in order to be added to the system, which can be done for a minimum of 10 years or indefinitely. Although they are still considered private property, they are included in the SINANPE.

• Peru's latest NBSAP (2014), submitted to the Convention on Biological Diversity, makes explicit note of the important role ACPs play in complementing the national protected area system • As of 2018, there are 124 Private Conservation Areas, protecting 366,540.66 ha

• WDPA lists 87 Private Conservation areas (private governance), with another 56 Private Conservation areas under local community governance.

Case studies/best practices:

• *ACP Pampa del Burro*: About **2,777 ha**, the Private Conservation Area (ACP) in the departamento de Amazonas was the vision of Cástulo Guevara, who moved to Yambrasbamba with plans for agriculture but instead decided to pursue conservation in the white sand montane forest area, as the forest was responsible for supplying his town with water.

• *Los Amigos Conservation Concession*: located towards the Southeastern region of Peru near the Bolivian border, a forested region with multiple land management practices. The concession was formed by Asociación para la Conservación de la Cuenca Amazónica (ACCA) in 2001 with the intention of protecting 360,000 acres of old growth forests of the Amazon

• *Conservamos por Naturaleza*: founded in 2012 by Sociedad Peruana de Derecho Ambiental to promote citizen involvement in conservation actions through an approach

based on innovation and collaboration. Based on story-telling, crowdfunding and crowd-sourcing schemes, CxN seeks to involve more citizens in grassroots conservation efforts. The stories of people devoted to conservation are widely disseminated through mainstream media outlets and events, promoting opportunities for collaboration and volunteers.

See additional info in country profile (http://nbsapforum.net/knowledge-base/resource/peru-country-profile-international-outlook-privately-protected-areas).

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